Georgia's Application for the Innovative Assessment Demonstration Authority

Under Section 1204 of the Elementary and Secondary Education Act (ESEA)

Georgia Department of Education

Application for Federal Assistance

Legal Name of Applicant: **Georgia Department of Education**	Applicant's Mailing Address: **205 Jesse Hill Jr. Drive, SE** **Atlanta, GA 30334**
Employer Identification Number: **58-6002042**	Organizational DUNS: **806743159**
Lead Agency: **Georgia Department of Education** Contact Name: **Allison Timberlake, Deputy Superintendent for Assessment & Accountability**	Lead Agency Contact Phone: **(404) 463-6666** Lead Agency Contact Email Address: **atimberlake@doe.k12.ga.us**
Required Applicant Signatures *(Must include signatures from an authorized representative of each Participating State Agency. Insert additional signature blocks as needed below.)* To the best of my knowledge and belief, all of the information and data in this application are true and correct. I further certify that I have read the application, am fully committed to it, and will support its implementation:	
Lead Agency Authorized Representative (Printed Name): **Richard Woods, State Schools Superintendent**	Agency Name: **Georgia Department of Education**
Signature of Lead Agency Authorized Representative: Richard Woods	Date: 12-12-18

Assurances

This form assures that the lead SEA and each SEA applying as a consortium will:

(1) Continue use of the statewide academic assessments in reading/language arts, mathematics, and science required under 34 CFR 200.2(a)(1) and section 1111(b)(2) of the Act--

(i) In all non-participating schools; and

(ii) In all participating schools for which such assessments will be used in addition to innovative assessments for accountability purposes under section 1111(c) of the Act consistent with paragraph (b)(1)(ii) of this section or for evaluation purposes consistent with 34 CFR 200.106(e) during the demonstration authority period;

(2) Ensure that all students and each subgroup of students described in section 1111(c)(2) of the Act in participating schools are held to the same challenging State academic standards under section 1111(b)(1) of the Act as all other students, except that students with the most significant cognitive disabilities may be assessed with alternate assessments aligned with alternate academic achievement standards consistent with 34 CFR 200.6 and section 1111(b)(1)(E) and (b)(2)(D) of the Act, and receive the instructional support needed to meet such standards;

(3) Report the following annually to the Secretary, at such time and in such manner as the Secretary may reasonably require:

(i) An update on implementation of the innovative assessment demonstration authority, including--

(A) The SEA's progress against its timeline under 34 CFR 200.106(c) and any outcomes or results from its evaluation and continuous improvement process under 34 CFR 200.106(e); and

(B) If the innovative assessment system is not yet implemented statewide consistent with 34 CFR 200.104(a)(2), a description of the SEA's progress in scaling up the system to additional LEAs or schools consistent with its strategies under 34 CFR 200.106(a)(3)(i), including updated assurances from participating LEAs consistent with paragraph (e)(2) of this section.

(ii) The performance of students in participating schools at the State, LEA, and school level, for all students and disaggregated for each subgroup of students described in section 1111(c)(2) of the Act, on the innovative assessment, including academic achievement and participation data required to be reported consistent with section 1111(h) of the Act, except that such data may not reveal any personally identifiable information.

(iii) If the innovative assessment system is not yet implemented statewide, school demographic information, including enrollment and student achievement information, for the subgroups of students described in section 1111(c)(2) of the Act, among participating schools and LEAs and for any schools or LEAs that will participate for the first time in the following year, and a description of how the participation of any additional schools or LEAs in that year contributed to progress toward achieving high-quality and consistent implementation across demographically diverse LEAs in the State consistent with the SEA's benchmarks described in 34 CFR 200.106(a)(3)(iii).

(iv) Feedback from teachers, principals and other school leaders, and other stakeholders consulted under paragraph (a)(2) of this section, including parents and students, from participating schools and LEAs about their satisfaction with the innovative assessment system;

(4) Ensure that each participating LEA informs parents of all students in participating schools about the innovative assessment, including the grades and subjects in which the innovative assessment will be administered, and, consistent with section 1112(e)(2)(B) of the Act, at the beginning of each school year during which an innovative assessment will be implemented. Such information must be--

(i) In an understandable and uniform format;

(ii) To the extent practicable, written in a language that parents can understand or, if it is not practicable to provide written translations to a parent with limited English proficiency, be orally translated for such parent; and

(iii) Upon request by a parent who is an individual with a disability as defined by the Americans with Disabilities Act, provided in an alternative format accessible to that parent; and

(5) Coordinate with and provide information to, as applicable, the Institute of Education Sciences for purposes of the progress report described in section 1204(c) of the Act and ongoing dissemination of information under section 1204(m) of the Act.

Lead Agency Authorized Representative (Printed Name): Richard Woods	
Signature: Richard Woods	Date: 12-12-18

Letting Districts Lead the Way: Georgia's Innovative Approach to Assessment for Learning

Georgia is embarking on a groundbreaking approach to assessment innovation by leveraging the expertise of local school districts to develop and implement innovative assessment solutions designed to support student learning. In 2018, the Georgia Legislature passed Senate Bill 362, establishing Georgia's innovative assessment pilot program. This innovative assessment pilot program is fully consistent with the requirements of Section 1204 of the Elementary and Secondary Education Act (ESEA), as described in the project narrative under the Innovative Assessment System section, and allows up to 10 districts or consortia of districts to design and implement an innovative assessment and accountability program aligned with state academic content standards – the Georgia Standards of Excellence (GSE).

The State of Georgia (Georgia Department of Education) will oversee the innovative assessment pilot program while three approved districts/consortia – Cobb County School District, Georgia MAP Assessment Partnership, and Putnam Consortium – take the lead in developing and implementing innovative assessment solutions. The assessment systems being developed by these districts/consortia are being designed to maximize instructional time and provide immediate feedback to inform instruction, and prepare students for the next grade, course, college, or career.

The Cobb County School District is utilizing the Cobb Teaching and Learning System Assess platform (CTLS-Assess). CTLS-Assess contains valid and reliable assessments given throughout the year that indicate a student's mastery of each standard in a course. CTLS-Assess assessments are delivered using a scalable, online platform that provides a student's progress on the assessments to teachers in real time. The Georgia MAP Assessment Partnership is utilizing MAP Growth for Georgia created by NWEA. MAP Growth for Georgia is a through-year assessment that leverages adaptive interim assessments to provide timely insights on students' command of grade-level standards, measure academic growth, provide norm-referenced test results, and produce summative proficiency scores. The Putnam Consortium is utilizing Navvy, a diagnostic assessment system created by Navvy Education, LLC.

Navvy is the first-of-its-kind, on-demand assessment system that leverages cutting-edge data science to support a critical shift in assessment for providing real-time and reliable diagnostic data upon which teachers can continuously act to customize learning opportunities for students. Combined, these three districts/consortia will implement their assessment systems in 22 districts, serving 329 schools and about 287,582 students, beginning in the 2019-2020 school year.

Georgia is applying for approval under the federal Innovative Assessment Demonstration Authority (IADA) authorized by ESEA Section 1204 in order to support its districts as they lead the way in developing innovative assessments for learning. The objective of Georgia's innovative assessment pilot program is to allow local school districts to develop and implement innovative assessments that are comparable and aligned with the GSE standards. During the duration of the IADA pilot, the state of Georgia will evaluate the three innovative assessments and consult stakeholders across the state to select one assessment model (one of the innovative assessments or the state's current assessment system, Georgia Milestones) for use statewide.

While each district/consortium is working with technical experts to design and implement its assessments, Georgia will also contract with an external technical assistance provider to provide independent technical assistance to the districts/consortia as well as provide an annual report of activities, needs, and next steps. Additionally, Georgia will work with an external provider toward the end of the demonstration authority to evaluate the technical quality of the innovative assessment systems, including alignment between the innovative assessments and the state academic content standards and the comparability between the innovative assessments and the state's current assessment system, Georgia Milestones. This process, combined with Georgia's oversight of the innovative assessment pilot, will help maximize the technical quality of the innovative assessment systems, establish comparability, establish a system of continuous improvement, and provide information needed to inform Georgia's identification of a single system for statewide implementation.

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Project Narrative

Overview

Throughout the Innovative Assessment Demonstration Authority (IADA) period, the State of Georgia (Georgia Department of Education) will oversee the innovative assessment pilot program while three approved districts/consortia – Cobb County School District, Georgia MAP Assessment Partnership, and Putnam Consortium – take the lead in developing and implementing innovative assessment solutions. The assessment systems being developed by these districts/consortia are being designed to maximize instructional time, provide immediate feedback to inform instruction, and prepare students for the next grade, course, college, or career. This section of Georgia's application provides an overview of each district/consortia's innovative assessment system.

The remainder of this application describes how the state of Georgia is supporting each requirement along with descriptions of how the Cobb County School District, Georgia MAP Assessment Partnership, and Putnam Consortium are each meeting the application requirements for its respective assessment systems.

<u>Cobb County School District</u>

For the last eight years, Cobb County School District, the second largest district in Georgia with 112,000 students in 113 schools, has implemented a standards-based assessment platform in its schools – the Cobb Teaching and Learning System Assess platform (CTLS-Assess). CTLS-Assess initiatives were developed with the help of teachers so that students could demonstrate mastery of the state's academic content standards. In this initiative, assessments were developed in CTLS-Assess and administered at the standards-level for each of the courses and subjects that were required to be tested for state and federal accountability.

The original purpose of the initiative was to support students and teachers in the learning process. Accountability was not one of the original goals. The IADA gives Cobb County School District the opportunity to expand CTLS-Assess by allowing it to be used for accountability purposes and to possibly scale the assessment system to all Georgia LEAs. During the IADA period, Cobb will expand and refine its innovative assessments and establish the comparability between the innovative standards-level assessments and the existing state assessment system, Georgia Milestones.

CTLS-Assess assessments indicate a student's mastery of each standard in a course (for example, every standard in third-grade math). These assessments will be delivered using a scalable, online platform that provides a student's progress on the assessments to teachers in real time. With CTLS-Assess, teachers give the assessments throughout the year as students are ready instead of waiting until the end of the year. CTLS-Assess is designed to provide information on each standard so that students and their teachers know how they are doing throughout the year. This detailed, standards-level information for each student will be combined at the end of the school year for state and federal accountability.

Cobb County School District is convinced that these innovative, standards-level assessments will have a profound impact on teaching practice and student learning for all courses in which it is implemented. However, Cobb's ultimate hope and vision for this initiative is more ambitious. By focusing on standards instead of courses (every standard in third grade math rather than third grade math as a whole), CTLS-

Assess should translate easily to our career, technical, and agricultural education (CTAE) pathway courses since those courses are naturally focused on the individual skills needed for work. If Cobb can better improve our student's preparation for work and life, then our students will have the best possible future.

Georgia MAP Assessment Partnership

The Georgia MAP Assessment Partnership (GMAP) proposes to partner with NWEA® to thoughtfully implement a unified assessment system that reduces testing time, provides educators with instructional guidance, and challenges students to develop the higher-order thinking skills they need to succeed in college and careers.

At the end of the five-year Georgia Innovative Assessment Pilot Program (GMAP Pilot), by spring 2023, the result will be a state-of-the-art comprehensive assessment system that blends NWEA MAP® Growth™ benchmark assessments with items directly aligned to the Georgia Standards for Excellence (GSE) to create a unique blueprint and through-year test experience in grades 3–8 in English language arts and mathematics and grades 5 and 8 in science that:

- Provides high-quality student growth data, regardless of where on the continuum of learning a student falls.
- Returns scores that give information about summative proficiency status relative to grade-level standards.

The through-year system consists of adaptive assessments administered three times per year – in fall, winter, and spring – to measure student learning relative to grade-level expectations and adapts within, below, or above grade level based on the student's performance. Educators will receive instructionally relevant reports on student grade-level performance, as well as individual learning level and cross-grade-level growth, throughout the school year— in time to impact learning. Summative proficiency scores are generated for accountability using grade-level performance data from the three interim assessments and optional performance tasks.

Each computer adaptive assessment will give students the opportunity to demonstrate progress toward grade-level proficiency and will provide information about a student's growth, allowing teachers to continue to use the high-quality longitudinal growth information that exists today within the MAP Growth system.

This system will leverage the adaptive principles of MAP Growth for grades 3–8 as a foundation for a through-year assessment model in English language arts, mathematics, and science aligned to the GSE. This model will use adaptive assessments administered in fall, winter, and spring to yield longitudinal growth data, instructionally relevant insights, and summative proficiency scores, as shown in Figure C-1.

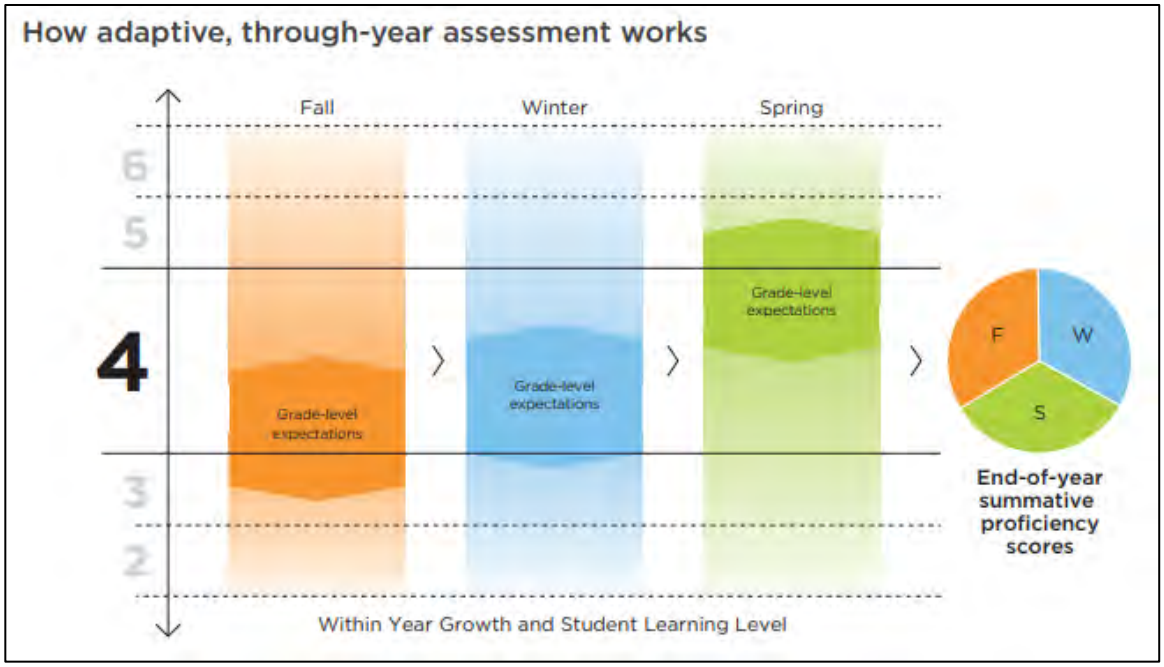

Figure C-1: Through-Year Assessments. Summative proficiency scores are generated for accountability using grade-level performance data from the three interim assessments and optional performance tasks.

Specifically, each assessment will:

- Provide timely data and narrative insights about student and class achievement, including performance against grade-level expectations (and performance below or above grade level).
- Show longitudinal academic growth within and across years.
- Maximize test efficiency for each student (for example, if students demonstrate command of particular grade-level concepts in fall or winter, they do not necessarily need to be retested on them in spring).
- Include recommendations for classroom-based performance tasks tailored to student needs.
- Feature the option to include performance tasks with each assessment or only in spring, depending on the theory of learning and the intended balance of assessment and instructional time.
- Yield summative proficiency scores for the year by summing up grade-level performance data from the three assessments.

The intent of this partnership is to create a system that would allow districts to leverage a through-year model instead of delivering a separate traditional annual summative assessment and provide a solution that helps facilitate student learning throughout the year.

During the five-year GMAP Pilot, NWEA, in partnership with Georgia stakeholders, intends to:

- **Years 1-2:** Develop the through-year model while implementing MAP Growth.
- **Years 3-4:** Pilot and field test the through-year model and continue testing with MAP Growth as needed; conduct comparability studies for the through-year model and Georgia Milestones.
- **Year 5:** Scale the through-year model, resulting in a comprehensive assessment system that meets both district and State needs, yielding data that can be used throughout the year to

inform instruction and be aggregated at the end of the year to make determinations about summative proficiency.

Throughout the GMAP Pilot, GMAP districts, teachers, and administrators will have input and be involved in the development of the through-year assessment model.

Figure C-2 shows the projected test plan for the GMAP Pilot.

	ELA		MATH		SCIENCE	
	Interim	Summative	Interim	Summative	Interim	Summative
Year 1	MAP Growth	GA Milestones	MAP Growth	GA Milestones	MAP Growth	GA Milestones
Year 2	MAP Growth	GA Milestones	MAP Growth	GA Milestones	MAP Growth	GA Milestones
Year 3	Through-Year	Through-Year/ GA Milestones	Through-Year	Through-Year/ GA Milestones	MAP Growth	GA Milestones
Year 4	Through-Year		Through-Year		Through-Year	Through-Year/ GA Milestones
Year 5	Through-Year		Through-Year		Through-Year	
Every Year	Educator & Stakeholder Involvement					

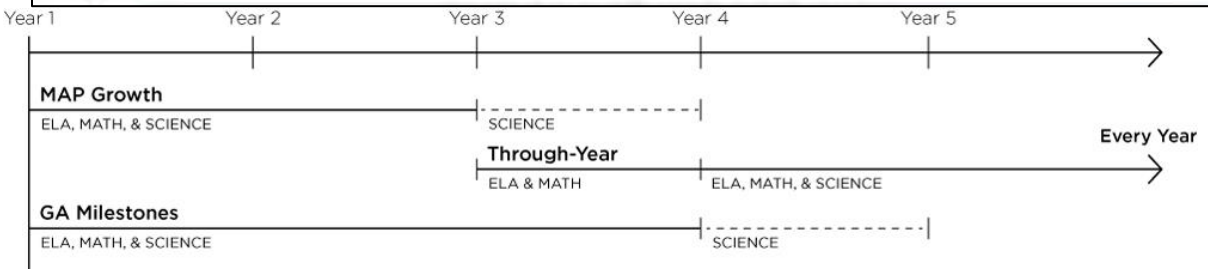

Figure C-2: GMAP Timeline. Projected test plan during the five-year GMAP Pilot.

Putnam Consortium

The Putnam Consortium seeks to implement an innovative, through-year assessment system ("Navvy") to support teaching and learning of the Georgia Standards of Excellence. Navvy is a first-of-its-kind, on-demand assessment system that leverages cutting-edge data science to support a critical shift in assessment for providing real-time and reliable diagnostic data upon which teachers can continuously act to customize learning opportunities for students. The development and implementation of Navvy has been led by districts in Georgia through collaborations among Georgia educational leaders and experts, Georgia teachers, researchers and faculty at University of Georgia, Georgia's flagship university, and key stakeholders.

Putnam County, in collaboration with Navvy Education, LLC and with member districts of the Putnam Consortium, is committed to syncing accountability with support for learning for all students to be successful in their college and career paths. By assessing real-time competencies of the state's academic standards throughout the year, the Putnam Consortium will be increasing the quality of instructionally-relevant feedback provided for schools and stakeholders, while simultaneously increasing the quality of

data collected for monitoring the learning opportunities provided by schools in our state. The Putnam Consortium expects both improved feedback and improved accountability to contribute to improved student outcomes.

By implementing this innovative assessment system, the Putnam Consortium aims to:

- Scale a locally-initiated assessment across the state
- Transition to a learning-focused assessment system that integrates statewide assessment with teaching and learning
    - **Flexibly administer** on-demand assessments as needed to sync naturally with classroom teaching and learning
    - Efficiently provide **diagnostic information** that is both **actionable** and **reliable** so that teachers can confidently act upon feedback to inform personalized instruction for students
    - Provide **timely feedback** via through-year assessments to identify student's specific needs for personalized instruction
- Transition to a competency-focused assessment system
- Improve student achievement for all students in Georgia

The IADA sets a high standard for an innovative system of assessment. The following table provides responses to the five central requirements pertaining to the Navvy assessment system.

Requirement	Response
Innovation	Navvy is a novel standards-level assessment system designed to produce valid and reliable inferences that pinpoint student competencies of individual state standards. Navvy leverages a family of diagnostic psychometric methods that previously has not been used for statewide assessment. It enables teachers to assess a student's competency on a standard-by-standard basis using short, web-based assessments that provide actionable, real-time feedback to support timely, personalized instruction. The flexible administration of the standards-level assessments allows the assessments to fit the teacher's instructional schedule, rather than forcing the teacher to build the schedule around an assessment. Navvy allows students multiple attempts to update their competence status of each standard, thereby fostering student engagement and ownership in the learning and assessment processes for all students and reducing the anxiety often associated with statewide assessment.
Assessment Quality	Navvy is grounded in empirical research and was developed in accordance with the Standards for Educational and Psychological Testing (AERA, APA, & NCME, 2014). Activities to gather empirical evidence to continuously evaluate the technical quality of the assessments are detailed in the application. The assessment design, implementation practices, and validity evidence will be regularly reviewed by the Georgia Innovative Assessment Pilot Technical Advisory Committee (TAC).
Comparability	Navvy and Georgia's current statewide assessment system, Georgia Milestones, are both aligned to the State's challenging academic standards, developed with significant input from Georgia teachers, and administered under comparable standardized testing conditions. This application details the methods for establishing annual summative determinations from the student competency profiles produced by Navvy and for evaluating achievement level comparability with the statewide assessment system.

Scale Statewide	Twelve LEAs that represent geographically and demographically diverse students in Georgia are currently committed to participating in this innovative assessment consortium. The expectation is that additional districts will join the consortium as the pilot progresses with the eventual goal of having all interested districts shift to Navvy's learning focused approach to accountability.
Demographic Diversity & Similarity	The current Navvy districts are representative of Georgia as a whole and will continue to be so as additional LEAs join the consortium.

The Navvy innovative system was developed locally and demonstrated via proof of concept in the 2017-2018 school year. The system then spread to 12 school districts in 2018-2019 school year through a grass-roots movement. The Putnam Consortium is committed to supporting the effort to further scale and evaluate the Navvy assessment system as a possible statewide accountability system.

This application sets forth a clear path for continued implementation and evaluation of the Navvy assessment system and, as such, satisfies all of the application requirements and selection criteria.

Consultation

Evidence that the SEA or consortium has developed an innovative assessment system in collaboration with –

1) **Experts in the planning, development, implementation, and evaluation of innovative assessment systems, which may include external partners; and**

The Cobb County School District, Georgia MAP Assessment Partnership, and the Putnam Consortium will engage with experts in the planning, development, implementation, and evaluation of their innovative assessment systems. Additionally, the State of Georgia will provide additional expert consultations as the state innovative assessment pilot progresses.

<u>Cobb County School District</u>

The Cobb County School District (CCSD) has implemented the Cobb Teaching and Learning System (CTLS) since 2011. This assessment platform, CTLS-Assess, contains standards-based assessments for each of the courses and subjects that are required to be tested for state and federal accountability. These assessments are given throughout the year and indicate a student's mastery of each standard in a course. CTLS-Assess assessments are delivered using a scalable, online platform that provides a student's progress on the assessments to teachers in real time. CCSD has relied on the expertise of within-district technical and professional experts as well as that of outside consultants.

CCSD Academic Division

Cobb County School District's Academic Division is led by Jennifer Lawson, Chief Academic Officer. Within the Academic Division, Kelly Metcalfe, Assistant Superintendent of Teaching & Learning, provides leadership to several departments including the Assessment and Personalized Learning Department and

the Instruction and Innovative Practices Department. The Assessment Department is led by Lori Horn, the Director of Assessment and Personalized Learning. The team includes four Assessment Supervisors, all of whom have expertise in the areas of assessment development, the utilization of assessment data to inform instruction, professional learning development and delivery, assessment platform/technology implementation, and content area expertise in English language arts, mathematics, and science. The Instruction and Innovation team is led by Dr. Felicia Angelle, the Director of Instruction and Innovative Practice. The department is comprised of 13 content area supervisors in English language arts, mathematics, science, social studies, CTAE, health/physical education, world languages, performing and visual arts, and STEM. These departments within the Academic Division have worked collaboratively throughout the development of CTLS-Assess to support the development of quality district assessments. Once assessments are developed, they are vetted by the Academic Division's curriculum and assessment leaders for item quality and bias and to ensure alignment with state standards. For resumes of key personnel, see Appendix B-7.

CCSD Strategy and Accountability Division

Within Cobb County School District's Strategy and Accountability Division the technology team is led by Marc Smith, Senior Executive Director of Technology. This team includes 155 employees with expertise in network services, instructional technology, field services, student information systems, and customer care. CCSD's Technology Department develops internal applications in collaboration with all other departments in the district using the Microsoft technology stack. The department has facilitated the collaboration between the district and external vendors to develop and support CTLS-Assess. CCSD's Accountability team is led by Dr. Ehsan Kattoula, the Assistant Superintendent of Accountability, Research & Grants. Dr. Kattoula has expertise in using assessment data to inform school improvement and is the district expert in the College and Career Ready Performance Index (CCRPI), Georgia's school accountability system under ESSA.

CCSD Education Incites®

Education Incites® is headquartered in Chicago, IL, with a multi-national product development team based in Charlotte, NC. Education Incites® has extensive experience in the construction of standards-based formative and summative assessment platforms supporting some of the largest, most complex school districts in the country, including the Cobb County School District. For years, Education Incites® has worked to understand not only the functional needs of educators, but to also understand the technical requirements for assessment platforms to perform reliably under peak volumes of student users.

<u>Georgia MAP Assessment Partnership</u>

The Georgia MAP Assessment Partnership (GMAP) is implementing MAP Growth and developing a through-year assessment model, MAP Growth for Georgia, with NWEA.

NWEA has provided assessment products and services — including the planning, development, implementation, and evaluation of innovative assessment systems — since the organization was founded in 1973 with the purpose of building high-quality, equitable assessments for use in K–12 education.

NWEA became an incorporated nonprofit in 1977 and was the first organization to offer computer adaptive testing for students in grades K–12 beginning in 1985. By dynamically adjusting to each student's answers, computer adaptive tests create a personalized experience that accurately measures performance. This adaptivity supports students with diverse needs, including students with disabilities, English learners, and those performing outside grade-level expectations.

Over the years, NWEA has continued to improve and expand its computer adaptive assessment offerings:

- **MAP Growth** (previously called Measures of Academic Progress®, or MAP), the organization's flagship interim assessment launched in 2000, measures student performance using items aligned to state standards, and informs educators and parents about what students are ready to learn next. Tests for students in grades 2–12 assess mathematics, reading, language usage, and science.
- **MAP Growth K–2** (previously called MAP for Primary Grades), launched in 2006, assesses content that is typical for early learners and supports pre-, emergent, and beginning readers with audio support. Tests assess mathematics and reading.
- **MAP Reading Fluency™,** launched in 2018, is the first assessment in the market to measure oral reading fluency using automatic scoring. The test, completed using a headset with a mounted microphone, focuses on foundational reading skills, including oral reading fluency and literal comprehension. The screening and benchmarking assessment is appropriate for students in grades K–3.

NWEA currently partners with over 9,800 education organizations worldwide to provide assessment solutions, reports, instructional resources, professional learning, and research services. These partnerships include school districts of various sizes; state departments of education; private schools and charter schools; foundations; international schools; and national education organizations such as the Bureau of Indian Education.

NWEA has continued to expand globally, reaching over ten million students throughout the United States and in 145 foreign countries. NWEA employs 700 staff members dedicated to creating the best assessments for students and providing support and professional learning educators need to promote student growth.

The NWEA testing platform supports over sixty million student test events each year. It is designed with highly scalable architecture and is capable of scaling up based on partner needs.

Preliminary linking between existing MAP Growth assessments and Georgia Milestones has been completed, and MAP Growth data is currently being used by Georgia districts to help inform instructional decisions. Further design and development to more tightly align the through-year assessment to the Georgia Standards of Excellence will be completed over the course of the GMAP Pilot to create an assessment system that continues to provide valuable information to teachers about where students are on the growth continuum and create results that go beyond linking to Georgia Milestones, producing reliable, valid results comparable to the information needed to populate the state accountability system.

GMAP stakeholders reached out to see if NWEA would partner in the development of their application for one of the innovative assessment opportunities enabled by Georgia Senate Bill 362. Through the use of MAP Growth at their respective schools and districts, GMAP leaders believed that MAP Growth could

be tailored to meet the requirements of Senate Bill 362 and, most importantly, provide a solution comparable to the Georgia Milestones summative assessments.

Key NWEA staff who are currently engaged in the design and development of this work bring extensive state and assessment consortia experience to the table, are familiar with the IADA peer review expectations, and have helped to successfully shepherd new assessments through the design, development, implementation, and approval process. Please see Appendix C-1 for résumés of key personnel.

Partnership with the Georgia Center for Assessment

Additionally, the Georgia Center for Assessment has agreed to help facilitate collaborative work with Georgia educators as the solution is built and refined. See Appendix C-2 for a letter of support.

Putnam Consortium

Putnam County and its participating LEAs have consulted with a variety of experts and stakeholders in the state in the development of the innovative Navvy assessment system.

Putnam County has partnered with Navvy Education, representatives from 11 other LEAs, and with educators across the state to design, develop, and implement the Navvy assessment system for teaching and learning and to design an accountability system based upon Navvy assessment results. Putnam County's research-practice partnership with Navvy Education was born out of Putnam County's local commitment to assessing competencies at the standards level and focusing on local accountability based on gaining competencies of the standards for the past 10 years.

Technical and Professional Learning Experts

Navvy Education (Athens, Georgia)

Navvy Education, a Georgia-based assessment company, was founded by Dr. Laine Bradshaw specifically to meet the needs of local school districts to have access to a diagnostic assessment system that also meets technical requirements of validity and reliability. Dr. Bradshaw is professor at the University of Georgia and a leading expert in diagnostic psychometrics and assessment. The Navvy assessment system is grounded in her peer-reviewed research which has demonstrated the successful design of similar assessments. Navvy Education consulted with a network of educators across the state of Georgia to develop Navvy. This team of Georgia educators was comprised of master classroom teachers and of experts who have served in roles such as curriculum administrators in the State Department of Education, curriculum directors at Regional Educational Service Agencies (RESAs), and presidents of teacher organizations in Georgia. As the developer of the assessments and an on-going partner with local LEAs, Navvy Education works closely with LEAs and provides training, professional development, and support to successfully use and implement the system. Navvy Education will also guide the evaluation of the technical properties of the assessments and produce annual technical documentation for the assessment system. For this work, Navvy Education's psychometric team will include experts in diagnostic assessment design and analysis with Dr. Matthew Madison, professor at Clemson University, and Dr. Phil Chalmers, professor at York University. Navvy Education will also provide assistance on other technical reports as needed, such as the annual report to the U.S. Department of Education during the Innovative Assessment Demonstration Authority (IADA) period.

Institute for Performance Improvement (Grayson, GA)

Putnam County, participating LEAs, and Navvy Education have partnered with the Institute for Performance Improvement (the "Institute") to provided professional development to support implementation of the innovative assessment system. The Institute is a group of performance improvement specialists dedicated to developing, certifying, and supporting school improvement facilitators at state and local education agencies and at school levels. Their programs and services support meeting ESSA requirements for school improvement with an emphasis on leadership, developing high-impact professional learning, and planning and evaluating school improvement interventions. The Institute has developed and certified state and regional education agency staff and school improvement specialists across the country and, since 2002, supported by the Gates and Wallace foundations, Institute President Deb Page, has developed leaders in 172 GA school districts in data-driven, team-based school improvement. The Institute is currently training school improvement personnel working in the GaDOE and in Georgia's Regional Educational Service Agencies (RESAs) and will work with participating LEAs to provide training for school improvement personnel focused on implementing Navvy in their schools.

The National Center for the Improvement of Educational Assessment (Center for Assessment, Dover, New Hampshire)

The Center for Assessment consulted with Putnam County to provide policy advice and consultation on meeting the IADA requirements. Throughout the IADA period, the Center for Assessment will provide for technical assistance for standard-setting practices to establish annual summative determinations for the innovative assessment system, provide consultation on evaluating the comparability among the innovative assessment system and the statewide assessment system, and connect Putnam County with nationally-recognized experts as needed for additional input, review, and evaluation to support continuous improvement.

Please see Appendix D-12 for résumés of key staff.

<u>State of Georgia</u>

Georgia is currently seeking the assistance of external experts through a Request for Proposals (RFP) process to assist Georgia and its pilot districts in planning, developing, implementing, evaluating, and scaling Georgia's innovative assessment pilot program. The selected technical assistance provider will provide a set number of technical assistance hours to each of the three districts/consortia to assist in the development and implementation of their innovative assessment systems. Additionally, the provider will convene a technical advisory committee (TAC) twice each year to provide independent, objective technical assistance regarding the technical quality of the innovative assessment systems. Finally, the contractor will provide the state with an annual report summarizing the technical assistance needs addressed at TAC meetings and through technical assistance hours, lessons learned, and recommendations for future pilot program activities. Georgia will utilize this information to evaluate progress annually and improve its technical supports and implementation of the innovative assessment pilot program. The RFP process is not yet complete and, as such, resumes of the technical assistance providers and TAC members are not available for inclusion in this application. However, this information can be provided as needed after the RFP process is complete (expected to be complete by January 2019).

Georgia will also seek an external expert through a competitive bid process to conduct an independent evaluation of technical quality of the innovative assessment systems toward the end of the demonstration authority.

This technical evaluation will include an evaluation of reliability and validity evidence that is consistent with nationally recognized professional and technical standards. This will include a series of construct comparability (i.e., content alignment) studies including analyses of assessment framework documents (e.g., test blueprints and specifications for test items) and convening panels of educators (including Georgia teachers and external expert facilitators) to examine the alignment between items on the innovative assessments with the Georgia Standards of Excellence (GSE) content standards.

The technical evaluation will also include a series of score comparability studies including empirical analyses for linking procedures (to establish concordance tables), building reliability and validity evidence, classification accuracy analyses (for achievement level designations), analyses by subgroups of students, and performance differentiation by schools. Additional analyses will explore the comparability of administration procedures (including availability of accommodations), as well as scoring specifications (including protocols for scoring constructed response items) and inter-rater reliability statistics. Included within the scope of these studies will be analyses that explore the potential use of the concorded measures for each relevant grade-span and content area as indicators within the statewide accountability system.

2) Affected stakeholders in the State, or in each State in the consortium including –
- **(i) Those representing the interests of children with disabilities, English learners, and other subgroups of students described in section 111(c)(2) of the Act;**
- **(ii) Teachers, principals, and other school leaders;**
- **(iii) Local educational agencies (LEAs);**
- **(iv) Representatives of Indian tribes located in the State;**
- **(v) Students and parents, including parents of children described in paragraph (a)(2)(i) of this section; and**
- **(vi) Civil rights organizations**

State of Georgia

Georgia's path to its innovative assessment pilot program began during the development of the state's Every Student Succeeds Act (ESSA) plan. Georgia engaged in a comprehensive process to solicit stakeholder feedback and utilize that feedback to inform the development of its ESSA plan. See Appendix A-1 for an overview of Georgia's ESSA Plan Development Process. This process included a State Advisory Committee, stakeholder engagement, and ESSA Working Committees. Representatives for each of the applicable stakeholders required by this section were included throughout the process.

The State Advisory Committee consisted of more than 40 stakeholders representing state agencies, non-profit and civic organizations, education advocacy groups, policymakers, superintendents, parents, and students to develop focus areas and guiding principles for each of the sections of ESEA, including on assessment, as well as reviewing stakeholder feedback and providing feedback themselves on the proposed plan. The composition of this committee included all stakeholders required by this section, as applicable:

i. *Those representing the interests of children with disabilities, English learners, and other subgroups of students* – students, parents, teachers, Southern Education Foundation, 100 Black Men of Atlanta, ACLU Georgia, Division of Children and Family Services, other civil rights organizations (see below), Special Education State Advisory Panel, and other representatives on ESSA working committees
ii. *Teachers, principals, and other school leaders* – Professional Association of Georgia Educators (PAGE), Georgia Association of Educators (GAE), EducatorsFirst, Georgia Association of Educational Leaders (GAEL), Regional Education Service Agencies (RESAs), 2017 Teacher of the Year
iii. *Local educational agencies (LEAs)* – Georgia School Superintendents Association (GSSA) and other superintendent representation, Georgia School Boards Association (GSBA), Georgia Charter Schools Association, Georgia Charter Systems Foundation, 2015 National Superintendent of the Year
iv. *Representatives of Indian tribes located in the State* – not applicable
v. *Students and parents, including parents of children described in paragraph (a)(2)(i)* – students, Georgia Parent Teacher Association (GaPTA), Parent to Parent of Georgia, and other parent representation
vi. *Civil rights organizations* – Southern Education Foundation, 100 Black Men of Atlanta, WonderRoot, Urban League of Greater Atlanta, ACLU Georgia, United Way of Greater Atlanta, Community Foundation of Greater Atlanta, Georgia State University School of Public Health, Georgia State Conference NAACP, The Opportunity Institute, Division of Children and Family Services, Parent to Parent of Georgia, Interfaith Children's Movement, Georgia Appleseed, Sheltering Arms, Center for Pan-Asian Community Services, Gwinnett StoPP, Georgia Budget and Policy Institute

Additionally, the committee included stakeholders representing higher education (Technical College System of Georgia, University System of Georgia), state agencies (Governor's Office of Student Achievement, Student Finance Commission, Professional Standards Commission, Department of Juvenile Justice, Department of Early Learning, Georgia Public Library Service), economic development (Georgia Partnership for Excellence in Education, Georgia Hispanic Chamber of Commerce, Georgia Association for Career Technical Education), policymakers (Governor's Office, Lt. Governor's Office, lawmakers), and the State Schools Superintendent and State Board of Education.

Stakeholders were engaged statewide through:

- eight public feedback sessions across the state that provided opportunities for parents, students, educators, business and industry, and community members to share their thoughts and concerns;
- feedback sessions with each of the State School Superintendent's advisory councils, representing middle and high school students, parents, teachers, and district superintendents;
- social media feedback;
- email feedback; and
- a public survey to gather feedback.

For additional information on the stakeholders engaged and feedback received, see Appendix A-2.

The common themes that emerged through this stakeholder feedback regarding the work of assessment included:

- Tests should be used to inform, rather than drive instruction.
- Testing is important, but currently there is too much focus on testing outcomes for students to the detriment of educating the whole child.
- State assessments have limited instructional uses due to their summative nature and the time of year they are administered.
- Formative assessments, taken throughout the school year, are needed to provide teachers with more timely information to inform instruction.
- Additional flexibility is needed regarding how assessments are administered.
- It is powerful what we report. It is important to think through how success and failure are communicated.
- Assessment reports need to be easier to understand and provided in a more timely manner.

For an overview of all the assessment feedback received, see Appendix A-3.

In addition to the State Advisory Committee, Georgia convened six working committees to review the feedback, study their area of focus, and help design Georgia's ESSA plan. The Assessment Working Committee included representatives of superintendents, principals, teachers, school improvement, special education, higher education, and teaching and learning. In considering new assessment opportunities offered under ESSA, the Assessment Working Committee clearly recognized and supported the interest of various stakeholders to pursue assessment flexibility. The committee's recommendations included:

- Districts be allowed to present innovative assessment solutions for consideration to be scaled statewide.
- Additional study and analysis are needed regarding the implementation of multiple statewide interim assessments.
- Districts be allowed to pursue a locally selected, nationally recognized high school assessment and present evidence that the requirements outlined in federal law are met.

Additionally, Code Section 20-2-291 of the Official Code of Georgia Annotated (O.C.G.A. § 20-2-281) was amended by Georgia Senate Bill 211 in 2017 (see Appendix A-4) to direct the existing ESSA Assessment Working Committee to pursue maximum flexibility for state and local assessments under federal law, including applying for the federal IADA. In light of these recommendations and SB 211, the Assessment Working Committee recommended that the Georgia Department of Education (GaDOE) establish an Assessment Task Force specifically to vet assessment flexibility options and to make recommendations to the State School Superintendent and the State Board of Education for implementation. See Appendix A-5 for more information about the Assessment Working Committee's recommendations and SB 211.

In September 2017, Georgia State Schools Superintendent Richard Woods announced the creation of an Assessment Innovation & Flexibility Task Force. The task force is comprised of a variety of stakeholders, including policymakers, districts, and advocates. The task force has met throughout 2018, with a purpose of examining and developing recommendations for Georgia to take advantage of the assessment flexibility afforded under ESSA and other federal law; learning about and developing best practices based on the assessment innovation and flexibility being pursed and utilized in other states; and applying for and providing oversight for Georgia's participation in IADA. The task force's recommendations are expected in the winter of 2018-2019.

In response to the desire to pursue assessment flexibility and allow local districts the opportunity to develop innovative approaches to assessment, Georgia's innovative assessment pilot program was ultimately created in 2018 by state legislation (O.C.G.A. § 20-2-281; as amended by Senate Bill 362 in 2018; see Appendix A-6). State legislators, State Board of Education (SBOE) members, school district leaders, and other stakeholders participated in the legislative process, including speaking at hearings regarding the innovative assessment pilot program. That feedback was considered and utilized in crafting the final version of the bill that became state law.

Once state law established the innovative assessment pilot program, the State Board of Education (SBOE) held a statewide application process available to all Georgia school districts. Applications were due on either August 1 or September 1, 2018 and were considered at the August and September SBOE meetings. Three districts or consortia of districts submitted applications for consideration at the August board meeting with one being approved (Putnam Consortium). Three districts or consortia of districts submitted applications for consideration at the September board meeting with two being approved (Cobb County School District and Georgia MAP Assessment Partnership). See Appendix A-7 for the application announcement and Appendix A-8 for the application requirements.

Throughout the IADA period, Georgia will utilize its superintendent, parent, and student advisory councils to collect stakeholder feedback on the innovative assessment pilot. Additionally, Georgia will develop an annual stakeholder feedback process to ensure all required stakeholders are kept informed of the innovative assessment pilot's progress and have the opportunity to provide feedback to inform development and implementation efforts. This feedback, along with the previously-mentioned technical evaluation, will be used by the State to ultimately select one assessment system, approved by the SBOE, for possible statewide expansion.

<u>Cobb County School District</u>

The Cobb County School District (CCSD) collaborated with multiple stakeholders to develop the innovative assessments and assessment platform that are combined to create CTLS-Assess.

i. Students and parents, including parents of children described in paragraph (a)(2)(i) of this section:

School district leaders regularly engage with and solicit feedback from the various constituencies represented in the district including parents and guardians of students with disabilities and English learners (ELs). CCSD supports students, parents, and district staff with materials and ideas for how best to engage with parents of special education and EL students.

The CCSD district leaders have worked diligently to ensure children with disabilities, English learners, and other subgroups of students are appropriately and adequately served within this new assessment model. Special education and EL teachers have participated in the development of CTLS-Assess and will continue to be key stakeholders in its ongoing development and scaling. In addition, district leaders work closely with CCSD's Special Education Parent Mentors. This group works to enhance communication between parents and educators, ultimately leading to greater success for students with disabilities. As parents of students with disabilities, CCSD's Special Education Parent Mentors provide resources to families of children with special needs. They are part of the broader Georgia Parent Mentor Partnership.

The CCSD utilizes a variety of resources to engage parents of English Learners in their child's education, including the use of Language Facilitators, district support staff, and technology-related services. When practicable, CCSD uses the English Learner's home language as a means of providing parents with school-related information. This includes utilizing interpreters for parent meetings across the district.

ii. Teachers, principals, and other school leaders:

Classroom teachers were also integral to the development of CTLS-Assess items, instructional resources, and the user interface and designs of the platform. Each year, over 100 Cobb County School District teacher leaders, at each grade level and content area, participate in the collaborative development of common assessments delivered through CTLS-Assess. Prior to beginning the assessment development process, all staff involved in the development of these common assessments participate in professional learning designed to train teachers on how to write quality, rigorous items for district assessments. This professional learning is provided by external partners. Teacher teams work alongside Cobb County School District curriculum and assessment leaders throughout the development process (i.e. development of the assessment blueprint, development of items, and development of the assessment). Once assessments are developed, they are vetted by CCSD's curriculum and assessment leaders for item quality and bias. These assessments are reviewed each year and revised as needed to ensure alignment with state standards.

In addition, CCSD teachers and leaders provide ongoing recommendations for enhancements to CTLS-Assess to support teaching and learning. Once recommendations are made, a CTLS-Assess review team discusses the suggestion(s) during monthly meetings. These recommendations are prioritized and shared with technology staff and external partners as needed to initiate the enhancement requests.

CCSD provides a robust menu of training opportunities to all leaders, teachers, and support staff across the district on the use of CTLS-Assess (Appendix B-1)**.** These trainings are designed to be delivered in 30-45-minute sessions to minimize the need for substitute teachers. Training topics include CTLS-Assess Dashboard, Sound Assessment Practices, Data Analysis for Teachers, Data Analysis for Administrative Teams, Item Builder, Assessment Builder, etc. Professional learning sessions for CTLS-Assess are available through face-to-face trainings as well as through a digital format.

iii. Local educational agencies (LEAs):

Through the IADA period, Cobb County School District will participate in shared decision making as additional LEAs elect to participate in the pilot, through the development of an Innovative Assessment Leadership Team which will provide input on key decisions.

iv. Representatives of Indian tribes located in the State

Native Americans represent less than 0.5% of Georgia's population and do not have specific tribal organizations that consult on education issues.

v. Students and parent, including parents of children described in paragraph (a)(2)(I) of this section;

The CCSD leadership team supports district leaders with materials and ideas for how best to engage with parents of special education and EL students.

As previously mentioned, the CCSD leaders work to ensure children with disabilities, English language learners, and other subgroups of students are adequately represented. Special education and EL teachers who have participated in development of assessment items will continue to be key stakeholders in the ongoing development of CTLS-Assess.

Currently, CTLS-Assess assessments are administered with classroom assessment accommodations as indicated in the students Individual Education Plan (IEP), Individual Accommodation Plan (IAP), or English Learner- Testing Participation Committee (EL-TPC) plan to ensure equitable access to the assessments. Through the IADA period, CCSD will develop an accommodations manual specific to the administration of CTLS-Assess. This development team will include the CCSD Assessment Director, Special Education Director, and Federal Programs Director, as well as teachers and other school leaders. This manual will mirror the state assessment accommodations manual.

vi. Civil rights organizations

CCSD will work with advocacy groups during the IADA period, soliciting feedback from civil rights advocacy groups such as local chapters of the NAACP as part of the implementation and on-going evaluation and improvement of the innovative assessment system.

<u>Georgia MAP Assessment Partnership</u>

The school districts in the GMAP consortium have involved stakeholders in coming to the decision to partner with NWEA and use MAP Growth and/or to pursue the GMAP Pilot. The following are ways in which at least one of the districts involved the stakeholders in their decision.

- School leaders and teachers of English learners and students with disabilities have been involved in the process to ensure that MAP Growth would meet their needs. Review of the data produced is an ongoing process.
- Barrow County School System joined with the Georgia Partnership for Excellence in Education to conduct a thorough system assessment inventory with a team of district and school administrators, instructional coaches, teachers, parents, and board members. Further review was provided through four focus groups which included school administrators, teachers, parents, and students.
- School Board members have been consulted throughout the process of adopting Growth MAP, implementation, and the pursuit of the GMAP Pilot. Each district's board chairman and superintendent have signed an agreement of support to pursue the Georgia MAP Assessment Partnership. Please see Appendix C-3 for résumés of key GMAP district leaders.
- Many of the schools have local governance teams or sometimes referred to as school governance teams that meet regularly and review the practices in the school and/or district. These teams include teachers, parents, administrators, and community members. The meetings do include reviewing the data produced by MAP Growth to ensure that goals are being met.
- Representative of Indian tribes were not consulted since it is not applicable in any of the participating districts.
- Through the process of Strategic Planning, community engagement meetings were held that involved parents, community members, staff, district leaders, business leaders, and students. Some of the local leaders included members from the NAACP and the Coalition of Latino Leaders. Surveys were also sent out that included the following demographic groups:

Parent/Guardian (35.71%), Teacher (19.05%), Adult - no children in K-12 schools (11.90%), and Employee with children in school (11.90%).

Stakeholder engagement will play a key role in the development of a through-year assessment model aligned to Georgia content standards. In particular, GMAP educators will, in collaboration with NWEA, recruit experts to help in the work to create desired specific inference definitions about what students know and can do in the content area and understand alignment with respect to the Georgia Milestones Achievement Level Descriptors (ALDs), and to define needs and review score report specifications. This will be done in partnership with participating GMAP districts so that a broad representation of educators is included in the GMAP Pilot process.

Development activities and standard setting are expected to include:

- Special education teachers
- EL teachers
- Teachers from schools with high-minority and low-minority student proportions
- Teachers from elementary, middle, and high schools
- Principals, curriculum directors, and school level-assessment directors
- District superintendents, curriculum directors, and assessment directors
- Educators and administrators representing and serving Native American students (as applicable in future participating LEAs)

Participants will be selected in partnership with GMAP districts for facilitated workgroups.

At the end of the GMAP Pilot, NWEA plans to partner as appropriate with GMAP districts to follow the State-approved stakeholder engagement process required by the State's Every Student Succeeds Act (ESSA) plan to drive further decision and development.

Additionally, a diverse group of representatives from many of these stakeholder groups have been involved in the process of developing the products that are serving as a basis of the initial growth and development work. NWEA has worked with partners to develop a variety of accommodations, along with universal and designated supports, for special populations, including for students with disabilities, English learners, and other students with special needs or considerations. NWEA offers a flexible accommodations approach to allow students to use their own third-party assistive technology. NWEA will continue to follow these successful practices during development of the through-year assessments.

Stakeholder engagement is a crucial component in NWEA content and test development processes. NWEA considers stakeholder needs when each item is created and then moved into a test pool for field testing and then operational usage. NWEA wants to measure the performance of students with a wide range of abilities and skills so that all students receive opportunities to demonstrate competence on the same content and will continue to follow these procedures, in collaboration with Georgia educators and stakeholders as new items are developed.

NWEA Content Solutions staff will work with a Georgia content advisory group to make sure that all content developed and/or used for the through-year assessment will meet specifications. Each district will provide one mathematics, one English language arts, and, in Years 2 and beyond, one science content expert with a deep understanding of the Georgia Standards of Excellence. This group can provide binding answers for the direction of the through-year assessment model in Georgia. In order to

build a cohesive group, it is asked that the membership be stable, and NWEA would prefer yearly commitments if possible. The content advisory group will participate in the following activities:

- Interpretation of standards
- Inputs to item specifications
- Inputs to test specifications
- Questions of alignment or other content questions during development

There may be times when the content advisory group meets cross-content, but many of the meetings will focus on a single content area to use attendees' time most wisely.

Stakeholders will be included in content review and bias/sensitivity reviews of all new content created for use in Georgia. The reviewers of content will be drawn from a wide variety of backgrounds and experiences. For bias/sensitivity reviews, having representative participants from as many demographic groups as possible gives the best feedback for content developers.

NWEA works directly with teachers and students who use accommodations and assistive technologies in multiple states and with national organizations, including CAST, Gallaudet University, Freedom Scientific®, American Printing House for the Blind, and the WGBH National Center for Accessible Media. Partnering with experts in the field, including the National Center for Accessible Media (NCAM®), has given NWEA opportunities to participate in and conduct frequent training around universal design. This partnership informs item and test development through a focus on current trends and best practices for accessibility.

As the through-year assessment is developed, NWEA and GMAP staff will meet monthly to discuss progress and will engage in a larger annual planning meeting prior to the end of each year of the project. This time will be used to evaluate progress and to adjust plans for the following year.

NWEA will maintain ownership of all content and intellectual property developed under this program.

<u>Putnam Consortium</u>

This initiative relies on collaboration among the participating districts and various stakeholder groups. This effort has been a grassroots effort, with district-level leaders leading the development of the innovative assessment system. We briefly highlight below the involvement and participation of these important stakeholders named in the application.

i. Students and parents, including parents of children described in paragraph (a)(2)(i) of this section:

School district leaders regularly engage with and solicit feedback from the various constituencies represented in their school district including parents and guardians of students with disabilities and English learners (EL). The Putnam Consortium will utilize existing resources from the GaDOE that provide district leaders with materials and ideas for how best to engage with parents of special education and EL students, including the use of personnel and technology to facilitate communication in other languages. The local LEAs work with advocacy organizations such as local PTAs, will work with parents of student with disabilities through state-level programs such as the Georgia Parent Mentor Partnership, and will seek input from state-level organizations such as the Superintendent's Parent Advisory Council to ensure all students are being served and supported within the new assessment and accountability model. Teachers who work directly with children described in paragraph (a)(2)(i) and communicate directly with

parents of these children were integral to the development of Navvy assessments and the accountability framework that focused on what students understand, allows students to move at their own pace, and provides students with more than one opportunity to succeed. These features of the assessment and accountability system were especially shaped by educators who feel that this population of students in our schools are able to show what they know and gain the support they need with the current statewide assessment system. Special education and EL teachers will continue to have key input in the review and implementation of the innovative system for assessment and accountability.

In the Navvy assessment system, students have their own dashboard to view results and teachers have submitted feedback to the Putnam Consortium and to Navvy Education from students on usability of the dashboard as well as the delivery of the assessments. In addition, Navvy Education conducted interviews with students to gain feedback on the initial layout and design of English language arts assessments.

ii. Teachers, principals, and other school leaders:

Teachers and school leaders were actively involved in development and implementation of Navvy and the accountability framework utilizing Navvy. The initiative was begun from the ground-level to provide a solution for needs that teachers, principals, and school leaders expressed to district-level leadership: teachers need an effective formative assessment system that focused on reliably describing what student do and do not understand at the standards-level to implement an effective formative assessment process. The development process for Navvy has been an on-going collaboration among teachers, school leaders, and district leaders to provide this solution and will continue to be.

Each school district currently using Navvy assessments is invited to have up to seven representatives on the Putnam Consortium Innovative Assessment Leadership Team: (a) superintendent or assistant superintendent, (b) curriculum director, (c) assessment director, (d) special education director, (e) two principals, and (e) a community member (e.g., board member or other community member). This leadership team meets monthly to review plans and discuss decisions about implementation of the Navvy assessments for both instructionally-relevant feedback and for accountability. Each district also has an internal process to facilitate a two-way line of communication between the leadership team and school leaders, to ensure school principals' voices are being represented by the leadership team at monthly meetings and to ensure progress and next steps are being shared with principals. Similarly, schools have internal processes to ensure two-way communication between school leaders and teachers. Teachers and school leaders also communicate directly with Navvy Education through the Navvy assessment platform to provide suggestions for improvement or give any type of feedback.

In addition, Georgia educators are leaders of development of the innovative system; classroom experience and teacher expertise and insights were critical to the development process. The Navvy item writing teams are comprised of Georgia classroom teachers and former teachers who are still serving active roles in schools (e.g., providing professional development or consultation for schools). Georgia educators also served on content validity review teams for items. These 30-40 Georgia educators represent different districts across the state and were peer-recommended to be on the Navvy development teams based on their expertise in content and pedagogy and their knowledge of the Georgia Standards of Excellence.

Navvy Education has also worked to give stakeholders access to the procedures and concepts underlying the assessment design, so they may, in turn, contribute to the design through their own perspectives, experiences, and insights. For all districts currently using Navvy assessments, Navvy Education provided

a half-day, in-person training for all district leaders, school leaders, and a sample of teachers. This training included looking 'under the hood' to show leaders how the philosophy behind Navvy and the assumptions in Navvy's data science are substantially different from other assessment systems. It also included explaining how Navvy fits into a larger theory of action to support instruction, increase student agency, and improve student learning. An explicit goal of this training is to introduce assessment and psychometric concepts using language all educators can understand to invite them into the conversation of assessment design and purposes. Giving everyone from teachers to superintendents an introduction to diagnostic measurement techniques has been a priority for us and something we feel has contributed to the success of our grassroots movement.

Another opportunity that teachers and school leaders have for feedback is through follow-up trainings provided by Navvy Education. Navvy Education to this point has said "yes" to all requests from school districts to come back and provide additional in-person training for additional personnel or for more in-depth professional development on implementing the assessment system. During these trainings, teachers and school leaders have the opportunity to provide insights and input for improving the Navvy assessment system and its use for supporting teaching and learning and for fulfilling accountability needs.

In addition to participating LEAs, Putnam County has held an annual informational meeting and invited personnel from any LEA who is interested in learning more about the Navvy assessment system and joining the consortium. At these meetings, Putnam County and Navvy Education asked participants to provide input on the design of the assessments and facilitated discussions about ways to increase the effectiveness and usefulness of the system.

iii. Those representing the interests of children with disabilities, English learners, and other subgroups of students described in section 1111(c)(2) of the Act:

The Navvy assessment design and the accompanying accountability framework based on Navvy assessments was created with input from teachers who have experience working with students with disabilities and English language learners. The Putnam Consortium will utilize existing materials the GaDOE has developed to support district leaders with materials and ideas for how best to engage with parents and others representing interests of special education, EL students, and other noted subgroups and will develop additional materials as needed within from teachers and experts with sufficient expertise in working with students with disabilities and ELs. The Putnam Consortium will also collaborate with advocacy groups that the GaDOE has established a working relationship with such as Southern Education Foundation and 100 Black Men of Atlanta and will seek input from state organizations such as the Special Education State Advisory Council to ensure all students are being served within the new assessment model. The Navvy assessments are administered with accommodations allowed by and described in the state assessment accommodation manual; see also "Element 5: Provide for participation of all students". An accommodations manual specific to the administration of Navvy assessments will be developed by Navvy Education in collaboration with the Putnam Consortium Innovative Assessment Leadership Team to ensure equity while transitioning to a new assessment framework.

iv. Local educational agencies (LEAs):

As noted (ii) above, this initiative originated from LEAs and is an on-going collaboration among participating LEAs. LEAs have partnered with Navvy Education to lead the development and

implementation of Navvy. Through the IADA period where the new assessment framework becomes an integral part of the accountability system, Superintendent Eric Arena of Putnam County will lead the consortium of participating LEAs and will facilitate shared decision making among participating LEAs, with the Putnam Consortium Innovative Assessment Leadership Team continuing to provide input on key decisions. In addition, a subset of the Leadership Team members will comprise an Executive Team responsible for making decisions based upon input from the larger Leadership Team.

v. Representatives of Indian tribes located in the State:

Georgia does not have specific tribal governance authorities with whom school districts could consult on education issues.

vi. Civil rights organizations:

The Putnam Consortium will solicit feedback from advocacy groups that the GaDOE has established a working relationship with such as 100 Black Men of Atlanta, WonderRoot, Urban League of Greater Atlanta, ACLU Georgia, Georgia State Conference NAACP, among others. During the IADA period, the Putnam Consortium will also solicit feedback from civil rights advocacy groups such as local chapters of the NAACP as part of the implementation and on-going evaluation and improvement of the innovative assessment system.

Innovative assessment system

A demonstration that the innovative assessment system does or will –

1) **Meet the requirements of section 1111(b)(2)(B) of the Act, except that an innovative assessment –**
   - (i) **Need not be the same assessment administered to all public elementary and secondary school students in the State during the demonstration authority period described in 34 CFR 200.108 and prior to statewide use consistent with 34 CFR 200.107, if the innovative assessment system will be administered initially to all students in participating schools within a participating LEA, provided that the statewide academic assessments under 34 CFR 200.2(a)(1) and section 1111(b)(2) of the Act are administered to all students in any non-participating LEA or any non-participating school within a participating LEA; and**
   - (ii) **Need not be administered annually in each of grades 3-8 and at least once in grades 9-12 in the case of reading/language arts and mathematics assessments, and at least once in grades 3-5, 6-9, and 10-12 in the case of science assessments, and at least once in grades 3-5, 6-9, and 10-12 in the case of science assessments, so long as the statewide academic assessments under 34 CFR 200.2(a)(1) and section 1111(b)(2) of the Act are administered in any required grade and subject under 34 CFR 200.5(a)(1) in which the SEA does not choose to implement an innovative assessment;**

2)
   - (i) **Align with the challenging State academic content standards under section 1111(b)(1) of the Act, including the depth and breadth of such standards, for the grade in which a student is enrolled; and**

(ii) May measure a student's academic proficiency and growth using items above or below the student's grade level so long as, for purposes of meeting the requirements for reporting and school accountability under sections 1111(c) and 1111(h) of the Act and paragraphs (b)(3) and (b)(7)-(9) of this section, the State measures each student's academic proficiency based on the challenging State academic standards for the grade in which the student is enrolled;

3) Express student results or competencies consistent with the challenging State academic achievement standards under section 1111(b)(1) of the Act and identify which students are not making sufficient progress toward, and attaining, grade-level proficiency on such standards;

4)

(i) Generate results, including annual summative determinations as defined in paragraph (b)(7) of this section, that are valid, reliable, and comparable for all students and for each subgroup of students describe din 34 CFR 200.2(b)(11)(i)(A)-(I) and sections 1111(b)(2)(B)(xi) and 1111(h)(1)(C)(ii) of the Act, to the results generated by the State academic assessments described in 34 CFR 200.2(a)(1) and section 1111(b)(2) of the Act for such students. Consistent with the SEA's or consortium's evaluation plan under 34 CFR 200.106(e), the SEA must plan to annually determine comparability during each year of its demonstration authority period in one of the following ways:

(A) Administering full assessments from both the innovative and statewide assessment systems to all students enrolled in participating schools, such that at least once in any grade span (i.e., 3-5, 6-8, or 9-12) and subject for which there is an innovative assessment, a statewide assessment in the same subject would also be administered to all such students. As part of this determination, the innovative assessment and statewide assessment need not be administered to an individual student in the same school year.

(B) Administering full assessments from both the innovative and statewide assessment systems to a demographically representative sample of all students and subgroups of students described in section 1111(c)(2) of the Act, from among those students enrolled in participating schools, such that at least once in any grade span (i.e., 3-5, 6-8, or 9-12) and subject for which there is an innovative assessment, a statewide assessment in the same subject would also be administered in the same school year to all students included in the sample.

(C) Including, as a significant portion of the innovative assessment system in each required grade and subject in which both an innovative and statewide assessment are administered, items or performance tasks from the statewide assessment system that, at a minimum, have been previously pilot tested or field tested for use in the statewide assessment system.

(D) Including, as a significant portion of the statewide assessment system in each required grade and subject in which both an innovative and statewide assessment are administered, items or performance tasks from the innovative assessment system that, at a minimum, have been previously pilot tested or field tested for use in the innovative assessment system.

(E) An alternate method for demonstrating comparability that an SEA can demonstrate will provide for an equally rigorous and statistically valid comparison between student performance on the innovative assessment and the statewide assessment, including for each subgroup of students described

in 34 CFR 200.2(b)(11)(i)(A)-(I) and sections 1111(b)(2)(B)(xi) and 1111(h)(1)(C)(ii) of the Act; and

(ii) Generate results, including annual summative determinations as defined in paragraph (b)(7) of this section, that are valid, reliable, and comparable, for all students and for each subgroup of students described in 34 CFR 200.2(b)(11)(i)(A)-(I) and sections 1111(b)(2)(B)(xi) and 1111(h)(1)(C)(ii) of the Act, among participating schools and LEAs in the innovative assessment demonstration authority. Consistent with the SEA's or consortium's evaluation plan under 34 CFR 200.106(e), the SEA must plan to annually determine comparability during each year of its demonstration authority period;

5)

(i) Provide for the participation of all students, including children with disabilities and English learners;

(ii) Be accessible to all students by incorporating the principles of universal design for learning, to the extent practicable, consistent with 34 CFR 200.2(b)(2)(ii); and

(iii) Provide appropriate accommodations consistent with 34 CFR 200.6(b) and (f)(1)(i) and section 1111(b)(2)(B)(vii) of the Act;

6) For purposes of the State accountability system consistent with section 1111(c)(4)(E) of the Act, annually measure in each participating school progress on the Academic Achievement indicator under section 1111(c)(4)(B) of the Act of at least 95 percent of all students, and 95 percent of students in each subgroup of students described in section 1111(c)(2) of the Act, who are required to take such assessments consistent with paragraph (b)(1)(ii) of this section;

7) Generate an annual summative determination of achievement, using the annual data from the innovative assessment, for each student in a participating school in the demonstration authority that describes –

(i) The student's mastery of the challenging State academic standards under section 1111(b)(1) of the Act for the grade in which the student is enrolled; or

(ii) In the case of a student with the most significant cognitive disabilities assessed with an alternate assessment aligned with alternate academic achievement standards under section 1111(b)(1)(E) of the Act, the student's mastery of those standards;

8) Provide disaggregated results by each subgroup of students described in 34 CFR 200.2(b)(11)(i)(A)-(I) and sections 1111(b)(2)(B)(xi) and 1111(h)(1)(C)(ii) of the Act, including timely data for teachers, principals and other school leaders, students, and parents consistent with 34 CFR 200.8 and section 1111(b)(2)(B)(x) and (xii) and section 1111(h) of the Act, and provide results to parents in a manner consistent with paragraph (b)(4)(i) of this section and part 200.2(3); and

9) Provide an unbiased, rational, and consistent determination of progress toward the State's long-term goals for academic achievement under section 1111(c)(4)(A) of the Act for all students and each subgroup of students described in section 1111(c)(2) of the Act and a comparable measure of student performance on the Academic Achievement indicator under section 1111(c)(4)(B) of the Act for participating schools relative to non-participating schools so that the SEA may validly and reliably aggregate data from the system for purposes of meeting requirements for –

(i) Accountability under sections 1003 and 1111(c) and (d) of the Act, including how the SEA will identify participating and non-participating schools in a consistent manner for comprehensive and targeted support and improvement under section 1111(c)(4)(D) of the Act; and

(ii) Reporting on State and LEA report cards under section 1111(h) of the Act.

State of Georgia

Georgia's groundbreaking approach to assessment innovation leverages the expertise of local school districts to develop and implement innovative assessment solutions designed to support student learning. These assessment systems (CTLS-Assess, MAP Growth for Georgia, Navvy, and the state's existing assessment system, Georgia Milestones) provide different features designed to support student learning. While Georgia's current assessment system, Georgia Milestones, offers a traditional end-of-year summative assessment with innovative features, such as technology-enhanced items, the three proposed assessment systems will offer a different approach based on interim assessments and other features that provide formative, actionable feedback.

For the five years of the pilot period, each of the three districts/consortia will work with stakeholders and technical experts to develop and implement innovative assessments within its district/consortium. Additional schools and districts not currently part of a consortium will have an opportunity to join a consortium during this time, as approved by the SBOE (per SB 362).

The Georgia Department of Education (GaDOE) and SBOE will provide oversight for the innovative assessment pilot program to ensure participating districts and consortia are meeting all the requirements of the innovative assessment system listed in this section. The GaDOE will seek funds from the General Assembly to hire five new staff members (see Appendix A-9 for a description of these positions). At this time, based on expressions of support for this pilot project from Assembly leadership and from the incoming Governor, Georgia is confident that the legislature will fund these positions.

Three of the new staff members will be housed within GaDOE's Office of Assessment and Accountability. A Program Manager will manage activities and projects related to the innovative assessment pilot program, including managing and working with contractors; serving as the liaison in working with technical assistance groups, ensuring the completeness of state and federal reporting, communicating with districts and consortia, and ensuring activities are on-schedule and meeting timeline requirements. This individual will be responsible for developing and monitoring an implementation plan for each participating consortium and the state and ensuring that statutory requirements are being met, including annual reporting requirements. This individual will also oversee the collection of evidence supporting the state's technical evaluation of the assessments included in the innovative assessment pilot. An Assessment Specialist will assist the Program Manager with these responsibilities. An Accountability Specialist will support the inclusion of the innovative assessments' data in Georgia's accountability system, the College and Career Ready Performance Index (CCRPI).

Two of the new staff members will be housed within GaDOE's Office of Information Technology and will be dedicated to supporting the inclusion of the innovative assessment data in state reporting systems. A Database Developer and a Web Application Developer will manage efforts to utilize the assessment pilots' data in CCRPI calculations and other relevant reporting systems.

The GaDOE will also contract with an external technical assistance provider to provide independent technical assistance to the innovative assessment pilot districts/consortia as well as provide an annual report of activities, needs, and next steps. This annual report will assist the state of Georgia in monitoring the progress made by the districts/consortia, maximizing the technical quality of the innovative assessment systems, establishing comparability with Georgia Milestones, and establishing a system of continuous improvement. This report will also inform the state of Georgia's selection of one

assessment system, at the end of the IADA pilot period, for statewide use. Throughout the IADA period, the GaDOE and the approved districts/consortia will provide the SBOE with updates as requested.

Georgia fully believes that this proposed assessment system is consistent with the statutory language of Section 1204 and with its implementing regulations. We note that although the statute and regulations do not specifically authorize a system in which multiple districts (or consortia of districts) develop and operate their own programs of innovative assessment, the statutory and regulatory language clearly leave open the option of a state implementing a system constructed in that manner. Thus, the statute and regulations are sufficiently flexible to allow Georgia to implement its system in the manner proposed in this application.

More specifically, we note that Section 1204(b)(1) of the statute authorizes the U.S. Secretary of Education to provide a State educational agency with the authority to establish an "innovative assessment system." Section 1204(a) provides that an innovative assessment system is a system of assessments that may include (1) competency-based assessments, instructionally embedded assessments, interim assessments, cumulative year-end assessments, or performance-based assessments that combine into an annual summative determination for a student; and (2) assessments that validate when students are ready to demonstrate mastery or proficiency and allow for differentiated student support based on individual learning needs. Based on the language of these two subsections, we have concluded that, while a State may implement only a single innovative assessment system, the definition of such a system (as set forth in subsection (a)) clearly does not require that, under such a system, all participating districts in a State must use the same assessments.

Further, Section 1204(e) sets forth the requirements for the State application, and lists close to 30 separate descriptions that must be included in such an application. What is notable about this statutory language (relative to the current discussion) is what is <u>not</u> included: any requirement that all students participating in a State's system take the same assessments. Almost certainly, had the Congress intended to impose such a limitation, it would have done so either in the definition of an innovative assessment system or in these application requirements.

Turning now to the regulations, the most relevant provision is §200.105(b)(1)(i), which provides that an innovative assessment "Need not be the same assessment administered to all public elementary schools in the State during the demonstration period…, if the innovative assessment system will be administered <u>to all students in participating schools within a participating LEA</u>…" (emphasis added). This language, by requiring that all students in a participating district (but not necessarily all students across all participating districts) take the same assessment, clearly makes available the option that different districts in a participating State may administer different assessments.

In sum, although these statutory and regulatory provisions, which provide the legal framework for a State's participation in the Innovative Assessments authority, do not specifically authorize the participation of a State in which different districts (or district consortia) will administer different assessments, the language is clearly broad enough to encompass such systems. Thus, we believe they are fully acceptable under the statute and regulations.

For clarity of reading, all nine elements in this section will be addressed for the Cobb County School District, followed by all nine elements for the Georgia MAP Assessment Partnership, and then all nine elements for the Putnam Consortium.

Cobb County School District

The Cobb County School District (CCSD) developed and implemented the Cobb Teaching and Learning System-Assess (CTLS-Assess), the district's innovative assessment development, administration, and data reporting platform, in the second largest district in Georgia for over 112,000 students.

Additional features of CTLS-Assess exceed IADA requirements yet are key to supporting the day-to-day teacher practices of formatively assessing students and providing personalized instructional supports.

CTLS-Assess

CTLS-Assess is a comprehensive teaching and learning platform that supports the complete assessment process, from creating items and standards-based assessments, to administering and scoring, then providing real-time actionable data. There are several features teachers are currently using in their classrooms every day for formative assessments and instructional supports. See Appendix B-2 for CTLS-Assess usage data. CTLS-Assess features include:

- The blueprinting tool allows teachers to build standards-based assessments with specific levels of rigor, Depth of Knowledge (DOK) and Revised Bloom's Taxonomy (RBT).
- CTLS-Assess supports PDF versions of existing tests so teachers do not have to re-create existing assessments in the platform – they can simply create an answer key and administer.
- Teachers are excited about the performance of CTLS-Assess – online assessments load and advance instantly for students even during high scale usage. These assessment reports load instantly.
- The proctoring tool enables teachers to see test results in real-time (without refreshing their screens) while observing the overall pace of the class, each students' progress, length of time on each question, and have immediate access to assessment results.
- Teachers love the fact that they can personalize their real-time dashboard to see the information that is relevant and important to them.
- CTLS-Assess provides an assessment builder that allows users to search by standard, grade and/or subject. Users can add items or drag items to rearrange the order of the items on the assessment.
- CTLS-Assess delivers elegant reports in easy-to-understand formats that are available online or in PDF format.

CTLS-Assess enables teachers to quickly and easily assess students before, during, and after instruction. Through classroom assessments, teachers can effectively tailor instruction directly to individual student needs. See Appendix B-3 for more detail regarding CTLS features.

- **Before:** Pre-assessments can be used to determine what students already know and can do in order to determine readiness for a lesson; identify misconceptions and gaps in knowledge or skills; and identify students in need of differentiated instruction. Pre-assessments are used for instructional decision-making, not to assign grades. Pre-assessments help teachers determine what knowledge and skills their students already have. They help gauge whether students are ready for a lesson on a given indicator (whether they have the necessary prerequisites) or whether they need additional support. This support might take the form of adjusting grouping arrangements or altering the level of content materials.

- **During:** On-going instructional assessment helps teachers monitor student progress and make adjustments based on student performance and needs. Assessment results can help teachers make day-to-day decisions about the pacing and complexity of lessons and activities.
- **After:** Post assessment allows educators to assess student learning and mastery of content, skills or strategies. Post-assessment enables teachers to determine what students know, at what level they are able to perform, if instruction was effective, and what additional activities are needed for students to meet academic standards.
- **End of Unit or Grading Period:** Summative assessments can be used to get a picture of students' overall performance and progress against grade-level indicators. Summative assessments are often the basis for student evaluation. Summative assessments also help ensure long-term student learning as they require students to integrate and retain information over a period of learning.

Item & Assessment Creation

The CTLS-Assess platform supports expansive item types. For day-to-day formative assessment purposes, teachers can create items using the item editor and/or utilize pre-loaded item banks. CTLS-Assess enables effective assessment design allowing users to build standards-based assessments with specific levels of rigor, DOK and RBT utilizing the Advanced Blueprinting tool. CTLS-Assess supports the use of 'external assessments' (e.g., PDF versions of tests) by creating an answer key. This minimizes teachers having to recreate assessments.

By utilizing the CTLS-Assess item creation tool, teachers can create multiple choice items (with one or more correct responses and distractor rationales) as well as constructed response items. During item creation, the user can preview the item.

As items are created in CTLS-Assess, teachers can tag the items with the following information:

- Georgia Standard
- Depth of Knowledge
- Revised Bloom's Taxonomy
- Grade
- Subject
- Item Bank
- Response Type (multiple choice with one or multiple correct answers or constructed response)
- Teacher Read Instructions (instructions that are to be read by the teacher that are not displayed to the student)
- Copyright

Access to teacher items can be controlled at the user level. Access to copyright materials can also be managed through the item tagging process.

Assessment Administration

CTLS-Assess was designed for maximum performance and scalability and allows for easy administration of both online and paper-based assessments from one convenient interface. The platform easily allows users to publish and target assessments specifically to grade, subject, course and class taking the assessment. The platform's proctoring tools allows users to see test results in real-time while observing

the overall pace of the class, each student's progress, length of time on each question, and have immediate access to assessment results.

Assessment Scoring

CTLS-Assess supports full credit, partial credit and rubric-based scoring. The application allows evidence-based selected response and multi-part items to be scored with partial credit. CTLS-Assess supports rubric-based manual scoring and is currently used for scoring written constructed response items. Rubric scored items are weighted based on the maximum number of points within the rubric. The application displays both percent and raw scores and allows user-defined performance levels for each assessment.

Reporting & Analytics

CTLS-Assess will produce individual student summative reports consistent with the requirements specified in section 1111(b)(2)(B)(x). The existing CTLS-Assess delivers reports in easy-to-understand formats that are available online or in PDF format. The individual student assessment reports allow stakeholders to understand and address the specific learning needs of students in an understandable and uniform format.

The individual student assessment reports allow parents, teachers, principals, and other school leaders to understand and address the specific academic learning needs of students in 'real-time'. The reports identify which students are not making sufficient progress toward mastery of Georgia standards immediately upon completion of an assessment. This information is available to teachers and administration as soon as the assessment is completed. In addition, this information can be made available parents immediately as well. This is a significant improvement over our current state assessment system as assessment information is available to students, parents, teachers, and other school leaders in a timely way throughout the year. These stakeholders are provided real-time, continuous information on student progress towards proficiency of Georgia's academic standards rather than in a once a year report that is not available until the school year is over. This on-going assessment information provides teachers with actionable, real-time data that can be used to make better, timely instructional decisions throughout the academic year.

Security features of CTLS-Assess

CTLS-Assess is hosted on Amazon web services. The database is encrypted at rest and backups are performed nightly. The platform utilizes a role-based security model. Access to features can be turned on or off by role and for specific users. Access to system data (schools, teachers, classes, students) is controlled by a setting on each role. Each role is assigned a single option to limit access. The available options are None, Restrict to Region, Restrict to School and Restrict to Class. School based users can access any assessments results for students in their school. Items within the platform are contained within item banks which are also secured using the role-based model.

CTLS-Assess Integration with Student Information Systems

CTLS-Assess currently allows for data to be imported and exported to the Cobb Student Information System (CSIS). As the system expands, depending upon the requirements of the other districts' SIS or the state Longitudinal Data System (LDS), the integration can be tailored to support each district's needs. CCSD has experience with data integration services (e.g., Clever, Edutone, SSIS, Pentaho); CCSD can

utilize an Application Program Interface (API) to specific how the systems or send and receive files via Secure File Transfer Protocol (SFTP).

CTLS-Assess was developed in Georgia and provides a dynamic suite of assessments that were created for the specific purpose of measuring the State's challenging academic content standards throughout the school year; as such, a strength of the system is alignment with the State's standards. CTLS-Assess is designed to give reliable indications of competency of the State's challenging academic standards using short (fewer than 10 items per standard) web-based assessments that are scored immediately to provide real-time feedback to educators.

District and school leaders will determine when assessments are administered within a given window and have the flexibility to assign assessments on combinations of standards as needed. Customized assessment pacing in turn allows for the customized instructional pacing needed for personalized learning and to support a more competency-based educational approach.

Assessment Design and Development

The assessments will be designed to determine which specific standards, and elements of standards, students have mastered. CTLS-Assess allows students to be reassessed by standard throughout the year. This allows teachers to monitor student progress toward mastery and provide up-to-date competency measures throughout the year.

After administering the assessments throughout the year, teachers will have access to a variety of data reports that provide valuable student competency information at the standard and standard element level. Instead of taking end-of-year assessments, which provide a higher-level overview of mastery of the state's academic content standards, we will utilize data collected throughout the year to produce annual summative determinations. This will fulfill federal requirements while maximizing instructional time. Appendix B-4 is an example of a GaDOE curriculum map for mathematics. By utilizing CTLS-Assess through-year testing, instructional time is maximized by eliminating review and retest time, as students will work daily toward competency through the end of the school year. Put plainly, schools will spend less time testing, teachers will spend more time teaching and personalizing student learning opportunities, and students will spend more time learning.

Proposed Assessments in CTLS-Assess

CTLS-Assess will serve both formative and accountability needs. CTLS-Assess allows for monitoring competency for individual standards and standard elements and provides students with multiple opportunities to show mastery without penalizing students who require additional supports to learn. Thus, CTLS-Assess allows for measuring learning as well as supporting learning. Shifting to assessment throughout the year instead of at the end of the year will better support teaching and learning. At the end of the school year, the assessment information collected on each student throughout the year will be summarized for accountability purposes.

CTLS-Assess will be utilized for grades 3-8 in English language arts (ELA) and math, for grades 5 and 8 in science, for high school ELA and math courses with a corresponding statewide assessment (2 courses per subject), and for high school science for one course with a statewide assessment

Table B-1 illustrates the grade and subject combinations where the CTLS-Assess innovative assessment system and the statewide assessments, Georgia Milestones, will be implemented. Annual determinations of student proficiency described in section 1111(b)(2)(B) of ESEA in CTLS-Assess schools are based on CTLS-Assess assessments, except in those grades and subject areas where the statewide assessment (Georgia Milestones) is administered and comparability has not yet been established; in these cases, the Georgia Milestones results will be utilized to determine annual summative determinations until reasonable comparability has been established. Once reasonable comparability has been established, a sample of schools will no longer be required to take CTLS-Assess assessments and Georgia Milestones assessments concurrently.

Table B-1. *CTLS-Assess innovative assessment and accountability system overview by grade and subject*
*Milestones is the current end-of-year statewide assessment system.

Grade	Math	ELA	Science
3	CTLS-Assess & Milestones (Sample)	CTLS- Assess & Milestones (Sample)	
4	CTLS- Assess & Milestones (Sample)	CTLS- Assess & Milestones (Sample)	
5	CTLS- Assess & Milestones (Sample)	CTLS- Assess & Milestones (Sample)	CTLS- Assess & Milestones (Sample)
6	CTLS- Assess & Milestones (Sample)	CTLS- Assess & Milestones (Sample)	
7	CTLS- Assess & Milestones (Sample)	CTLS- Assess & Milestones (Sample)	
8	CTLS- Assess & Milestones (Sample)	CTLS- Assess & Milestones (Sample)	CTLS- Assess & Milestones (Sample)
High School Course 1	CTLS- Assess & Milestones (Sample) [Algebra I/Coordinate Algebra]	CTLS- Assess & Milestones (Sample) [9th Grade Literature and Composition]	CTLS- Assess & Milestones (Sample) [Biology]
High School Course 2	CTLS- Assess & Milestones (Sample) [Geometry/Analytic Geometry]	CTLS- Assess & Milestones (Sample) [American Literature & Composition]	

The following section demonstrates how CTLS-Assess innovative assessments currently meet the requirements of section 1111(b)(2)(B) of ESEA and the requirements specified in Part 3(b) of the Application for New Authorities under the Innovative Assessment Demonstration Authority.

Element 1: Meet the requirements of section 1111(b)(2)(B) of the Act

CTLS-Assess will be designed to meet assessment requirements provided by federal statue in Section 6311(b)(2) subparagraph (B). CTLS-Assess provides “timely information about student mastery of [State academic] standards” (clause ii) and “individual diagnostic reports” (clause x) that are “valid and reliable, consistent with relevant, nationally recognized professional and technical testing standards” (clause iii) in order to “understand and address the *specific academic needs* of students” (clause x). CTLS-Assess will use assessment results to monitor and support all students throughout the year, in addition to their use for accountability. Thus, CTLS-Assess presents an innovative solution to the persistent challenge of monitoring student progress toward mastery while preserving valuable instructional time.

Section 1111(b)(2)(B)(i). SEAs in the demonstration authority are exempt from section 1111(b)(2)(B)(i) that requires the *same* academic assessments be used and administered to measure the achievement of all public elementary and secondary students in the State. CTLS-Assess will be utilized in a subset of CCSD schools for the period of the demonstration authority, scaling up each year.

Participating schools will utilize CTLS-Assess for the grade levels/content area and courses indicated in Table B-1. The statewide end-of-year assessments (i.e., Georgia Milestones) will be administered to a sample of schools (see Table B-1) to provide comparability data.

Section 1111(b)(2)(B)(ii). See description and documentation provided below under the following two sections— "Aligns with depth and breadth of challenging State academic standards" and "Provides timely, disaggregated results for stakeholders"—for how CTLS-Assess meets the requirements of Section 1111(b)(2)(B)(ii).

Section 1111(b)(2)(B)(iii-iv). See description and documentation provided below under "Provides valid, reliable, and comparable annual proficiency determinations" for how CTLS-Assess meets the requirements of Section 1111(b)(2)(B)(iii-iv).

Section 1111(b)(2)(B)(v). The CTLS-Assess innovative assessment system is exempt from section 1111(b)(2)(B)(v) as the statewide end-of-year assessments do not need to be administered annually in grades 3-8 and at least once in grades 9-12 in the case of ELA and math assessments, and at least once in grades 3-5, 6-9, and 10-12 in the case of science assessments, so long as the statewide end-of-year assessments are administered in any required grade and subject in which the SEA does not choose to implement an innovative assessment.

CCSD will utilize CTLS-Assess in each grade and subject required by federal statute (i.e., grades 3-8 in ELA and math, grade 5 and 8 science, and one course in high school for all three subjects) and for one additional high school course in ELA and math.

Section 1111(b)(2)(B)(vi). CTLS-Assess meets the requirements of section 1111(b)(2)(B)(vi) because it includes multiple means of measuring and monitoring student achievement through the use of assessment items that require higher order thinking.

Section 1111(b)(2)(B)(vii). See description and documentation provided below under "Provides for Participation of All Students" for how CTLS-Assess meets the requirements of Section 1111(b)(2)(B)(vii).

Section 1111(b)(2)(B)(viii). SEAs in the Demonstration Authority are exempt from section 1111(b)(2)(B)(viii) because they have discretion as to how they design the innovative assessment system. CTLS-Assess will be utilized in a subset of CCSD schools for the period of the Demonstration Authority until possible statewide expansion.

Section 1111(b)(2)(B)(ix). To ensure the validity of assessment results, CCSD will adhere to the GaDOE accommodation guidelines for English learners (see Appendix B-5 for the GaDOE Accommodations Manual).

Section 1111(b)(2)(B)(x). CTLS-Assess is designed to provide "individual diagnostic reports" (clause x) that are "valid and reliable, consistent with relevant, nationally recognized professional and technical testing standards" (clause iii) to allow stakeholders to "understand and address the specific academic

needs of students" (clause x) at a more detailed level than the current statewide end-of-year assessments. In addition, CTLS-Assess will provide immediate feedback to teachers and students which meets the requirement to provide the reports "as soon as is practicable after an assessment is given." The section titled "Provides summative determinations for all students that describes student's mastery" includes additional information on how CTLS-Assess meets the requirements of Section 1111(b)(2)(B)(x).

Section 1111(b)(2)(B)(xi). See description and documentation provided below under "Provides timely, disaggregated results for stakeholders" for how CTLS-Assess meets the requirements of Section 1111(b)(2)(B)(xi).

Section 1111(b)(2)(B)(xii). CTLS-Assess provides immediate assessment results that can be reviewed in a variety of ways, including by performance on items aligned to a specific standard, standard element, item depth of knowledge level, among others. See description and documentation provided below under "Provides timely, disaggregated results for stakeholders" and "Provides summative determinations for all students that describes student's mastery" for additional information regarding how CTLS-Assess meets the requirements of Section 1111(b)(2)(B)(xii).

Section 1111(b)(2)(B)(xiii). See description and documentation provided below under "Provides for Participation of All Students" for an additional description of how CTLS-Assess meets the requirements of Section 1111(b)(2)(B)(xiii).

Element 2: Align with challenging State academic content standards

The CTLS-Assess assessment items will be aligned with the challenging State academic standards under section 1111(b)(1) of ESEA, including the depth and breadth of such standards, for the grade in which a student is enrolled as required in section 1111(b)(2)(B)(ii).

Assessments will be developed within CTLS-Assess using procedures that will ensure items are tightly aligned with the depth and breadth of state standards. A third-party contractor who specializes in assessment item development and assessment development for Georgia standards will be utilized to train teacher leaders and other key personnel for the development process. Training will include deconstructing standards to identify clear learning targets, blueprint development, and item development using Universal Design Standards. CCSD teachers, who possess content area and pedagogical expertise will comprise the team of teacher leaders.

CCSD will utilize the expertise of a psychometrician to ensure the assessments that are developed will initially and continually meet reliability and validity expectations throughout the IADA period.

In addition, the CCSD will utilize the services of an external evaluator to ensure continuous alignment of assessments with state standards for the duration of the IADA period. Feedback from the external evaluator will be included in an annual report that will be submitted to the USED.

Element 3: Express student results consistent with state standards and identify students not attaining proficiency on standards

CTLS-Assess will produce proficiency reports immediately after students complete an assessment. The reports will provide actionable assessment data at the standard and standard elements level for each assessment.

Element 4: Generate results, including annual summative determinations, that are valid, reliable, and comparable for all students and for each subgroup of students

CCSD intends to utilize option (B) to establish comparability between the innovative assessments and the existing State academic assessments for all students and for each subgroup of students. During the initial years of the IADA period, a sample of students will take both the innovative assessments and the State academic assessments. This sample will be selected to ensure demographic similarity to CCSD and the State student populations. The assessments will be designed to provide annual proficiency determinations that are valid, reliable, and comparable for all students and for each subgroup of students described in 34 CFR 200.2(b)(11)(i)(A)-(I) and sections 1111(b)(2)(B)(xi) and 1111(h)(1)(C)(ii) of ESEA, and, described in 34 CFR 200.2(a)(1) and section 1111(b)(2). CTLS-Assess will objectively measure student progress toward mastery of state standards.

The expertise provided by CCSD's external assessment development training partner, the utilization of a psychometrician's expertise to review item performance and assessment data, and the utilization of an external evaluator will all ensure CTLS-Assess will meet or exceed the expectations of validity, reliability, and comparability.

Throughout the IADA period, CCSD will collect feedback from participating schools regarding the implementation of CTLS-Assess. The CTLS Leadership team will discuss all feedback and adjust CTLS-Assess as needed to ensure continuous improvement.

Student accommodations will be provided according to their Individual Education Plan (IEP), Individual Accommodation Plan (IAP), or English Learner- Testing Participation Committee (EL-TPC) plan to ensure equitable access to the assessments. See "Provides for participation of all students" for a description of accommodations.

The psychometrician utilized by Cobb County School District will ensure items do not show any inherent performance differences between subgroups of students.

Element 5: Provide for the participation of all students, including children with disabilities and English learners

As required by sections 1111(b)(2)(B)(vi and xiii) CTLS-Assess provides accessibility for all students, including students with disabilities and English learners, through its easy-to-to use testing format, and valid and reliable assessments. CCSD will ensure all required student participation requirements are met. Students with the most severe cognitive disabilities will continue to participate in the state alternative assessment, currently, the Georgia Alternate Assessment (GAA) 2.0.

CTLS-Assess provides a variety of tools to meet assessment accommodations requirements for students. These tools include several standard features available to all students in the online administration of CTLS-Assess. These features include the highlighter tool, scientific and basic function calculators (with the ability to restrict use as needed) and zoom features. In addition, a number of enhancements to CTLS are in process. These include the ability to enlarge font, use of a place marker/blocking tool, and the

ability to change the background color of the screen and font color. Another enhancement is the incorporation of text to speech features which will allow 'read to' accommodations to be set within the system. Currently, students utilize a screen reader (e.g. Snap-n-Read) or district personnel, when this accommodation is needed.

Additional accommodations not dependent on CTLS-Assess technology can be provided. For example, setting accommodations (e.g. small group, preferential setting, test administered by certified educator familiar to student, etc.), presentation accommodations (e.g. repetition of directions, sign English Language Arts passages, Braille, etc.), response accommodations (e.g. scribe, abacus, etc.) and scheduling accommodations (e.g. frequent monitored breaks, extended time, etc.) can be provided.

Element 6: Annually measure in each participating school progress on the Academic Achievement indicator of at least 95 percent of all students, and 95 percent of students in each subgroup of students

CCSD will ensure that at least 95 percent of all students in all schools and 95 percent of students in each subgroup of students will take the CTLS-Assess innovative assessments. Furthermore, the academic achievement indicator for each of these students will be computed from the standards-level competency results.

Element 7: Generate an annual summative determination of achievement

The standards level determination will be combined to give a summative score at the end of the year, consistent with the current assessment system, Georgia Milestones (see Appendix B-6). CCSD will utilize CTLS-Assess standards-level competency results to form annual summative determinations that are valid, reliable, and comparable. This section discusses validity evidence within a comparability-based framework to address the second intended accountability-focused use of CTLS-Assess: to use the multiple, up-to-date CTLS results as the basis for categorizing students into the four Achievement Levels used by the current statewide assessment system.

Comparability must be required at the level of the annual determinations. This means that evidence is provided to support the notion that if, for example, a student is determined to be a "Proficient Learner" in one district, had that student been assigned to another district's assessment system (for example, CTLS-Assess or Georgia Milestones) he or she could expect to also be deemed a Proficient Learner.

Element 8: Provide disaggregated results by each subgroup of students, including timely data

The individual student reports available in CTLS-Assess fulfill the requirements specified in section 1111(b)(2)(B)(x). CTLS-Assess assessment reports provide large-scale data overviews of performance on a given assessment, down to individual student level performance on a standard or standard element level. All reports are visually pleasing and presented in an easy to understand format with clear, concise text.

The CTLS-Assess reports allow district leaders, school leaders, teachers, students, and parents to quickly and easily access real-time data regarding progress toward mastery.

Element 9: Provide an unbiased, rational, and consistent determination of progress toward the State's long-term goals for academic achievement

CTLS-Assess, when it is comparable to the Georgia Milestones results, will provide an unbiased, rational, and consistent determination of the long-term goals of academic achievement set in Georgia's ESSA Plan. For example, high school goal for students being proficient by the year 2032 will be 77.8% for mathematics and 80.2% for ELA.

Georgia MAP Assessment Partnership

Element 1: Meet the requirements of section 1111(b)(2)(B) of the Act

(2) ACADEMIC ASSESSMENTS.—

(B) REQUIREMENTS.—The assessments under subparagraph (A) shall—
(i) except as provided in subparagraph (D), be—
(I) the same academic assessments used to measure the achievement of all public elementary school and secondary school students in the State; and

All GMAP schools will take the GMAP assessments in English language arts and mathematics in Year 4 at grades 3-8 in lieu of the Georgia Milestones, and will take NWEA assessments in English language arts, mathematics, and science in Year 5 at grades 3-8 in lieu of the Georgia Milestones. Students needing alternate assessments — such as students with the most severe cognitive disabilities and students needing to take the assessment of English Language proficiency — will continue to take the State-provided assessments in those areas.

(II) administered to all public elementary school and secondary school students in the State;
(ii) be aligned with the challenging State academic standards, and provide coherent and timely information about student attainment of such standards and whether the student is performing at the student's grade level;

The portion of the NWEA through-year assessment used to create proficiency scores will be tightly aligned to the Georgia Standards of Excellence and the Georgia Milestones Achievement Level Descriptors (ALDs) that describe varying levels of proficiency against these standards. This information will be returned, along with a MAP Growth score, very shortly after the test session is complete. Additional detail is provided in Element 2 of the response to this requirement.

(iii) be used for purposes for which such assessments are valid and reliable, consistent with relevant, nationally recognized professional and technical testing standards, objectively measure academic achievement, knowledge, and skills, and be tests that do not evaluate or assess personal or family beliefs and attitudes, or publicly disclose personally identifiable information;

Assessments will be aligned to Georgia Standards of Excellence and academic learning progressions to provide information about student academic achievement, knowledge, and skills. No information about personal or family beliefs and attitudes will be collected, and no individual student information will be released publicly. Additional detail is provided in Elements 3 and 4 of this requirement.

(iv) be of adequate technical quality for each purpose required under this Act and consistent with the requirements of this section, the evidence of which shall be made public, including on the website of the State educational agency;

The NWEA through-year assessment is being built to maintain high levels of technical rigor and quality, and is being built following best practices for assessment design and development in coordination with qualified assessment experts.

(v)

(I) in the case of mathematics and reading or language arts, be administered—

(aa) in each of grades 3 through 8; and

(bb) at least once in grades 9 through 12;

(II) in the case of science, be administered not less than one time during—

(aa) grades 3 through 5;

(bb) grades 6 through 9; and

(cc) grades 10 through 12; and (III) in the case of any other subject chosen by the State, be administered at the discretion of the State;

GMAP participants will ensure students take either the NWEA through-year or Georgia Milestones assessments in each of these grades and subjects throughout the entirety of the GMAP Pilot so that this requirement is met.

(vi) involve multiple up-to-date measures of student academic achievement, including measures that assess higher-order thinking skills and understanding, which may include measures of student academic growth and may be partially delivered in the form of portfolios, projects, or extended performance tasks;

Results will return information about student mastery of grade-level standards in a timely manner and, when paired with the information from the benchmark assessment, will help teachers understand where students are and what skill gaps are most critical to address to help students access the learning they are ready for next. Additional detail is provided in Element 3 of the response to this requirement.

(vii) provide for—

1. *the participation in such assessments of all students;*
2. *(II) the appropriate accommodations, such as interoperability with, and ability to use, assistive technology, for children with disabilities (as defined in section 602(3) of the Individuals with Disabilities Education Act (20 U.S.C. 1401(3))), including students with the most significant cognitive disabilities, and students with a disability who are provided accommodations under an Act other than the Individuals with Disabilities Education Act (20 U.S.C. 1400 et seq.), necessary to measure the academic achievement of such children relative to the challenging State academic standards or alternate academic achievement standards described in paragraph (1)(E); and*
3. *(III) the inclusion of English learners, who shall be assessed in a valid and reliable manner and provided appropriate accommodations on assessments administered to such students under this paragraph, including, to the extent practicable, assessments in the language and form most likely to yield accurate data on what such students know and can do in academic content areas, until such students have achieved English language proficiency, as determined under subparagraph (G);*

Students will continue to be assessed using the most appropriate assessment for them. Students needing the alternate assessment will take the State alternate assessment, and students needing the English proficiency assessment will continue to take the State-provided ELP assessment. Accommodations will be made available on the general NWEA through-year assessment as detailed in this application so that all students have the ability to access the assessment content. Additional detail is provided in Element 5 of the response to this requirement.

NWEA checks for the following components in order to verify that items are accessible to as many student populations as possible:

- Language is transparent, clean, and simplified as much as possible.
- Uses logical organization of ideas and clarity of sentence structures, not just sentence length and difficult words.
- Uses common words and clear noun-pronoun relationships.
- Avoids unnecessary wordiness, colloquialisms, idioms, and figurative language.
- Uses clear and familiar words, states important ideas first in a sentence, and uses consistent terms.
- Avoids use of irrelevant graphs or pictures. Simplifies diagrams to allow for alternate text.
- Confirms all items work with available accessibility tools offered or on the roadmap for development.
- Topics used in passages or items avoid content that might offend, stress, penalize, or offer an advantage to students based on personal characteristics, culture, socio-economic background, or group identity.

(viii) at the State's discretion—

1. *be administered through a single summative assessment; or*

As the NWEA through-year solution is being refined and validated, partner districts will continue taking Georgia Milestones. Per the timelines presented in this application, districts will transition to a through-year model over the course of the five-year GMAP Pilot.

2. *be administered through multiple statewide interim assessments during the course of the academic year that result in a single summative score that provides valid, reliable, and transparent information on student achievement or growth;*

This is the option the NWEA through-year model will transition to over the course of the five-year GMAP Pilot.

(ix) notwithstanding clause (vii)(III), provide for assessments (using tests in English) of reading or language arts of any student who has attended school in the United States (not including the Commonwealth of Puerto Rico) for 3 or more consecutive school years, except that if the local educational agency determines, on a case-by-case individual basis, that academic assessments in another language or form would likely yield more accurate and reliable information on what such student knows and can do, the local educational agency may make a determination to assess such student in the appropriate language other than English for a period that does not exceed 2 additional consecutive years, provided that such student has not yet reached a level of English language proficiency sufficient to yield valid and reliable information on what such student knows and can do on tests (written in English) of reading or language arts;

The NWEA through-year assessment will provide for assessments using tests in English and intends to provide appropriate supports for students as allowed on the state summative assessment.

(x) produce individual student interpretive, descriptive, and diagnostic reports, consistent with clause (iii), regarding achievement on such assessments that allow parents, teachers, principals, and other school leaders to understand and address the specific academic needs of students, and that are provided to parents, teachers, and school leaders, as soon as is practicable after the assessment is given, in an understandable and uniform format, and to the

extent practicable, in a language that parents can understand; the, local educational agency, and school by—

(I) each major racial and ethnic group;

(II) economically disadvantaged students as compared to students who are not economically disadvantaged;

3. *children with disabilities as compared to children without disabilities;*

(IV) English proficiency status;

(V) gender; and

(VI) migrant status, except that such disaggregation shall not be required in the case of a State, local educational agency, or a school in which the number of students in a subgroup is insufficient to yield statistically reliable information or the results would reveal personally identifiable information about an individual student;

Student rosters, student-level reports, and data reports, as detailed in Elements 3 and 8 of the response to this requirement, will be provided to GMAP districts and schools to share with their stakeholders, including individual student reports that can be shared with parents. Data files that can be provided to the Georgia Department of Education to enable data from GMAP districts to be reported in the school accountability system and report cards, as for all non-Pilot students. This provides a consistent standard of accountability reporting and attention paid to achievement gaps for all students in the state.

(xii) enable itemized score analyses to be produced and reported, consistent with clause (iii), to local educational agencies and schools, so that parents, teachers, principals, other school leaders, and administrators can interpret and address the specific academic needs of students as indicated by the students' achievement on assessment items; and

Individual student reports as well as aggregate reports will be provided to participating districts. Additional detail is provided in Elements 3 and 8 of the response to this requirement.

(xiii) be developed, to the extent practicable, using the principles of universal design for learning.

NWEA assessments have been, and will continue to be, developed using universal design for learning. Additional detail is provided in Element 5 of the response to this requirement and in the response to the "Prior experience, capacity, and stakeholder support" section under the header Effective Supports and Appropriate Accommodations.

Members of GMAP and affiliate members will work together to create an innovative assessment system that appropriately measures the depth and breadth of the State's content standards, and that meets the technical reliability and validity requirements required of section 1111(b)(2)(B) of the Elementary and Secondary Education Act. The development will begin as districts implement and utilize MAP Growth tests created by NWEA as part of the five-year GMAP Pilot. For the new through-year assessment, work will be done to enhance adaptability and identify areas where item development may be needed to deliver a through-year blueprint robust enough to provide full grade-level coverage to the Georgia Standards of Excellence, the state's academic content standards. This will provide information both about student growth and about the ability of students to access and demonstrate proficiency against the State's rigorous academic content standards.

This system will leverage the adaptive principles of MAP Growth for grades 3–8 as a foundation for a through-year assessment model in English language arts and mathematics, and for grades 5 and 8 in science aligned to the GSE. This model will use adaptive assessments administered in fall, winter, and

spring that are tightly aligned to the State standards and designed to measure grade-level expectations to yield longitudinal growth data, instructionally relevant insights, and summative proficiency scores.

Element 2: Align with challenging State academic content standards

MAP Growth assessments are already aligned to the GSE in English language arts, mathematics, and science, and additional work will identify areas where item development may be needed to deliver a through-year blueprint robust enough to provide full grade-level standard coverage. This information will be documented as part of technical reports.

As part of the test development process, NWEA Content Specialists link the grade-level expectations across grades to create a two-tier framework consisting of instructional areas and sub-areas. In general, strands within the standards become the instructional areas in the framework of MAP Growth tests. Areas in the standards documents that are determined to be subdomains of the strands become the sub-areas.

For example, the grades 2–5 MAP Growth for Mathematics test aligned to the GSE has a “Measurement and Data” instructional area that includes two instructional subareas: “Geometric Measurement and Problem Solving” and “Represent and Interpret Data.” The “Measurement and Data” instructional area corresponds to the “Measurement and Data” domain in the GSE, while the instructional sub-areas represent the content in the cluster standards.

Creating tests in this manner means that they align tightly to the standards and provide an accurate measure of student achievement.

MAP Growth test items span a full range of cognitive levels and skills, further supporting the alignment of the tests to the GSE. Each item in the pool is evaluated and tagged with a Bloom’s cognitive process dimension and Depth of Knowledge level. MAP Growth tests include items at Depth of Knowledge levels 1, 2, and 3.

As NWEA moves forward with the implementation of the through-year model, Content Specialists will work with Georgia educators to review and refine content alignment using a principled development process. NWEA intends to work with Georgia educators and assessment experts to continually refine test alignment to and expand item pool coverage of the GSE. Once completed, NWEA will produce a multi-year item development plan for the State to review for improved alignment as the GMAP Pilot progresses.

Table C-1 shows the framework of MAP Growth assessments aligned to the Georgia Standards of Excellence. A full mapping of the GSE to MAP Growth will be produced and reviewed by the content advisory group in Years 1 and 2.

Table C-1: Framework of MAP Growth Assessments Aligned to the GSEs

Instructional Area	Sub-areas
Mathematics, Grades 2–5	
Operations and Algebraic Thinking	▪ Represent and Solve Problems ▪ Analyze Patterns and Relationships

Table C-1: Framework of MAP Growth Assessments Aligned to the GSEs

Instructional Area	Sub-areas
Number and Operations	▪ Understand Place Value, Counting, and Cardinality ▪ Number and Operations in Base Ten ▪ Number and Operations — Fractions
Measurement and Data	▪ Geometric Measurement and Problem Solving ▪ Represent and Interpret Data
Geometry	▪ Reason with Shapes, Attributes, and Coordinate Plane
Mathematics, Grades 6–12	
Operations and Algebraic Thinking	▪ Expressions and Equations ▪ Use Functions to Model Relationships
The Real and Complex Number Systems	▪ Ratios and Proportional Relationships ▪ Perform Operations ▪ Extend and Use Properties
Geometry	▪ Geometric Measurement and Relationships ▪ Congruence, Similarity, Right Triangles, and Trigonometry
Statistics and Probability	▪ Interpreting Categorical and Quantitative Data ▪ Using Sampling and Probability to Make Decisions
Reading, Grades 2–12	
Literature	▪ Literature: Key Ideas and Details ▪ Literature: Craft and Structure
Informational Text	▪ Informational Text: Key Ideas and Details ▪ Informational Text: Craft and Structure
Vocabulary Acquisition and Use	▪ Context Clues and Reference ▪ Word Relationships and Nuance
Language Usage, Grades 2–12	
Writing: Write, Revise Texts for Purpose and Audience	▪ Plan, Organize; Create Cohesion, Use Transitions ▪ Provide Support; Develop Topics; Conduct Research ▪ Establish and Maintain Style: Use Precise Language
Language: Understand, Edit for Grammar, Usage	▪ Parts of Speech ▪ Phrases, Clauses, Agreement, Sentences
Language: Understand, Edit Mechanics	▪ Capitalization ▪ Punctuation ▪ Spelling
Science, Grades 3–5	
Earth and Space Science	▪ Rocks, Soil, and Fossils; Processes that Form Earth's Surface Features ▪ Stars and Planets; Motions and Relative Positions of Earth, the Sun, and the Moon ▪ The Water Cycle, Weather Events, and Weather Patterns
Physical Science	▪ Balanced and Unbalanced Forces; Electricity and Magnetism ▪ Transfer of Heat Energy; Light and Sound ▪ Physical and Chemical Changes

Table C-1: Framework of MAP Growth Assessments Aligned to the GSEs

Instructional Area	Sub-areas
Life Science	▪ Parts of Cells; Classification; Survival in Habitats; Inherited, Acquired Characteristics ▪ Ecosystems: Effects of Humans; Energy Flow and Roles of Organisms; Microorganisms
Science, Grades 6+	
Earth and Space Science	▪ The Universe; Earth, the Sun, and the Moon ▪ Water in Earth Processes; Weather and Climate ▪ Formation of Earth's Surface; Natural Resources
Physical Science	▪ Structure and Properties of Matter ▪ Energy; Force, Mass, and Motion; Gravitational, Electrical, Magnetic Forces ▪ Electromagnetic and Mechanical Waves
Life Science	▪ Diversity and Comparison of Living Organisms; Evolution ▪ Cells, Tissues, Organs, and Systems; Genetic Information ▪ Interdependence of Organisms with One Another and Their Environments

NWEA has more than three decades of experience aligning assessments to specific state standards, using an evidence-based process. NWEA will work with Georgia stakeholders required by the IADA to conduct a thorough review of the Georgia Standards of Excellence and alignment criteria documents, which describe skills to be measured and expected performance. NWEA will have a team led by test developers with expertise in applying state standards to assessments with the State's view of the standards in mind. NWEA will collaborate with educators about items and specifications to gain a deeper understanding of Georgia standards.

To check item quality and standards coverage, an independent alignment study will be conducted. NWEA staff will prepare materials to support the contractor that the Georgia Department of Education selects for this study and will work with the State to discuss progress with the innovative assessment Technical Advisory Committee (TAC) as is warranted. Once completed, NWEA will collaborate with the State in order to determine the outcomes of the alignment study and determine any needed changes to development plans. NWEA knows strong alignment is critical for quality assessments and looks forward to partnering with Georgia in these efforts.

Each item will be reviewed by Content Specialists for alignment to Georgia standards, as well as the targeted depth of knowledge and cognitive demand, as college and career standards currently require. To verify that the depth and rigor of the Georgia standards are reflected in the NWEA item pool and test specifications, NWEA intends to select item reviewers from within GMAP and other Georgia districts. This will include reviewers who are representative of key stakeholder groups in the State, as well as minority, low-income, students with disabilities, and English learners, as required by the IADA.

NWEA plans to develop performance tasks to confirm higher-order thinking skills and writing skills are part of the through-year assessment system. To that end, NWEA plans to phase in performance tasks, scoring protocols, and training over three years, starting in Year 3.

To align the performance tasks with the through-year assessment model, NWEA intends to collect sample responses to the performance tasks, guide teachers in matching student work to Georgia Milestones Achievement Level Descriptors, and build training guides and next-step guides. As a result, teachers can both administer the tasks and have a framework for analyzing student thinking along learning progressions. Including performance tasks in the through-year assessment system will ultimately improve alignment of the testing system and the validity of the summative scores.

The Rasch model, one of the item response theory models commonly employed in state K-12 assessment programs, was used to create the equal-interval scales for MAP Growth assessments. These scales have been named RIT scales. A MAP Growth RIT score can be used to estimate student proximity to a specified academic achievement level or performance standards.

The through-year assessment model employs an interim measure that adapts above and below grade level to accurately assess every student, and also measures student learning against grade-level expectations. The through-year model will employ a vertical scale specific to Georgia academic standards that links to the MAP Growth RIT scale, allowing educators to take advantage of national MAP Growth norms and make inferences relative to their historical MAP Growth data.

Score reports will be developed that will represent academic performance and growth in reference to Georgia's proficiency standards and the NWEA national norms.

The assessment model adapts above and below grade level, at interim intervals, to measure growth and support high-quality instructional and accountability decisions, and also measures student learning against grade-level expectations for accountability purposes. This model allows for accountability determinations and proficiency information to be calculated based on performance against the challenging academic standards for the grade in which the student is enrolled. It also provides educators with information about where students are along the growth continuum in a way that allows for educators to understand how students are growing and what challenges they are ready for next — both to challenge students with what comes next and to help address learning gaps for students who may not be performing at grade level.

Because the assessments will be built to mirror the way the Georgia standards build and scaffold on top of each other, once students demonstrate command of a given concept, they do not necessarily need to be tested on it again the following term. Over the course of a school year, all students will have multiple opportunities to demonstrate mastery of grade-level standards.

Element 3: Express student results consistent with state standards and identify students not attaining proficiency on standards

NWEA proposes to expand on MAP Growth reporting for the through-year assessment and develop a criterion-referenced definition of grade-level proficiency. This information will be used to identify students who are not attaining or making sufficient progress toward grade-level proficiency on standards by reporting where students are performing against grade-level standards during each administration of the through-year cycle. Because both grade-level content determinations and off-grade determinations will be made, teachers will have two pieces of information to drive instruction: What is the particular achievement level in which the child falls? At which content level is the student successfully engaging? This will allow teachers to understand where students are performing relative to

on-grade standards and expectations while at the same time letting them identify which instructional gaps need to be closed in order to move students to proficiency.

MAP Growth assessments currently provide multiple reporting options Georgia educators can use for identifying which students are not making progress toward Georgia's academic content standards. Some reports, such as the Learning Continuum shown in Figure C-3, include Georgia Standards of Excellence-aligned Learning Statements that help educators pinpoint precisely what a student or group of students is ready to learn.

Figure C-3: Learning Continuum. The Class View of this report groups a teacher's students and identifies specific areas for instruction, which are displayed by GSE standard or instructional area, based on test results. Student names and data used in images of reports throughout this application are not real.

While MAP Growth reporting supports determinations about whether students are making progress, NWEA intends to develop additional reports that support decisions regarding grade-level proficiency, relying on the aggregation of data from through-year assessments.

When the system is complete, determinations about student performance that will target where a student is performing, even if above or below grade, will be returned, as will additional information about student performance against grade-level standards. Reporting from the first two administrations of the assessment will provide information about projected proficiency, based on grade-level expectations, and following the third assessment, reports will combine information from all three administrations to deliver a summative score relative to grade-level standards as well as information about student growth across the entirety of the academic year. This allows for both within-grade and across-grade growth information to be used by schools and teachers.

At Risk Reporting

MAP Growth provides detailed reports that help educators, school leaders, and district leaders group struggling students for instruction and intervention. This information will continue to be made available throughout the GMAP Pilot and will remain relevant when the new through-year solution is complete.

Quintile Grouping in Reports

The Grade Report and Class Report both show students' detailed and summary test data by grade for a selected term, at different reporting levels. One of the views of the Grade Report is the Summary page, shown in Figure C-4. This page groups students by percentile, from low (21st percentile and below) to high (80th percentile and above) based on NWEA national norms. The "Overall Performance" row is based on the overall RIT score in the subject, and the other rows are broken out by instructional area (labeled "Goal Area") within that subject.

Grade Report

Grade 3

Term:	Winter 2017-2018	**Norms Reference Data:**	2015
District:	NWEA Sample District - Partner Acc	**Weeks of Instruction:**	16 (Winter
School:	Three Sisters Elementary School	**Grouping:**	None
		Small Group Display:	No

Reading

Demo Growth: Reading 2-5 / Demonstration Tests - NWEA 2017

Summary	
Total Students With Valid Growth Test Scores	41
Mean RIT	206.2
Standard Deviation	11
District Grade Level Mean RIT	*
Students At or Above District Grade Level Mean RIT	*
Norm Grade Level Mean RIT	202.5
Students At or Above Norm Grade Level Mean RIT	25

	Lo %ile < 21		LoAvg %ile 21-40		Avg %ile 41-60		HiAvg %ile 61-80		Hi %ile > 80		Mean RIT (+/- Smp Err)	Std Dev
Overall Performance	count	%	count	%	count	%	count	%	count	%		
Demo Growth: Reading 2-5 / Demonstration Tests - NWEA 2017	3	7%	7	17%	11	27%	11	27%	9	22%	204-206-208	11
Goal Area												
Vocabulary Acquisition and Use	3	7%	8	20%	11	27%	12	29%	7	17%	204-206-208	12.8
Literature	1	2%	10	24%	11	27%	9	22%	10	24%	206-208-210	11.2
Informational Text	0	0%	12	29%	10	24%	9	22%	10	24%	205-207-209	11

Figure C-4: Grouping by Quintiles. School leaders can use the Summary page of the Grade Report to identify students who are not making progress toward Georgia's academic content standards, based on which quintile they are in. The far left quintile is low, which is students at or below the 21st percentile. Note: Other reports show this same view, including the Class Report, which a teacher can use for intervention grouping and other purposes.

Achievement Status and Growth Report

The Achievement Status and Growth Report is particularly useful in measuring program effectiveness and student learning, and grouping students based on percentile information. This customizable report provides both a static and an interactive summary of data. The static report shows growth projections for each student (based on NWEA national norms) and compares actual student growth to projected growth.

With the interactive visualization of this report, teachers can quickly see how each student is growing and achieving so they can more effectively focus instruction. The default setting for this report is to characterize achievement and growth relative to the 50th percentile, as shown in Figure C-5.

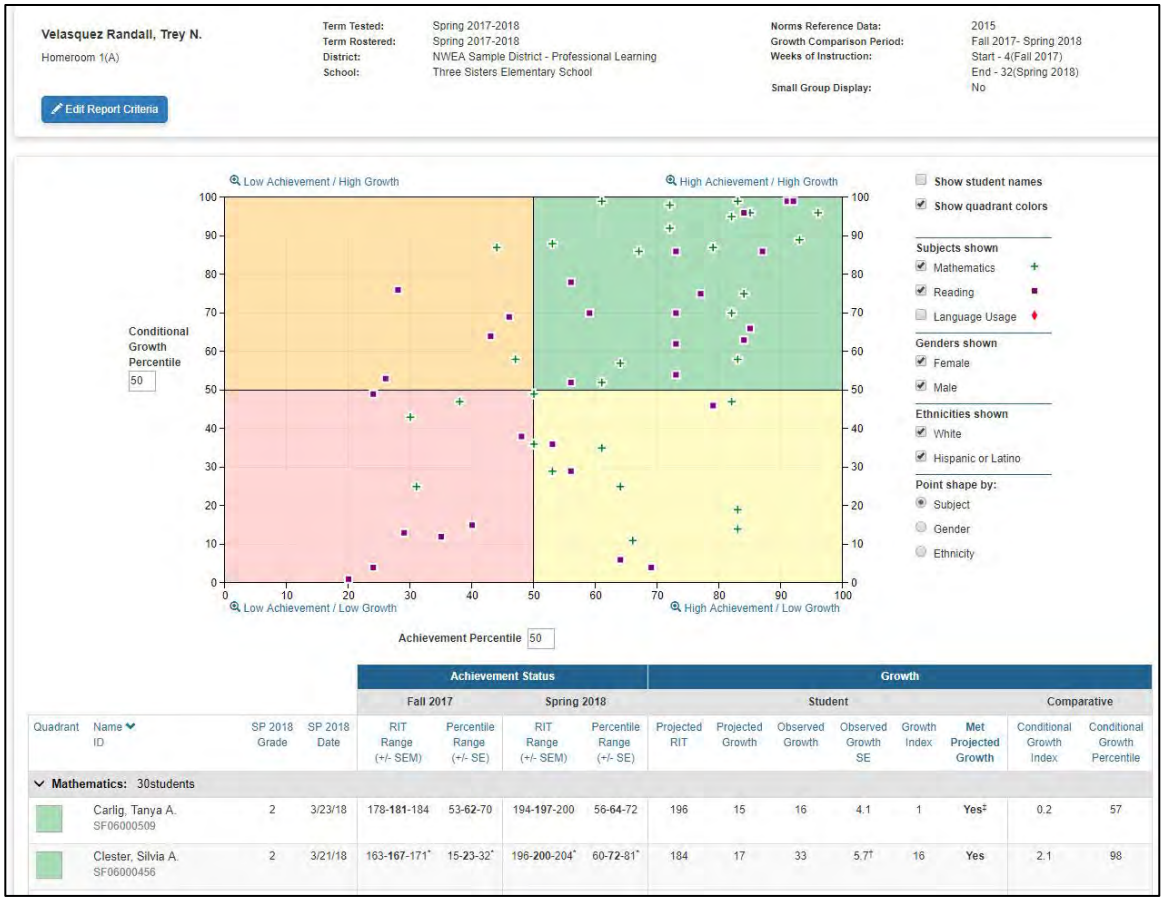

Figure C-5: Achievement Status and Growth Report. The quadrant view of this interactive report allows educators to see, at a glance, how students are achieving and growing relative to the 50th percentile. Educators can customize and group students by adjusting the x and y axes, as seen in Figure 6.

Using this report, educators can adjust the benchmarks against which achievement and growth are compared, as shown in Figure C-6, to group students for at-risk data reporting or for more effective instruction (intervention or extension, for example).

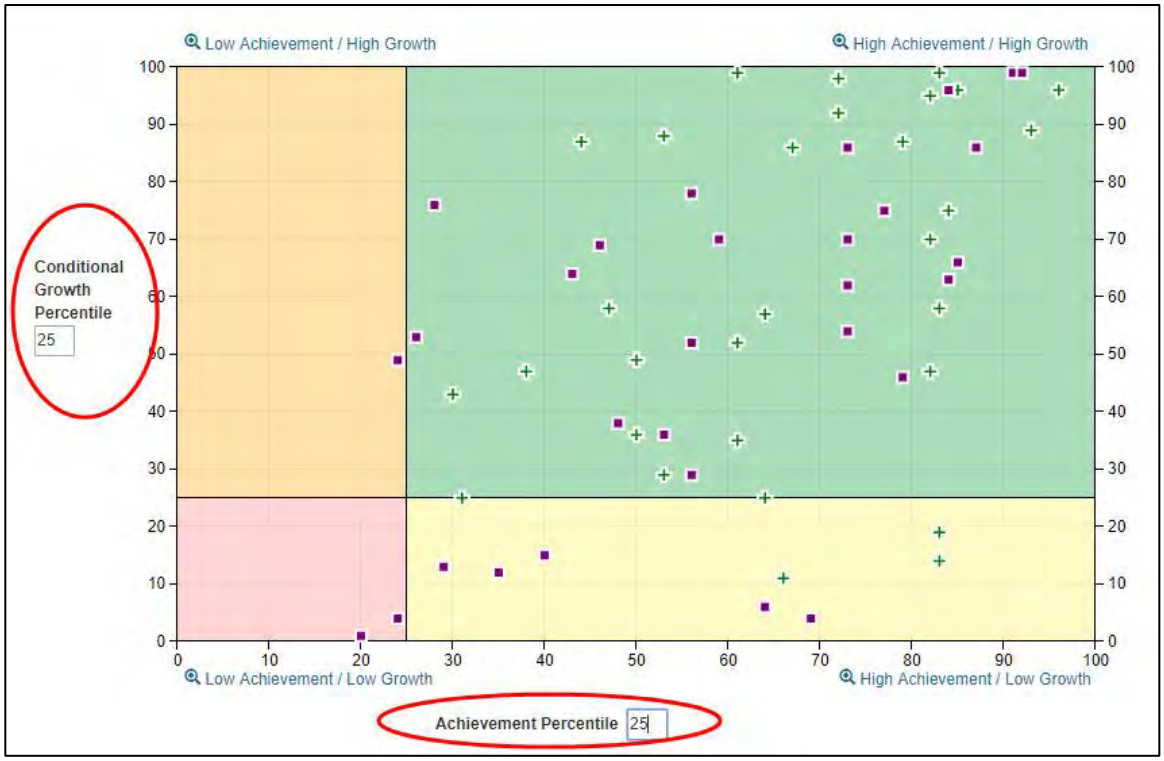

Figure C-6: Grouping Students Based on Performance. Educators can adjust the percentiles of the Achievement Status and Growth Report (in the fields circled in red) to group students for a variety of purposes, including to report or identify at-risk students. The lower-left quadrant here shows students who are below the 25th percentile in both achievement and growth.

At risk can be defined in two ways: norm-referenced and criterion-referenced. Both definitions are useful to educators and students. MAP Growth currently provides a norm-referenced definition of the "at risk student" by comparing student growth and progress over time to national norms. The conditional growth percentile (CGP) answers the questions, "How does this student's growth compare to other similar students across the nation?" and "Is this student keeping up with the growth typically seen in other similar students across the nation?" According to this definition, a student who is not keeping up with their peers in the nationally normed reference group could be considered "at risk." In contrast, a criterion-referenced definition of the "at risk student" is focused on student growth toward specific content, rather than a norm-referenced group. Students could exhibit higher-than-typical growth, according to the CGP, but still not be on track to reach proficiency; conversely, students could be on track to reach proficiency, but actually display below-average CGP.

NWEA proposes to expand on MAP Growth reporting and develop a criterion-referenced definition of at-risk students in four steps:

1. Conduct a thorough alignment study to identify gaps between MAP Growth item pools and the Georgia Standards of Excellence.
2. Fill those gaps in the item pools with new items that will provide complete domain representation of the state content standards. This likely will include the development of performance tasks, which are not currently included in the MAP Growth item pools.
3. Conduct new linking studies that establish functional relationships between the Georgia-specific item pools and scales and Georgia Milestones summative scores.
4. Integrate new reporting features into existing reports that complement the existing definition of at-risk students with a criterion-referenced interpretation of the "at-risk student." This last step will give teachers and students direct and accurate feedback concerning which students are "at risk" of not reaching each proficiency standard: Beginning, Developing, Proficient, and Distinguished Learner achievement levels.

Figure C-5 provides an example of a current report that defines "at risk" using a norm-referenced definition. These benchmarks default to the 50th percentile and teachers can adjust the benchmark to any percentile desired. However, once all of the steps outlined above are complete, future designs of this report could give Georgia teachers the ability to apply benchmarks for any of the proficiency standards. For example, if a teacher wants to know who is at risk of not reaching the Proficient achievement level, the teacher could simply select a check box for the Proficient level, and the benchmark would adjust accordingly.

Element 4: Generate results, including annual summative determinations, that are valid, reliable, and comparable for all students and for each subgroup of students

NWEA is forming an internal technical advisory committee to review the technical quality of the through-year assessment and provide guidance on test validation, score reliability, and test scaling.

Types of Scores that Will be Reported by the Through-Year Assessment System

The through-year assessment scores will retain the benefits of the MAP Growth RIT scale while simultaneously collecting evidence from each interim assessment that can be aggregated into a summative score for accountability purposes. The RIT scale is an equal-interval vertical scale that spans grades K–12, and a RIT score can be used to estimate student proximity to a specified academic achievement level or performance standards. Using the RIT scale to report test results makes it possible to follow a student's educational growth from testing season to testing season and year to year. Each subject area has a unique alignment to the RIT scale.

By using item response theory to create the scales and anchoring item difficulty estimates to them, the RIT scales are comparable from one set of items to another and from one set of examinees to another. This enables comparisons of the scores from different students, or from the same student at different times, even though different sets of test items are administered. This also allows longitudinal comparison of student performance.

The RIT scale has national norms, percentiles, and growth percentiles; as such, it is a norm-referenced scale. In contrast, the Georgia-specific scale will be developed to closely align to the Georgia Standards

of Excellence and, as such, will be a criterion-referenced scale. Table C-2 shows the scales that will be produced by the through-year assessment system.

Table C-2: Types of Scales Produced From the Through-Year Assessment System

Test Event	RIT Scale (Norm-Referenced)	Georgia-Specific Scale (Criterion-Referenced)
Fall	Yes	Yes
Winter	Yes	Yes
Spring	Yes	Yes
Spring Aggregated Summative	No	Yes

In order to achieve the dual purposes of assessment *for learning* and *of learning*, a given test event will need to administer enough items from the RIT scale to support reliable and valid inferences to the RIT scale, as well as sufficient items from the scale that are aligned to and directly measure the Georgia Standards of Excellence to support inferences regarding the depth of achievement in grade-level standards. Adaptive testing is ideal for this purpose because it is more efficient than linear assessments.

NWEA expects some items will likely serve both the RIT scale and the Georgia-specific scale, some items will only serve the Georgia-specific scale, and some will serve only the RIT scale. The scores that will be generated from each interim test will include a RIT score and a Georgia-specific score representing student achievement in the Georgia Standards of Excellence. The extent to which these two scores will be similar or different is not yet known.

If the results of the alignment study show very small gaps between the RIT item pool and the Georgia Standards of Excellence, then the scores may prove to be so highly and positively correlated that they may be indistinguishable, at which time it would be inappropriate to report separate subscores for the RIT scale and the Georgia-specific interim score[1]. However, in light of the results of previous linking studies in Georgia and the fact that Georgia Milestones include constructed response items and MAP Growth does not, these two scores will probably be moderately positively correlated, such that the two scores can be linked together, but not equated.

If the Georgia-specific scale is distinct enough from the RIT scale, then the RIT score and the Georgia-specific score will be reported as separate subscores. The Georgia-specific interim score from fall, winter, and spring will then be aggregated into a single summative score for accountability purposes at the end of the year.

To recapitulate, NWEA currently plans that each interim test will generate a RIT score and a Georgia-specific interim score. At the last testing event, the Georgia-specific interim scores will be aggregated to produce a summative score that will be used for accountability purposes.

The current reliability, validity, and comparability evidence for MAP Growth scores that are reported on the RIT scale is presented next, followed by the plan for addressing reliability, validity, and comparability for each type of score reported within the through-year assessment system, including the Georgia-specific interim scores and the aggregated summative score used for annual determinations.

[1] Sinharay, S., Haberman, S. J., & Puhan, G. (2007). Subscores Based on Classical Test Theory: To Report or Not to Report. *Educational Measurement: Issues and Practice, 26* (4), 21–28.

The Plan to Establish the Reliability and Validity of the Georgia-Specific Scale

The partnership between GMAP and NWEA affords an opportunity to systematically study the through-year assessment system over the first four years of this work, with the ultimate goal of designing a system that will maximize the reliability and validity of the through-year assessment system.

To study the reliability and validity of the new Georgia-specific scales, NWEA will use the same measures of reliability and validity as used for MAP Growth (RIT scale): marginal reliability, classification consistency and accuracy, content validity, construct validity, and concurrent and predictive validity; however, NWEA recognizes the need to collect additional evidence that addresses the summative accountability purposes of the Georgia-specific scales.

NWEA will give additional effort and resources to study the validity of the classification decisions derived by the Georgia-specific scales so that the annual summative determinations attain acceptable levels of classification accuracy. This will be done by comparing the classification accuracy of the through-year system to the Georgia Milestones. NWEA will utilize simulation studies to plan field tests and collect real data to help determine the optimal precision and test lengths needed from the Georgia-specific interim scores to obtain sufficiently reliable annual summative determinations.

Validity is not an all-or-nothing endeavor, but is achieved at various degrees; therefore, NWEA plans to iteratively improve the reliability, validity, and comparability of the through-year assessment system by annually evaluating and prioritizing revisions. Figure C-7 displays an iterative test development process adapted from Boehm's Spiral Model of software development[2] that provides a framework for evaluation and continual improvement.

[2] Boehm, B, "Spiral Development: Experience, Principles, and Refinements," Special Report CMU/SEI-2000-SR-008, July 2000.

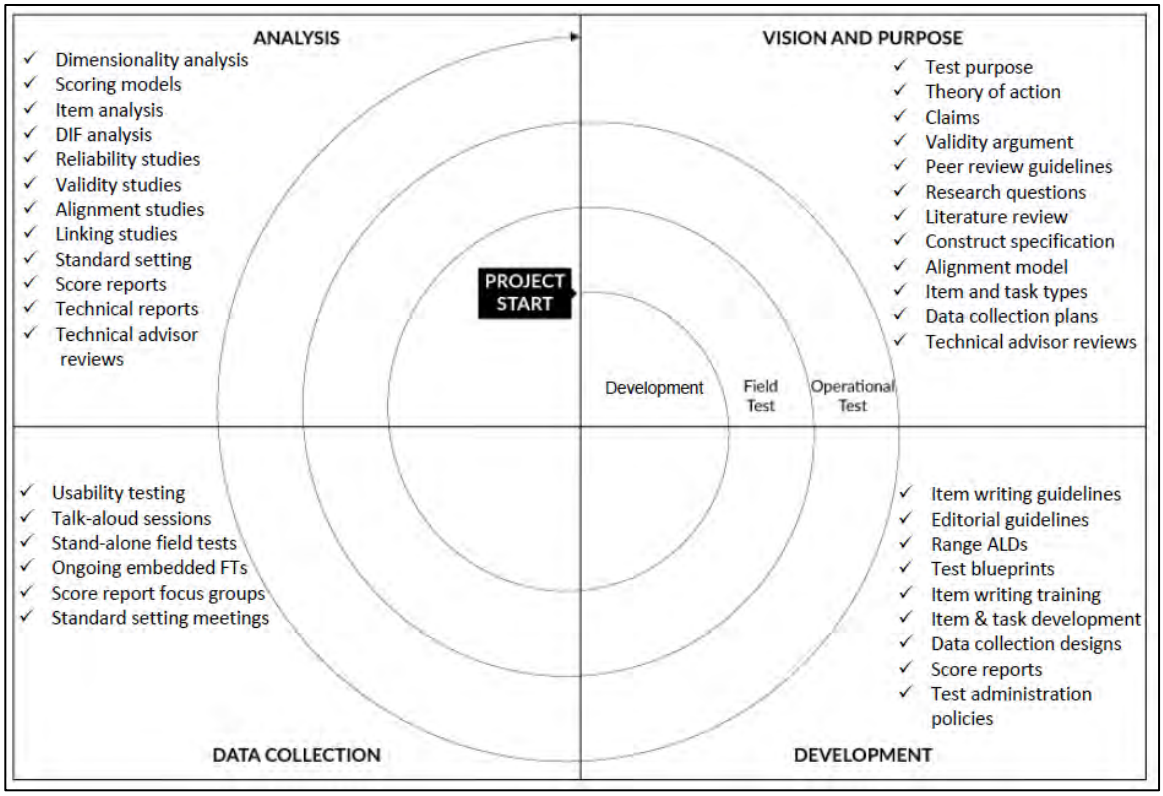

Figure C-7: Boehm's Spiral Development Model. NWEA plans to continually evaluate and improve the through-year assessment model during the GMAP Pilot.

NWEA employs more than forty Research and Psychometric staff who are leaders in the industry and in academia. These teams verify that growth measurements are accurate and that data provided with NWEA assessments are valid, reliable, and comparable. NWEA has spent decades conducting test reliability and validity, the stability of the RIT scale, and the precision of test score studies. Georgia students will benefit from the studies and analyses the NWEA Psychometric teams regularly conduct, including item pool depth analysis, test validation, comparability studies, differential item functioning (DIF) analysis, and unmatched normative data.

Score validity and reliability are critical characteristics for test scores. Validity and reliability analyses take on even greater importance as scores are used for high-stakes purposes. NWEA adheres to the *Standards for Educational and Psychological Testing,*[3] including in the development and reporting of reliability coefficients and in NWEA routine reporting of estimates of standard error of measurement along with test scores.

Validity

[3] American Educational Research Association (AERA), American Psychological Association (APA), and National Council on Measurement in Education (NCME). (2014). *Standards for Educational and Psychological Testing.* Washington, DC: AERA.

The evidence to support the validity of the Georgia-specific scale and the aggregated summative scale will be centered on their intended purpose to determine the student's achievement level. Evidence to support the validity of summative scores and annual determinations will include information about:

- **Content Validity:** The extent to which the items that produce the summative score match the Georgia Standards of Excellence.
- **Construct Validity:** The extent to which the test measures what it is intended to measure.
- **Concurrent and Predictive Validity:** The extent to which the summative scores and classifications are predictive of student performance on the Georgia Milestones assessments.
    - **Item-Validity Index:** The point-biserial correlations of the through-year items with the Georgia Milestones total test score is a type of item-validity index.[4] Low point-biserial correlations on this index could indicate items that should be carefully examined to ensure that construct-irrelevant knowledge is not surfacing in the item pool.
    - **Item Exposure:** Evidence that the item pool is large enough that items are not over-exposed.
    - **Standard Setting Process:** Evidence that the method used to established cut scores that define the achievement levels is reliable, accurate, and valid.
    - **Opportunity to Learn:** Evidence that the items used for the Georgia-specific scale and the aggregated summative scale represents content that students had opportunity to learn.
- **Consequential Validity:** Evidence that the through-year assessment system does not result in a reduction of retention of knowledge.
    - **Simulation Studies:** At the onset and throughout the design of the through-year assessment system, simulation studies will be conducted with simulated and real data to inform decisions, including test length, blueprint design, constraint engine design, stopping rules, sampling designs, choice of psychometric models, and score aggregation models.

Table C-3 presents the types of evidence that will be collected to support claims of validity, reliability, and comparability for each through-year assessment scale.

Table C-3: Validity, Reliability, and Comparability Evidence That Will Be Collected for Each Scale in the Through-Year Assessment System (F=fall, W=winter, S=spring)

Type of Evidence	RIT Scale				Georgia-Specific Scale				Aggregated Summative Scale
	F	W	S		F	W	S		End of Year
Validity Evidence									
Content validity	✓	✓	✓		✓	✓	✓		✓
▪ Blueprints and blueprint conformity	✓	✓	✓		✓	✓	✓		✓
▪ Item writing process	✓	✓	✓		✓	✓	✓		✓
▪ Range achievement level descriptors (ALDs)	✓	✓	✓		✓	✓	✓		✓
▪ DIF analyses and bias and sensitivity reviews	✓	✓	✓		✓	✓	✓		✓

[4] Allen, M. J., & Yen, W. M. (2001). Introduction to measurement theory. Waveland Press.

Table C-3: Validity, Reliability, and Comparability Evidence That Will Be Collected for Each Scale in the Through-Year Assessment System (F=fall, W=winter, S=spring)

Type of Evidence	RIT Scale				Georgia-Specific Scale				Aggregated Summative Scale
	F	W	S		F	W	S		End of Year
Construct validity	✓	✓	✓		✓	✓	✓		✓
▪ Model data fit	✓	✓	✓		✓	✓	✓		✓
▪ Dimensionality analyses	✓	✓	✓		✓	✓	✓		✓
▪ Differential test functioning	-	-	-		✓	✓	✓		✓
Concurrent validity	✓	✓	✓		✓	✓	✓		✓
Predictive validity	✓	✓	✓		✓	✓	✓		✓
▪ Item-validity index	-	-	-		✓	✓	✓		✓
Evidence of item under-exposure	✓	✓	✓		✓	✓	✓		✓
Standard setting process	-	-	-		-	-	-		✓
Opportunity to learn	-	-	-		✓	✓	✓		✓
Simulation studies	-	-	-		✓	✓	✓		✓
Consequential validity	-	-	-		✓	✓	✓		✓
Reliability Evidence									
Inter-rater reliability of performance tasks	✓	✓	✓		✓	✓	✓		✓
Marginal reliability	✓	✓	✓		✓	✓	✓		✓
Conditional standard errors of measurement	✓	✓	✓		✓	✓	✓		✓
Classification consistency and accuracy	✓	✓	✓		✓	✓	✓		✓
Simulation studies	-	-	-		✓	✓	✓		✓
Comparability to Milestones									
Similar test administration policies	-	-	-		✓	✓	✓		✓
Same ALDs	-	-	-		✓	✓	✓		✓
Similar alignment standards	-	-	-		✓	✓	✓		✓
Same accommodation policies	-	-	-		✓	✓	✓		✓
Linking study	-	-	-		✓	✓	✓		✓
▪ High classification accuracy	-	-	-		✓	✓	✓		✓
▪ Population invariance	-	-	-		✓	✓	✓		✓
Socially moderated standards (if needed)	-	-	-		✓	✓	✓		✓

Reliability

NWEA will report marginal reliability evidence for the Georgia-specific scale. Measures of scale score precision, such as the standard error of measurement, both overall and conditional, will be reported along with classification consistency and accuracy of estimates for categorical classification decisions for achievement levels. In addition to scale score reliability, inter-rater reliability and agreement of performance task scores will also be reported.

All measures of reliability and precision listed in Table C-3 will be reported for the aggregated summative score.

Unique Challenges of a Through-Year Assessment System

The following challenges to the validity of through-year assessments must be addressed by any test developer tackling this innovation. All of these challenges can affect the validity of the through-year assessment. For this reason, the through-year assessment should be carefully studied before high-stakes implementation; therefore, per our timeline, the through-year assessment scores will not replace the Georgia Milestones assessments until reliability, validity, and comparability studies have been conducted. In partnership with Georgia stakeholders, NWEA research teams will address these technical challenges that must be resolved prior to implementing a through-year assessment system:

- Standard 12.8 of the *Standards for Educational and Psychological Testing*[5] stipulates that "evidence should be provided that students have had an opportunity to learn the content and skills measured by the test." Different school districts typically use different pacing guides, which means that different content is covered at different points in time. To address this challenge, NWEA intends to analyze the pacing guides of schools in GMAP districts to understand how much variability there will likely be at the planned testing events. Given this information, NWEA can consider options with GMAP leadership to address any concerns about opportunities to learn that might arise.
- Measurement models have been proposed over the years to aggregate the scores from multiple test events. Different models with varying assumptions will create different scores and inferences. To address this second challenge, NWEA intends to select several promising through-year assessment models, consistent with current literature, and conduct simulation studies to compare and contrast competing models to understand their relative strengths and weaknesses. Then, in collaboration with GMAP leadership, NWEA intends to identify the model that is most consistent with the intended inferences of the innovative testing program prior to pilot testing. NWEA will continue to evaluate the through-year assessments using actual data following the first field-test year.

The previous section describes how NWEA will establish the reliability and certain forms of validity; this section will describe the plan to achieve two types of comparability: 1) comparability of summative scores within and across subgroups of the GMAP consortium, and 2) comparability of the through-year summative scores with the Milestones summative scores.

Comparability of Summative Scores Within the Through-Year Assessment System

Test blueprints play a pivotal role in comparability and equivalence. A blueprint specifies what content will be assessed. If blueprints under- or over-represent the breadth, depth, cognitive processes, rigor, or linguistic complexity of the on-grade content standards, a test score will become biased and validity of the test will suffer. The definition of the latent construct, theta, is highly dependent on the blueprint. If the blueprint changes, so will the definition of the latent trait.

[5] American Educational Research Association (AERA), American Psychological Association (APA), and National Council on Measurement in Education (NCME). (2014). *Standards for Educational and Psychological Testing.* Washington, DC: AERA.

Any testing claim that requires the measurement of growth or equivalent scores within a year or across years within districts or across districts, requires blueprints that are consistently and reliably adhered to across all testing events. Otherwise, academic growth, learning, and achievement will become confounded with measured error, i.e., changes in the definition of the construct.

In adaptive tests, the blueprint acts as a constraint so that construct representation is achieved during the test event. Ultimately, the adaptive constraint engine defines the latent trait as per the blueprint. How is this done? The adaptive constraint algorithm defines the blueprint by ensuring that all the constraints are satisfied during a test event, while simultaneously maximizing an objective function, such as measurement precision.[6] The constraints largely influence content alignment. For instance, using Webb's alignment model, the adaptive algorithm and blueprints will largely contribute to categorical concurrence, content coverage, balance of representation, and depth of knowledge.[7]

In order for test scores to be equivalent — the strongest type of comparability — different forms of a test must be designed to measure the same construct under the same testing conditions.[8] Statistical procedures are used to make small adjustments to scale differences, but equating cannot compensate for substantial differences in content. Therefore, only tests that share a common test blueprint can possibly be equated.

NWEA assumes that different GMAP districts will utilize different pacing guides, so students will be exposed to content at different points of the year, but all students will have the opportunity to learn the appropriate grade-level content standards at some time throughout the year. Therefore, we are not expecting nor claiming that the interim Georgia-specific scales will be equivalent. However, by the time the final through-year interim assessment is taken, all students should have had the opportunity to learn all the on-grade content standards; therefore, the interim blueprints, once combined, will cover the same content, differing only in instructional sequence. Because the cumulative blueprints that are used to produce the aggregated summative score cover the same content, the summative scores can be equated using an equating model or a scaling model.

During the field test year, NWEA intends to field test all the items that serve the Georgia-specific scales within the spring testing window, calibrating them concurrently on the same item response theory scale, so that the summative blueprint is proportionally reflected in the data sets used for calibrations. When items are calibrated onto the same referent scale and the test data are collected under highly similar testing conditions, they are considered equivalent. Therefore, NWEA will claim the aggregated summative scores will be equivalent both within and across districts participating in GMAP. Table C-4 summarizes the claims of equivalence and non-equivalence within and across districts by each reporting scale of the through-year assessment system.

Multiple procedures will be used to prevent bias from entering into the scores for subgroups of students: 1) a pre-field-test bias and sensitivity review, 2) differential item functioning (DIF) analysis, 3) a

[6] Van Der Linden, W. J., & Reese, L. M. (1998). A Model for Optimal Constrained Adaptive Testing. *Applied Psychological Measurement*, 22(3), 259-270.
[7] Martone, A., & Sireci, S. G. (2009). Evaluating Alignment Between Curriculum, Assessment, and Instruction. *Review of Educational Research*, 79(4), 1332-1361.
[8] Kolen, M. J., & Brennan, R. J. (2004). *Test Equating: Methods and Practices*. (2nd ed.). New York: Springer-Verlag.

post-field-testing bias and sensitivity review for items flagged with DIF, and 4) differential test functioning analysis.

Prior to field testing, bias and sensitivity reviews will be performed on all items by groups of experts representing each subgroup defined in section 1111 (c)(2) of ESSA, including economically disadvantaged students, students from major racial and ethnic groups, children with disabilities, and English learners. To ensure that scale scores are equivalent across subgroups of students, DIF and differential test functioning (DTF) will be performed at different points in time during the development process.

DIF analysis will be conducted after each field test using the Mantel-Haenzel Delta DIF procedure. This procedure will be applied to each subgroup as sample size permits. A minimum sample size of 500 students per group is needed. Items that display DIF will not be used within operational scores unless they pass a post-field-test bias and sensitivity review and are declared free of bias.

As a further check on the equivalence of scores across subgroups, DTF analyses will be conducted using field test and operational data using the IRT method described by Chalmers[9] for all subgroups previously mentioned as sample sizes permit. As data are accumulated across years, samples sizes will increase and DIF and DTF analyses will be routinely performed following each test administration.

Table C-4: Claims of Equivalence or Non-Equivalence for Each Scale Produced From the Through-Year Assessment System

Scale	Common Blueprint Within Districts	Equivalent Within Districts	Common Blueprint Across Districts	Equivalent Across Districts
Each Interim RIT Scale	Yes	Yes	Yes	Yes
Fall Interim Georgia-Specific Scale	Yes	Yes	No	No
Winter Interim Georgia-Specific Scale	Yes	Yes	No	No
Spring Interim Georgia-Specific Scale	Yes	Yes	No	No
Aggregated Summative Scale	Yes	Yes	Yes	Yes

Additional detail about comparability is provided in the response to Element 9 of this requirement.

MAP Growth Linking Study

MAP Growth assessments have been demonstrated to be accurate predictors of students' proficiency on high-stakes summative assessments such as the Georgia Milestones. Each study identifies the specific RIT scale scores from MAP Growth that correspond to the various proficiency levels for each subject and grade.

These studies also estimate the probability that a student with a specific RIT score will achieve a status of "proficient" or better on a state test. The NWEA 2015 linking study showed that MAP Growth scores consistently classified proficiency for the Georgia Milestones Mathematics test 87 percent of the time

[9] Chalmers, R. P., Counsell, A., and Flora, D. B. (2016). It might not make a big DIF: Improved Differential Test Functioning statistics that account for sampling variability. Educational and Psychological Measurement, 76, 114-140.

and English Language Arts test 84 percent of the time for the sample used in that study. As the Georgia-specific scale is developed within the through-year system, it is likely to improve upon these levels of prediction accuracy because the content alignment will increase.

NWEA uses the equipercentile linking procedure10 to link the RIT scale to state summative assessments. The sample includes all students taking the MAP Growth interim test and the state summative test. Cut scores for the RIT scale are determined by applying the cut scores from the state summative assessment to the RIT scale through the statistical linking procedure. The cut score on the RIT scale is set to maximize classification accuracy and is used to make predictions of proficiency on the state summative test. Classification accuracy is examined using the method described in Pommerich et al., 2004.[11] Using Kolen's linking framework[12], this type of linking study would involve measuring the same content (Georgia Standards of Excellence), but doing so with different items in different conditions of measurement. The different measurement conditions would include multiple interim assessments administered via a computer adaptive engine (the NWEA through-year assessment) versus a single summative test administered as a linear assessment via online (Georgia Milestones).

To be clear, linking tests that differ in this manner is not considered an equating; equating produces scores that are interchangeable. Rather, this type of linking procedure will produce linking tables that allow users to see the most probable score and achievement level on the Georgia Milestones test, given a score on the through-year assessment. NWEA assumes that the goal of the comparability study is to produce such crosswalks between the scales, similar to the published linking tables for the ACT® and SAT®, and to establish achievement level performance standards that closely agree with those set on the Georgia Milestones assessments.

Comparability Across Assessment Systems

NWEA researchers conducted a linking study in 2015 that shows MAP Growth produces scores that are highly correlated to Georgia Milestones scores. The correlations ranged from 0.79 to 0.87. This linking method used a common student design and aligns with the first method for demonstrating comparability listed under section (4)(I). "Administering full assessments from both the innovative and statewide assessment systems to all students enrolled in participating schools, such that at least once in any grade span (e.g., 3–5, 6–8, or 9–12) and subject for which there is an innovative assessment, a statewide assessment in the same subject would also be administered to all such students." NWEA proposes to continue to use this same data collection design when conducting linking and comparability studies for all scores reported in the through-year assessment system.

The work NWEA proposes to perform in developing the innovative through-year assessment system will further improve comparability by increasing the similarity of the through-year measures with the Georgia Milestones tests. Therefore, NWEA expects the concurrent correlations of the Georgia-specific scales of the through-year assessment system will exceed the values reported in the 2015 linking study. The through-year assessment and Georgia Milestones tests will be similar in many ways:

[10] Kolen, M. J., & Brennan, R. L. (2004). Test equating, scaling, and linking.
[11] Pommerich, M., Hanson, B. A., Harris, D. J., & Sconing, J. A. (2004). Issues in Conducting Linkages Between Distinct Tests. *Applied Psychological Measurement*, 28(4), 247-273.
[12] Kolen, M. J. (2007). Data Collection Designs and Linking Procedures. In *Linking and aligning scores and scales* (pp. 31-55). Springer, New York, NY.

1. Same construct because the through-year assessment and Georgia Milestones align to the same content standards
2. Same achievement level descriptors
3. Same online test administration mode
4. Selected response item types represent the large majority of item types for both tests
5. Highly similar breadth and depth of coverage as reflected in the cumulative through-year blueprints and Georgia Milestones blueprints
6. Highly similar test administration guidelines
7. Cut score for each achievement level in the through-year summative scale is aligned to the cut scores on the Georgia Milestones tests via an equipercentile linking study

Establishing Comparable Proficiency Standards

NWEA plans to conduct linking studies between Georgia Milestones and the RIT scale on an annual basis as data are available, using the equipercentile linking procedures described previously, providing documentation to the Georgia Department of Education's proposed innovative assessment technical advisory committee for feedback. The purpose of these linking studies is to provide up-to-date proficiency predictions for participating schools.

The Georgia-specific scale will be under development in Years 1 and 2, but starting in Year 3, NWEA expects the item bank to be complete enough to support the operational administration of the Georgia-specific scale. NWEA aims to administer the full through-year assessment in English language arts and mathematics during the 2020-2021 school year, and in science during the 2021-2022 school year. Once the Georgia-specific scale for each subject is operational, the through-year assessment system will report both the RIT scores and the Georgia-specific scores used for aggregated summative score reporting.

Linking studies will then be conducted to evaluate the comparability of the Georgia-specific scales to the Georgia Milestones assessments, including, and most importantly, the aggregated summative score used for accountability purposes. To set proficiency standards on the aggregated summative scale, the current plan is to utilize the linking study results to apply the Georgia Milestones proficiency cut scores to the aggregated summative scale. Cut scores for each achievement level will be selected to minimize misclassification rates.

These results will be evaluated in terms of population invariance for each subgroup described in section 1111(c)(2) as sample sizes permit.[13] If the linking functions prove to be population variant (differ by subgroup), alternative standard setting options will be considered, such as socially moderated standard setting.[14] In addition to these linking studies, to further study comparability, NWEA will consider equivalence of expectation in terms of achievement level descriptors. NWEA is open to working with the State if independent third-party comparability studies are requested.

Standard Setting

13 Dorans, N. J., & Walker, M. E. (2007). Sizing Up Linkages. In Linking and Aligning Scores and Scales (pp. 179-198). Springer, New York, NY.
14 Lim, R. L. (1993). Linking Results of Distinct Assessments. Applied Measurement in Education, 6(1), 83-102.

Academic achievement standards on through-year aggregated summative scores will be established using multiple evidence-based approaches, including multiple linking studies and a standard-setting study in Year 5. Table C-5 displays the data that will be available for linking studies in each year of the GMAP Pilot. NWEA administers the MAP Growth test in many districts in Georgia of which nine are GMAP districts, which provide an opportunity to conduct linking studies between the RIT scale and the Milestones scale each year. All of these linking studies will permit us to make linked cut scores on the through-year summative scale either directly or indirectly from the Milestones scale.

For instance, in Year 3 NWEA can establish direct links from Milestones to the through-year scale through common person equipercentile linking, because GMAP districts will have Milestones and through-year data for each student. In Years 4 and 5, indirect linkages could be conducted between three scales: from the Milestones scale to the RIT scale, and from the RIT scale to the through-year summative scale.

In addition to these linking studies, NWEA would like to request the Georgia Department of Education to permit NWEA to embed a representative sample of Milestones items into the through-year tests to permit a common-item non-equivalent linking study. All of these linking studies will provide evidence that will help evaluate the precision and accuracy of the linked cut scores used in Years 4 and 5 in the absence of Milestones classifications for determining the annual summative determinations. Finally, NWEA intends to perform standard setting during Year 5 of the GMAP Pilot using the ID Matching methodology[15] The linking study results will provide "neighborhood" cut scores[16] that will inform the standard setters as they establish cut scores using the ID Matching procedure.

Table C-5: Data Collection Timeline and Availability for Linking Studies

	NWEA Districts					
	GMAP				Non-GMAP	
Year	RIT	Through-Year Summative	Milestones Summative		RIT	Milestones Summative
1	✓				✓	✓
2	✓				✓	✓
3	✓	✓			✓	✓
4	✓	✓	Predicted		✓	✓
5	✓	✓	Predicted		✓	✓

Comparability of Interpretations and Rigor in Expectations

The focal point of comparability will be the annual summative determinations that classify students into achievement levels. To promote comparable results, NWEA and GMAP will develop assessments to work with Georgia's existing Achievement Level Descriptors to align to the way that proficiency is defined within each content standard. If the Georgia Department of Education permits, NWEA will include a sample of retired Georgia Milestones items in the range ALD analysis as a way of cross-checking the level of rigor inherent to the definition of proficiency in the Georgia Milestones assessments. Range

15 Ferrara, S., Perie, M., & Johnson, E. (2014). Matching the Judgmental task with standard setting panelist expertise: The Item-Descriptor (ID) matching method. Journal of Applied Testing Technology, 9(1), 1-20.
16 O'Malley, Keng, & Miles, (2012). From Z to A: Using validity evidence to set performance standards. Setting performance standards: Foundations, methods, and innovations, 301-322.

ALDs will be used to guide item writing and review so that items align to the Georgia Standards of Excellence.

Element 5: Provide for the participation of all students, including children with disabilities and English learners

NWEA has worked with partners to develop a variety of accommodations, along with universal and designated supports, for special populations, including for children with disabilities, English learners, and other students with special needs or considerations. NWEA offers a flexible accommodations approach to allow students to use their own third-party assistive technology.

All NWEA items are written with the intent of reducing language demands so that the focus of the item is on the construct of interest. This includes: writing items in active voice; using present tense; avoiding complex sentence construction; and reducing vocabulary load.

In line with ESSA, NWEA is committed to providing the appropriate accommodations, such as interoperability with, and ability to use, assistive technology for students with disabilities. NWEA believes accessibility applies to all students. The NWEA philosophy underscores elements of universal design and individualization for student users with diverse needs. Even though the approach takes into consideration the unique needs of students, NWEA understands the need for standardization. NWEA recognizes that assessment terminology regarding accessibility, accommodations, features, and supports has become confusing in the assessment market.

In order to support the use of common naming conventions and definitions, NWEA has adopted the language and terminology of the Council of Chief State School Officers (CCSSO) Accessibility Manual.[17] NWEA chose to adopt CCSSO's approach because this plan focuses on providing supports for a student in both the curriculum and assessment. The CCSSO model fits with the NWEA approach to accessibility, which is to allow students access to the same tools and accommodations they already know and use on a regular basis.

NWEA actively conducts research and has taken critical steps in contributing to the field of accessibility and universal design. NWEA will strive to maximize the validity of its assessments for the greatest number of students, including students with disabilities and English learners. At the heart of NWEA efforts is a dedication to providing assessments that are adaptable to a combination of unique learning needs, easily perceived, and clear to each student.

When building in accessibility, it is a commitment for the entire organization and is something that needs to be thought about during the planning stages of every development release. With accessibility offerings being online, NWEA has created an accessibility checklist that follows accessibility standards and protocols provided by the Americans with Disabilities Act (ADA), compliance with Section 508 of the Rehabilitation Act, and WCAG 2.0 Guidelines.

Figure C-8 indicates the current NWEA process for incorporating accessibility at every step. This figure is a snapshot of the NWEA internal accessibility checklist, which is a combination of Section 508 standards,

[17] Shyyan, V., Thurlow, M., Christensen, L., Lazarus, S., Paul, J., and Touchette, B. (August 2016). *CCSSO Accessibility Manual: How to Select, Administer, and Evaluate Use of Accessibility Supports for Instruction and Assessment of All Students.* Washington, D.C.: CCSSO.

WCAG 2.0 Guidelines, and other various sources such as standards from the CAST, a nonprofit focused on expanding learning opportunities through Universal Design for Learning, and the National Center of Educational Outcomes (NCEO).

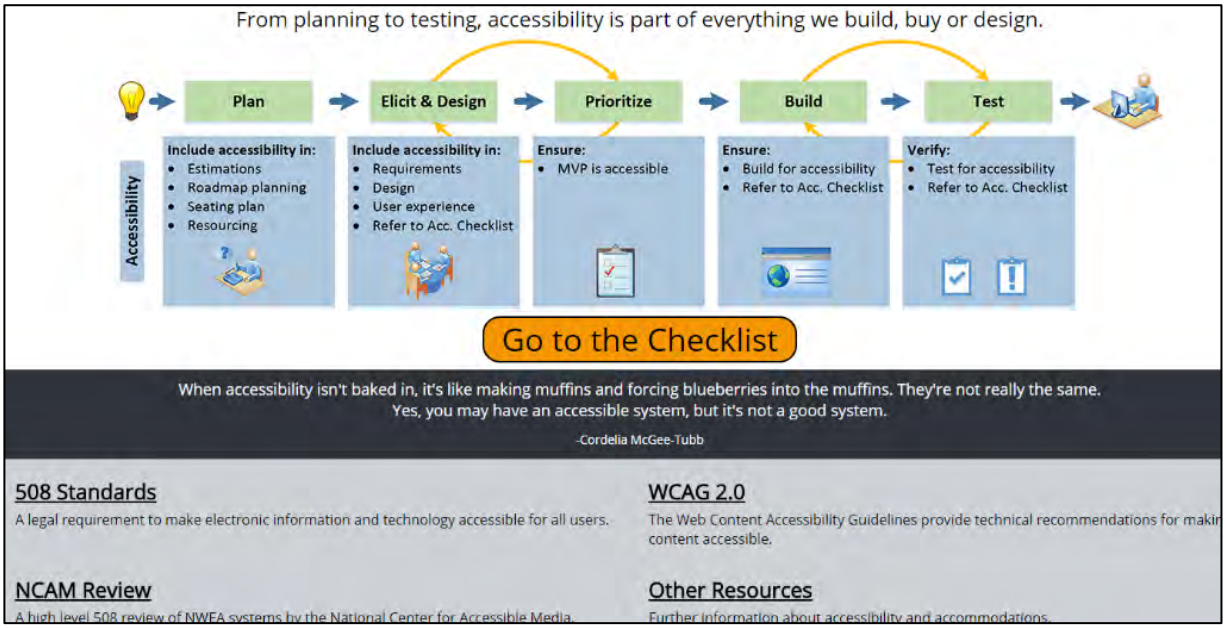

Figure C-8: NWEA Accessibility Development. In the internal accessibility checklist, each of the four categories and their subcategories is considered during assessment development.

The checklist is broken down into four categories, Visual Standards for Accessibility, Accessible Navigation, Alternatives for Inaccessible Content, and Accessible Multimedia. Each category has subcategories explaining and showing, with examples, how NWEA can build in accessibility. Each category and each subcategory is evaluated and considered during the development process. This process is the foundation for creating NWEA assessments to be accessible and this process is essential for students who use assistive technology.

Universal Design of Assessments (UD) and Universal Design for Learning (UDL) is another layer in creating accessible assessments. Making NWEA assessments accessible to students with a variety of needs, including those with disabilities, is a core part of the organization's mission, *Partnering to help all kids learn®*. With a strong foundation in UDL, NWEA is committed to making assessments that are engaging and accessible for all students.

Trained by CAST, a nonprofit focused on expanding learning opportunities through Universal Design for Learning, the NWEA Content Solutions team creates each item with the principles of UDL in mind. These principles provide a framework for developing flexible items to support many kinds of learners, maximize options for assessments, and provide multiple means of:

- Representation
- Action and expression
- Engagement

NWEA also adheres to the Universal Design of Assessment principles, which are as follows:

- Inclusive assessment population

- Precisely defined constructs
- Non-biased items
- Amenable to accommodations
- Simple, clear, intuitive instructions and procedures
- Maximum readability and comprehensibility
- Maximum legibility

Applying UDL and UD principles to NWEA assessments is standard practice and helps reduce barriers and minimize irrelevant information from the items, so the assessment can show what each student knows. NWEA is also sensitive to areas that are less obvious, but can have a major impact for accessibility, including the syntax, semantics, and grammatical structure of NWEA items. NWEA uses many resources such as Abedi, Downing, and Haladyna linguistic features that may affect comprehension and the Test Accessibility and Modification Inventory (TAMI)[18] to support all students.

In addition to these resources, NWEA has a Bias, Sensitivity, and Fairness (BSF) panel that reviews NWEA English language arts passages. NWEA also has BSF guidelines for each content area that help review items for topics such as stereotypes, gender discrimination, ethical issues, privilege, and various sensitivities for different cultures.

To verify that the depth and rigor of the Georgia standards are reflected in the NWEA item pool and test specifications, NWEA intends to select item reviewers from within GMAP and other Georgia districts. This will include reviewers who are representative of key stakeholder groups in the State, as well as minority, low-income, students with disabilities, and English learners.

More recently, NWEA has put tremendous focus on creating a computer adaptive assessment that is accessible for students with visual impairments. For these students, it is essential to have the ability to use their own assistive technology devices. To provide access for students with visual impairments who may use screen readers and refreshable braille devices, one must be able to support accessibility from all angles: (a) access into the content, (b) the ability to respond, and (c) technical requirements needed for the assistive technology devices to function, as defined in the NWEA Accessibility Information and Definitions list.

As standard practice, NWEA develops products considering universal design and accessibility standards from the start. For example, alternative text descriptions (alt-tags) for images are an important feature on a website to provide access to those using screen readers. Alt-tags provide descriptions of pictures, charts, graphs, etc., to those who may not be able to see the information. Laying this foundation means NWEA products are accessible for students using various accommodations. Using national standards such as WCAG 2.0 and ARIA (Accessible Rich Internet Applications) help to guide the creation of an accessible foundation.

NWEA also has contributed to the field of universal design and accessibility. NWEA — with support from WGBH[19] National Center for Accessible Media — has created detailed and thorough guidelines for

[18] Beddow, P. A., Kettler, R. J., and Elliott, S. N. (2008). *Test Accessibility and Modification Inventory*. Vanderbilt University: Nashville, TN.
[19] WGBH is a public radio and television station based in Boston, Massachusetts. The Carl and Ruth Shapiro Family National Center for Accessible Media (NCAM®) is a nonprofit research and development organization dedicated to achieving media access equality for people with disabilities. NCAM is part of the Media Access Group at WGBH.

describing many variations of images, charts, and graphics targeted specifically to the disciplines of reading, language usage, mathematics, and science. The guidelines review concepts such as item integrity, fairness, and the challenges image description writers face in the context of assessment. These guidelines result in consistent, user-friendly, and valid image descriptions that support the use of screen readers. Given its mission to help all kids learn, NWEA is firmly committed to high-quality accommodations and expects to continue to build on NWEA offerings in the years to come.

As NWEA moves forward with the through-year assessment, the organization will continue to examine and refine these processes in conjunction with Georgia educators.

Table C-6 provides current NWEA accommodations, universal features, and designated features for MAP Growth. The new through-year test designs and assessments will be built upon existing supported accommodations and features as outlined below.

Table C-6: Accommodations, Universal Features, and Designated Features

Support	Description	MAP Growth for Grades 3+	Innovative Assessment Grades 3–8
Accommodations are changes in procedures or materials that provide equitable access to instructional and assessment content and generate valid assessment results for students who need them. Embedded accommodations are provided digitally through instructional or assessment technology, while non-embedded accommodations (e.g., scribe) are provided locally.			
Non-Embedded Accommodations			
Abacus *(individualized manipulatives)*	This accommodation may be used in place of scratch paper for students who typically use an abacus.	✓	✓
Assistive Technology *(alternate response options, word processor, or similar keyboarding device to respond to items)*	The student can use assistive technology, which includes such supports as typing on customized keyboards; assistance with using a mouse; mouth or head stick or other pointing devices; sticky keys, touch screen, and trackball; speech-to-text conversion; or voice recognition.	✓	✓
Screen Reader	A software application that identifies and interprets what is being displayed on the screen (text, images, etc.). Screen readers are used by students with no or low vision.	✓	✓
Refreshable Braille	A raised-dot code that individuals read with the fingertips using a refreshable keyboard.	✓	✓
Calculator *(calculation device)*	A student uses a specific calculation device (e.g., large key, talking, or other adapted calculator) other than the embedded grade-level calculator.	✓	✓

Table C-6: Accommodations, Universal Features, and Designated Features

Support	Description	MAP Growth for Grades 3+	Innovative Assessment Grades 3–8
Extended Time *(breaks, flexible scheduling)*	Allow flexible scheduling for a student test administration; for example, testing longer than scheduled test session, multiple breaks, etc.	✓	✓
Human Signer *(sign language, sign interpretation of test)*	A human signer will sign the test directions to the student. The student may also dictate responses by signing.	✓	✓
Multiplication Table	A paper-based single digit (1-9) multiplication table is available to the student.	✓	✓
Scribe *(human scribe, scribed response, test administrator entering of responses for student)*	The student dictates her/his responses to an experienced educator, who records verbatim what the student dictates.	✓	✓
Universal features are accessibility supports that are either embedded and provided digitally through instructional or assessment technology (e.g., answer choice eliminator), or not embedded and provided non-digitally at the local level (e.g., scratch paper). Universal features are available to all students as they access instructional or assessment content.			
Embedded Universal Features			
Amplification *(audio amplification, increase volume, audio aids)*	The student raises or lowers the volume control, as needed, using headphones.	✓	✓
Calculator	An embedded on-screen digital calculator can be accessed for calculator-allowed items when students click on the calculator button. When the embedded calculator, as presented for all students, is not appropriate for a student (for example, for a student who is blind), the student may use the calculator offered with assistive technology devices (such as a talking calculator or a braille calculator).	✓	✓
Digital Notepad *(notepad)*	The student uses this feature as virtual scratch paper to make notes or record responses.	✓	✓

Table C-6: Accommodations, Universal Features, and Designated Features

Support	Description	MAP Growth for Grades 3+	Innovative Assessment Grades 3–8
Eliminate Answer Choices *(answer choice eliminator, strikethrough)*	The student uses this feature to eliminate those answer choices that do not appear correct to the student.	✓	✓
Highlighter *(highlight tool)*	The student uses this digital feature for marking desired text, items, or response options with a color.	✓	✓
Keyboard Navigation *(keyboards shortcuts, two-switch system)*	The student can navigate throughout test content by using a keyboard (e.g., arrow keys). This feature may differ depending on the testing platform.	✓	✓
Line Reader *(line reader mask tool, line reader tool, line guide)*	The student can use this feature as a guide when reading text.	✓	✓
Zoom (item-level) *(magnification, screen magnifier)*	The student can enlarge the size of text and graphics on a given screen. This feature allows students to view material in magnified form on an as-needed basis. The student may enlarge test content at least fourfold. The system allows magnifying features to work in conjunction with other accessibility features and accommodations provided. (Zoom is not compatible with MacBooks®.)	✓	✓
Non-Embedded Universal Features			
Breaks *(frequent breaks; paper-based test administration)*	Breaks may be given at predetermined intervals or after completion of sections of the assessment for students taking a paper-based test. Sometimes students are allowed to take breaks when individually needed to reduce cognitive fatigue when they experience heavy assessment demands. The use of this universal tool may result in the student needing additional overall time to complete the assessment.	✓	✓
English Dictionary	An English dictionary can be provided to the student. The use of this universal feature may result in the student needing additional overall time to complete the assessment.	✓	✓

Table C-6: Accommodations, Universal Features, and Designated Features

Support	Description	MAP Growth for Grades 3+	Innovative Assessment Grades 3–8
Noise Buffer *(headphones, audio aids)*	The student uses noise buffers to minimize distraction or filter external noise during testing. Any noise buffer must be compatible with the requirements of the test.	✓	✓
Scratch Paper *(blank paper)*	The student uses scratch paper or an individual erasable whiteboard to make notes or record responses. All scratch paper must be collected and securely destroyed at the end of each test domain to maintain test security. The student receives one sheet (or more as needed) of scratch paper. A marker, pen, or pencil should be provided as well. The student can use an assistive technology device to take notes instead of using scratch paper as long as the device is approved by the State. Test administrators must delete all notes taken on an assistive technology device after the test.	✓	✓
Thesaurus	A thesaurus containing synonyms of terms can be provided to the student. The use of this universal tool may result in the student needing additional overall time to complete the assessment.	✓	✓
Designated features are available for use by any student for whom the need has been indicated by an educator (or team of educators, including the parents/guardians and the student if appropriate) familiar with the student's characteristics and needs. Embedded designated features are provided digitally through instructional or assessment technology, while non-embedded designated features are provided locally. Designated features must be assigned to a student by trained educators or teams using a consistent process.			
Embedded Designated Features			
Text-to-Speech *(audio support, spoken audio)*	The student uses this feature to hear pre-recorded or generated audio of text.	✓	✓
Non-Embedded Designated Features			
Bilingual Dictionary *(word-to-word dictionary [English/native language])*	A bilingual/dual language word-to-word translation dictionary is provided to the student as a language support.	✓	✓
Color Contrast	Student uses specialized presentation of test.	✓	✓

Table C-6: Accommodations, Universal Features, and Designated Features

Support	Description	MAP Growth for Grades 3+	Innovative Assessment Grades 3–8
Human Reader *(human read aloud, read aloud)*	Test and question content is read aloud by a qualified human reader.	✓	✓
Magnification Device *(low-vision aids)*	The student adjusts the size of specific areas of the screen (e.g., text, formulas, tables, and graphics) with an assistive technology device. Magnification allows increasing the size to a level not provided by the zoom universal feature.	✓	✓
Native Language Translation of Directions *(translate test directions, general administration directions read aloud and repeated in student's native language)*	Test and question content is translated by a test administrator who is fluent in the language	✓	✓
Separate Setting *(alternate location)*	Test location is altered so that the student is tested in a setting different from what is used for most students.	✓	✓

Support for Assistive Technology Devices

The NWEA philosophy on accessibility is to remove barriers and create a supportive assessment foundation that applies to all students. NWEA underscores individualization of student needs by supporting the use of their own assistive technology (AT) devices. This is essential for some students, giving them the opportunity to use the tools and devices that are a part of their everyday learning rather than requiring them to use something new for one assessment.

This is a bold approach and requires dedication and patience, for with every assistive technology there are challenges. To meet the needs of students, NWEA started with the most widely used AT devices. Third-party software accessibility products that can be used with MAP Growth are included in Table C-7. As NWEA builds new through-year tests, the organization will continue supporting these products except in those cases where test security needs might override the system capability (for example, JAWS prevents us from using a secure browser).

Table C-7: Supported Third-Party Assistive Software

Third-Party Software*	Description
ZoomText®	ZoomText is a computer access solution designed for the visually impaired. It offers a combination of magnification and reading tools, as well as enhancements to colors, pointers, and cursors. It works for both Windows® and Macintosh® operating systems.
Chromebook™ Magnification	Chromebook has a built-in screen magnifier. This allows users to zoom in and out anywhere on the screen.
Windows Magnifier	The magnifier in Windows enlarges different parts of the screen and is part of the Ease of Access Center. Windows 7 and 8.1 users can choose from either full-screen or lens magnification modes.
Zoom on Mac® and iPad®	Mac computers and iPads have a built-in screen magnifier. It can magnify a screen up to 40 times its normal display size.
Chromebook Color Contrast	High-contrast mode inverts the picture so that a white background appears black, black text appears white, and colors are inverted (for example, blue text or graphics become orange).
Windows Color Contrast	Windows supports high-contrast themes for the operating system and applications that users may choose to enable. High-contrast themes use a small palette of contrasting colors that makes the interface easier to see.
Mac and iPad color contrast	Increase the readability of the screen on a MacBook or iPad by increasing the contrast of the display. Increase the contrast of the whole screen or emphasize borders between items in the Display section of the accessibility settings.
JAWS	JAWS, Job Access with Speech, is the world's most popular screen reader, developed for computer users whose vision loss prevents them from seeing screen content or navigating with a mouse. JAWS provides speech and braille output for the most popular computer applications.
Refreshable Braille Device	A raised-dot code that individuals read with the fingertips using a refreshable braille device.
** NWEA recommends students using these third-party tools launch the tool prior to launching the secure test browser.*	

Allowable Accommodations

Universal design and accessibility is an ongoing process that will remain central to development efforts.

For the accommodations included in Table C-8, it is NWEA judgment that they will be irrelevant to, or only minimally affect, the validity of the student's test score. Currently, students who are administered assessments using one or more of the standard accommodations listed in Table C-8 are subjected to the same reporting specifications as students not using accommodations.

Table C-8: Allowable Accommodations

Accommodation Type	Allowable Accommodation
Presentation Accommodations	▪ Simplify or clarify directions; for example, clarifying the location of the Next button ▪ Use visual magnification devices or software ▪ Use auditory amplification devices, noise buffers, or software ▪ Use masks to block a portion of the screen; for example, the student may use a sticky note, index card, or a blank sheet of paper to move down the screen as he or she is reading ▪ Read or reread aloud the test directions ▪ Read or reread aloud the test questions (not answer options) for Mathematics tests only and omit pronunciation or explanation of mathematics or science symbols
Response Accommodations	▪ Scribes, educational assistants, and other people supporting a student during testing must be neutral in responding to the student during test administration. Assistance in test administration must not lead a student to the correct answer. The student's response must accurately represent the student's own choice. These accommodations are supported: - Assign a scribe to record responses - Dictate responses to a scribe - Point to responses for a scribe - Respond in native language
Setting Accommodations	▪ Test an individual student in a separate setting ▪ Test a small group of students in a separate setting ▪ Minimize distractions; for example, use a study carrel
Timing/Schedule Accommodations	▪ Administer test over multiple sessions in a day ▪ Administer test over a number of days (within the limits of test administration guidelines) ▪ Allow a flexible schedule ▪ Extend time for testing (all NWEA assessments are designed to be untimed for all students) ▪ Administer at time of day most beneficial to student ▪ Offer breaks
Materials or Devices Accommodations	▪ Provide scratch paper ▪ Provide a comparable calculator when a student is unable to access the on-screen calculator
Miscellaneous Accommodations	▪ Provide a drink during testing ▪ Provide a snack during testing

Accommodations that have the potential to interfere with the measurement of core construct are considered non-standard, and they require special consideration. If circumstances (such as an Individualized Education Plan, 504 plan, or English for Speakers of Other Languages program) necessitate non-standard accommodations, those decisions can still be made per State summative assessment guidelines.

Element 6: Annually measure in each participating school progress on the Academic Achievement indicator of at least 95 percent of all students, and 95 percent of students in each subgroup of students

When implemented, through-year final summative student proficiency results returned at the end of test administration will be usable in the Georgia accountability system in a manner consistent with the way that assessment scores from the current Georgia Milestones assessment are used.

The GMAP districts will assess all students in grades 3-8 consistent with how they currently assess the Georgia Milestones Assessment System. This will meet the expectation of assessing at least 95 percent of all students, and 95 percent of students in each subgroup of students.

Element 7: Generate an annual summative determination of achievement

While the MAP Growth assessments being used in Years 1-2 are not able to produce a single summative score, linking studies show how MAP Growth scores can to be used to predict performance on Georgia Milestones. As development of the through-year assessment progresses, MAP Growth assessments will be augmented to enable the through-year growth assessments to result in both the high-quality student growth scores that are part of MAP Growth and a summative proficiency score, which will encompass four levels of reporting that measure how well students have demonstrated mastery of Georgia grade-level content standards. By administering the through-year assessment and Georgia Milestones in Year 3 to the same group of students in that school year, NWEA will be able to determine comparability of results from the through-year assessments with the Georgia Milestones.

Like interim or periodic assessments, through-year assessments would be administered multiple times throughout the school year, providing immediate and actionable feedback to guide instruction and learning. However, unlike interim and periodic assessments, results from each test event from the through-year assessment are aggregated at the end of the school year to produce a single summative score that can be used to classify students into proficiency categories *and* to measure across-year growth. Through-year assessment combines the best of both interim and summative methods.

Through-year assessments have many potential benefits, including ongoing instructional feedback, reduced cumulative testing time, and more timely and actionable data from assessments.

NWEA does not plan to include any alternate assessments, and GMAP districts plan to continue to allow students with the most severe cognitive disabilities to take the same alternate assessments used elsewhere in the State (Georgia Alternative Assessment (GAA) 2.0).

Element 8: Provide disaggregated results by each subgroup of students, including timely data

For the through-year assessment model, NWEA intends to design and develop reports for teachers, principals, and other school leaders, students, and parents that comply with the U.S. Department of Education's reporting requirements and that are consistent with the *Standards for Educational Psychological Testing.*[20] These reports will also be designed to be disaggregated by subgroup as per federal accountability and reporting requirements.

[20] American Educational Research Association (AERA), American Psychological Association (APA), and National Council on Measurement in Education (NCME). (2014). *Standards for Educational and Psychological Testing.* Washington, DC: AERA.

These reports are intended to give educators and school leaders the ability to see the percentage of students that are Beginning, Developing, Proficient, and Distinguished learners at state, district, school, and classroom levels.

MAP Growth reports enable educators and staff to query the assessment results by various subgroups and filters. They highlight aggregation, grouping, and other configurable options made available to administrators who access reports.

All MAP Growth student data and test results are exportable in comma-separated values (.csv) format for deeper analysis and use in external data or reporting systems. GMAP staff can generate raw data exports of assessment results, referred to as a combined data file. Data files can be generated on a daily, weekly, or one-time basis.

Operational MAP Growth assessment scoring is automatic and timely. Individual scores are available immediately in the end-of-test screen. Student reports can be generated after the student finishes testing. Classroom reports are updated every twenty-four hours.

For MAP Growth assessments, teachers can print and share the Student Profile report with parents. By using the “Print and Share” function, teachers can batch print the Student Profile report for an entire class or download a PDF for an individual student. The function allows teachers to choose one or more subjects, whether to include Learning Statements and/or growth goals, and which students to include.

Parent Resources

Educators can share individual student reports with parents, and NWEA provides high-quality and culturally sensitive resources in multiple languages that describe NWEA assessments and explain test results.

Parents can learn more about the vital role assessments play through the Parent’s Guide to MAP Growth, which explains what NWEA assessments measure, how they measure it, and how teachers use the data. Available in English, Spanish, Arabic, Vietnamese, Chinese, Korean, Haitian Creole, and Brazilian Portuguese.

NWEA has written a sample letter in English and Spanish that teachers can send home to introduce parents to MAP Growth assessments before initial testing, as well as a letter in English and Spanish that can accompany and explain test results. NWEA intends to adapt these resources and make them available for the through-year assessment when operational.

Element 9: Provide an unbiased, rational, and consistent determination of progress toward the State’s long-term goals for academic achievement

To ensure that the results of the assessment being built as part of the GMAP Pilot are unbiased, rational and make consistent determinations of progress toward the State’s long-term goals, a phased implementation approach is being used, with the Georgia Milestones assessment being given in Years 1-3 for English language arts and mathematics, and in Years 1-4 for science to establish comparability. This allows for thoughtful development and rigorous checks of the system, allowing GMAP districts and the State to be confident that the results can be used in the State accountability system and the classroom.

The proposed innovative assessment system will support the larger goals within Georgia's consolidated ESSA State plan. Georgia's consolidated State plan focuses on the "whole child" and strives to personalize learning for each student. The through-year assessment system will support the initiatives of Georgia's long-term goals in a number of ways.

First, the professional learning services NWEA will provide as part of a comprehensive approach will support the long-term goal of strengthening the teaching profession and enhancing data literacy. Second, the interim assessments will provide instructionally relevant and actionable feedback to teachers in the fall and winter interim tests that will support school systems in their tiered systems of continual improvement, allowing teachers to better meet the needs of learners earlier in the school year. Third, the adaptive assessments provide precise scores for any student along the score continuum. The increased precision that adaptive tests provide will ramify into the metrics used for defining and tracking improvement targets. Fourth, NWEA interim assessments will provide projections of growth conditional on prior achievement, permitting teachers to identify students at risk of not reaching their goals.

Specifically, the provision of a system of assessments that is able to return meaningful information about where students are in their learning regardless of grade-level standards empowers educators to understand where students and student subgroups are in terms of their learning and enables them to challenge students appropriately. This enables educators to differentiate instruction in a way that helps each student address his or her own relative weaknesses, and expand upon his or her own strengths. Information about how students are growing is provided both within and across years to further contextualize where students are making growth gains that are likely to decrease achievement gaps.

This approach offers information that traditional summative assessments administered at the end of the year are not able to provide, and, when given information about proficiency against grade-level standards and normative growth, allows teachers to see how student growth is helping to meet the Georgia Accountability goal of annually decreasing the gap between the baseline and 100 percent.

When examined for all students and all student groups, this system provides a through-year mechanism for tracking progress toward the Georgia Accountability system's long-term goal that this gap will be decreased by 45 percent over fifteen years. Because this information is provided at three intervals throughout the year, it yields critical information that school and district leadership teams can leverage to identify and learn from the most promising practices that are creating high growth for students, and allows educators to provide additional supports while there is still time to adjust instruction in instances in which critical growth and proficiency gaps are apparent.

When implemented, the data gathered from the innovative assessments will be able to be used in the extant State accountability and Report Card System. Content mastery will be calculated by using summative proficiency data, which will be provided against four performance level descriptors for the subjects and grades assessed. RIT data is used to provide information about normative student growth, which can be used in the academic growth portion of the progress indicator. Data can be provided at the individual student level and aggregated up in a manner consistent with the Closing Gaps measure required in the current report card system. Work has already been done to provide Lexile®[21] scores

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within the MAP Growth assessment, and this will continue to be available with the through-year model so that this component of the Readiness indicator can be calculated for participating schools.

NWEA will work with the Georgia Department of Education as needed when the assessment has been fully implemented to help facilitate data transfer processes in such a manner that it can be consumed by the State accountability calculation system as is appropriate.

Putnam Consortium

Navvy was designed to assist teachers in implementing an effective assessment process to support personalized learning for all students. In a letter written to LEA leaders, Navvy Education's founder explains, "A Navvy is one who guides navigation; 'Navvy' (rhymes with 'savvy') is a noun that is a short-form for 'navigator'. Navvy is designed to be a tool to help identify, and keep track of, which standards students understand and which they still need help to learn. The name of the system emphasizes the use of the system as a navigation tool and not just a measuring stick or evaluation instrument. In addition to giving teachers and administrators useful information in planning and guiding the education of students, our goal is for students to use Navvy as a tool for guiding their own learning across grades and across years."

The Navvy assessment system was developed in Georgia and provides an on-demand suite of assessments that were created for the specific purpose of measuring the State's challenging academic content standards; as such, a strength of the system is alignment with the State's standards. Navvy is designed to give reliable diagnoses of competency of the State's challenging academic standards using a short, web-based assessment for each standard that is scored immediately to provide real-time feedback to users.

Unique to Navvy—and the heart of the innovative aspects of the system—is the design for inferences to be valid and reliable at the small, and therefore actionable, grain size of individual standards (e.g., "Maria has demonstrated competence of the standard MGSE.6.EE.4"). This small grain size is in contrast to the overall or domain scores typically produced by traditional assessment systems, either measured once at the end of the year (summative forms of statewide assessment) or measured a few times throughout the year (interim forms of statewide assessment). Navvy uses cutting-edge psychometric methods to provide these standards-level inferences efficiently and reliably (see Appendix D-4).

All participating LEAs will administer the same set of assessments in Navvy. District leaders and teachers, however, have control over when Navvy assessments are administered and have the flexibility to assign assessments on combinations of standards as needed. Thus, Navvy assessments are available on-demand for teachers to use when needed and allows the pacing at which assessments are attempted, and re-attempted, to be customized for classes and even students within classes. Customized assessment pacing in turn allows for the customized instruction pacing needed for personalized learning and to support a more competency-focused educational approach.

Navvy assessments were implemented with a subset of schools and districts in the State as a proof of concept pilot in 2017-2018, then expanded the number of students served by a factor of seven under the Georgia Innovative Assessment Pilot (established under GA SB 362) at the start of the 2018-2019 school year, and has continued to grow during the fall of the 2018-2019 school year.

Dual Uses of Navvy

Navvy assessments are diagnostic assessments, in the literal sense of the word diagnostic ("gnosis" meaning *to know* and "dia" meaning *two*; see Rupp, Templin, & Henson, 2010): The assessment determines, for each standard, whether the student (a) has demonstrated competency of the standard or (b) has not demonstrated competency of the standard. This diagnosis can be used in a formative manner—to inform teachers and students of which standard(s) a student has learned and which standard(s) a student needs additional support to learn and subsequently inform instruction provided to the student—or it can be used in a summative manner—to describe which standards a student has learned at the end of a learning period. The diagnostic information Navvy provides can be used in both ways, formatively and summatively, because students are provided with multiple opportunities to demonstrate competency of the standard. Until the final attempt to demonstrate competency, the uses of the Navvy diagnoses are purely formative; there is no penalty for demonstrating competency on a later attempt. After the final attempt, a student's current status on the standard—competency or not—will be the status that is used as part of the student's aggregated result for summative accountability purposes.

The use of Navvy assessments to serve both formative and accountability needs is grounded in an educational approach that focuses on student competencies and acknowledges that (a) students learn standards at different paces, with some students requiring additional instructional support to reach competency, and (b) moving a student on to new standard before learning a more foundational standard is not beneficial to the student, but is rather a practice of traditional education. Because the Navvy system not only monitors competency for individual standards, but also provides students with multiple opportunities to succeed, this innovative assessment process calls for a fundamental shift in mindset of how assessments can be used to not only measure, but also support learning. The focus of assessment throughout the year will be on formative uses of Navvy to support teaching and learning, and then at the end of the year, the wealth of information the Navvy system collects on each student will be summarized for accountability purposes, without requiring additional testing time for students or schools. This practice positions this innovative assessment as a tool that can be used to help schools all year long, in addition to serving accountability needs.

Use of Navvy Assessment under IADA

The Navvy assessment system will be administered for grades 3-8 English and math, for grades 5 and 8 science, for high school math and English courses with a corresponding statewide assessment (2 courses per subject), and for high school science for 1 course with a corresponding statewide assessment.

In addition to the Navvy assessments, the Georgia Milestones will be administered in a representative sample of schools once per grade band in English language arts, math, and science to establish comparability. This representative sample of schools will require double-testing of a sample of students to establish comparability using the method described under 34 CFR 200.105(b)(4)(i)(B).

To reduce the burden of double testing, the Putnam Consortium and Navvy Education will seek to embed Georgia Milestones assessments into the Navvy platform for the purpose of double testing. This is similar to the comparability method described under 34 CFR 200.105(b)(4)(i)(B); however, the mode of administration will be through Navvy and throughout the year, instead of through the Georgia Milestones platform at the end of the year, so this may be considered as a method for establishing comparability under 34 CFR 200.105(b)(4)(i)(E). Important to this effort will be to preserve the technical

quality of Georgia Milestones assessments and items. If this approach is not successful, double testing will occur on the current Georgia Milestones platform at the end of the year (method described under 34 CFR 200.105(b)(4)(i)(B)) as a last resort.

Table D-1 illustrates the grade and subject combinations where, for a representative sample of schools, both the innovative assessment system (Navvy) and the statewide academic assessments (Georgia Milestones) will be administered in order to establish comparability: grade 3 (math); 4 (English language arts); 5 (science); 6 (math); 7 (English language arts); 8 (science); and in high school for the first course in math (Algebra I/Coordinate Algebra), for the second course in ELA (American Literature and Composition), and a course in science (Biology).

Grade	Math	ELA	Science
3	Navvy & Georgia Milestones	Navvy	Local Assessments
4	Navvy	Navvy & Georgia Milestones	Local Assessments
5	Navvy	Navvy	Navvy & Georgia Milestones
6	Navvy & Georgia Milestones	Navvy	Local Assessments
7	Navvy	Navvy & Georgia Milestones	Local Assessments
8	Navvy	Navvy	Navvy & Georgia Milestones
High School Course 1	Navvy & Georgia Milestones [Algebra I/Coordinate Algebra]	Navvy [9th Grade Literature and Composition]	Navvy & Georgia Milestones [Biology]
High School Course 2	Navvy [Geometry/Analytic Geometry]	Navvy & Milestones [American Literature & Composition]	Local Assessments [Physical Science]

Table D-1. *Assessment plan by grade and subject for establishing comparability* *Navvy is the innovative through-year assessment system and Milestones is the current end-of-year statewide assessment system.

Prior to participating in Navvy assessments, districts must demonstrate readiness and must make commitments to follow all of the state and federal requirements of the IADA. The Putnam Consortium Innovative Assessment Leadership Team is committed to supporting the development of local leadership and capacity to enable all LEAs in GA to implement the innovative assessment system with fidelity. This process is described in more detail under the “Prior Experience, Capacity, and Stakeholder Support” section.

We discuss below how the Navvy innovative assessment system currently meets the requirements of section 1111(b)(2)(B) of ESEA and the requirements specified in Part 3(b) of the Application for New Authorities under the Innovative Assessment Demonstration Authority.

The Putnam Consortium Innovative Assessment Executive Team and Navvy Education has developed a comprehensive plan and explanation for how the Navvy innovative assessment system meets the expected requirements. The plan and explanation is comprised of nine components: (1) meeting or exceeding all the requirements of section 1111(b)(2)(B); (2) aligning with the depth and breadth of the challenging State academic standards; (3) identifying proficiency on state standards; (4) providing valid, reliable, and comparable annual proficiency determinations; (5) providing for the participation of all students; (6) measuring participation rates; (7) generating an annual summative determination of achievement; (8) providing timely, disaggregated results for stakeholders; and (9) providing an unbiased, rational, and consistent determination of progress toward the State's long-term goals for academic achievement. Each component is detailed in turn below.

Element 1: Meet the requirements of section 1111(b)(2)(B) of the Act

The Navvy assessment system was designed to meet assessment requirements provided by federal statute in Section 1111(b)(2)(B). Navvy provides "timely information about student attainment of [State academic] standards" (clause ii) and "individual diagnostic reports" (clause x) that are "valid and reliable, consistent with relevant, nationally recognized professional and technical testing standards" (clause iii) in order to "understand and address the *specific academic needs* of students" (clause x). With the stated advantages of Navvy assessments in mind, the Putnam Consortium will use Navvy assessment results to support learning *in addition to* monitoring educational opportunities for all students. Thus, Navvy presents a potential solution to an enduring challenge in education for all states in our nation: to support schools with assessment systems that provide on-going, useful feedback while also monitoring the opportunities for all students to learn.

This section details how the Navvy innovative assessment and accountability system meets or exceeds each requirement within section 1111(b)(2)(B) of ESEA.

Section 1111(b)(2)(B)(i). SEAs in the demonstration authority are exempt from section 1111(b)(2)(B)(i) that requires the *same* academic assessments be used and administered to measure the achievement of all public elementary and secondary students in the State. The Navvy assessment system will be administered in a subset of schools and districts for the period of the demonstration authority as it continues to scale each year. The statewide academic assessments will be administered to all students in any non- participating LEA or any non-participating school within a participating LEA.

Participating LEAs will administer Navvy assessments. Navvy is a web-based suite of diagnostic assessments at the standards level. Local school districts have the flexibility to administer the assessments at their own pace throughout the school year. Participating schools will complete Navvy assessments in each grade and subject required by ESSA (i.e., selected as grades 3-8 math and English, grade 5 and 8 science, and one course in high school for all three subjects) and for one additional high school course in math and English. The statewide academic assessments (i.e., Georgia Milestones) will be administered to a sample of schools in several grades and subjects (see Table 1) to provide data for evaluating and establishing comparability (as described further in "Element 4: Generate results, including annual summative determinations, that are valid, reliable, and comparable for all students" section).

Section 1111(b)(2)(B)(ii). See description and documentation provided below under the following two sections—"Aligns with depth and breadth of challenging State academic standards" and "Provides

timely, disaggregated results for stakeholders"—for how the Putnam Consortium's innovative assessment and accountability system meets the requirements outlined in Section 1111(b)(2)(B)(ii).

Section 1111(b)(2)(B)(iii-iv). See description and documentation provided below under "Provides valid, reliable, and comparable annual proficiency determinations" for how the Putnam Consortium's innovative assessment and accountability system meets the requirements outlined in Section 1111(b)(2)(B)(iii-iv).

Section 1111(b)(2)(B)(v). The Putnam Consortium's innovative assessment system is exempt from section 1111(b)(2)(B)(v) as the statewide academic assessments need not be administered annually in each of grades 3-8 and at least once in grades 9-12 in the case of reading/language arts and mathematics assessments, and at least once in grades 3-5, 6-9, and 10-12 in the case of science assessments, so long as the statewide academic assessments are administered in any required grade and subject in which the SEA does not choose to implement an innovative assessment.

Participating LEAs will complete Navvy assessments in each grade and subject required by federal law (i.e., grades 3-8 math and English, grade 5 and 8 science, and one course in high school for all three subjects) and for one additional high school course in math and English. The statewide academic assessments (i.e., Georgia Milestones) will be administered to a sample of schools in several grades and subjects (see Table 1) to provide data for evaluating and establishing comparability (as described further in "Element 4: Generate results, including annual summative determinations, that are valid, reliable, and comparable for all students" section).

Section 1111(b)(2)(B)(vi). The Putnam Consortium's innovative assessment and accountability system meets the requirements specified in section 1111(b)(2)(B)(vi) because it includes multiple up-to-date measures of student academic achievement, including measures that assess higher-order thinking skills and understanding. The use of Navvy assessments validly measures the breadth and depth of the State's challenging academic standards in two ways: (1) Navvy is a through-year assessment system that updates the status of student competencies of standards throughout the year based on repeated assessment attempts, and (2) the student inferences produced from the Navvy assessment system, and the validity evidence to support those inferences, are at a fine-grained and diagnostic level that is instructionally-relevant feedback and provides a detailed account of student academic achievement. In these ways, Navvy provides new opportunities to identify which students need additional time or instruction to learn the standards, allows students multiple opportunities to show what they know, and updates their competency profiles in real time. By better aligning the assessment design and corresponding multidimensional diagnostic psychometric modeling to the standards themselves, Navvy provides for inferences about student achievement that are more reflective of the multifaceted nature of the standards.

Section 1111(b)(2)(B)(vii). See description and documentation provided below under "Element 5: Provide for participation of all students" for how the Putnam Consortium's innovative assessment and accountability system meets the requirements outlined in Section 1111(b)(2)(B)(vii).

Section 1111(b)(2)(B)(viii). The Navvy innovative system will be administered in a subset of schools and districts for the period of the Demonstration Authority until a possible statewide expansion. The statewide academic assessments will be administered to all students in any non-participating LEA or any non-participating school within a participating LEA.

Navvy is a through-year assessment system where participating LEAs will take multiple assessments on an LEA-determined paced. Results of these assessments will be used to produce an annual summative achievement score.

Participating LEAs will administer Navvy assessments in conjunction with statewide assessments for certain grade levels and subjects (see Table D-1). The information from these assessments is used to evaluate and establish comparability between participating schools and non-participating schools as described in the "Element 4: Generate results, including annual summative determinations, that are valid, reliable, and comparable for all students" section.

Section 1111(b)(2)(B)(ix). The Navvy innovative assessment system provides assessments for all students enrolled in a course that will be assessed according to Table D-1. To ensure the validity of Navvy assessment results, the participating LEAs allow the same accommodations as the current statewide assessment, as detailed in the accommodations manual for current state assessments.

Section 1111(b)(2)(B)(x). Given the design to provide valid and reliable inferences at the level of individual standards, Navvy is designed to meet the requirement to provide "individual diagnostic reports" (clause x) that are "valid and reliable, consistent with relevant, nationally recognized professional and technical testing standards" (clause iii) to allow stakeholders to "understand and address the specific academic needs of students" (clause x) at a level of detail that a statewide assessment system does not provide. Current statewide assessment systems do not have validity evidence at a grain size as small as the standard and typically do not report standards-level feedback. In addition, Navvy provides feedback in real-time (less than 5 seconds), which meets the requirement to provide the reports "as soon as is practicable after an assessment is given." Navvy will also provide an annual summative determination to meet these requirements; see "Provides summative determinations for all students that describes student's mastery" for additional information on how the Navvy innovative assessment and accountability system meets the requirements outlined in Section 1111(b)(2)(B)(x).

Section 1111(b)(2)(B)(xi). See description and documentation provided below under "Provides timely, disaggregated results for stakeholders" for how the Putnam Consortium's innovative assessment and accountability system meets the requirements outlined in Section 1111(b)(2)(B)(xi).

Section 1111(b)(2)(B)(xii). Navvy provides real-time reporting of students' achievement on the Navvy assessment items, disaggregated by the depth of knowledge of the question and the concept the question assesses, to students, teachers, school leaders, and district leaders. See description and documentation provided below under "Provides timely, disaggregated results for stakeholders" and "Provides summative determinations for all students that describes student's mastery" for more information on how the Navvy innovative assessment and accountability system meets the requirements outlined in Section 1111(b)(2)(B)(xii).

Section 1111(b)(2)(B)(xiii). See description and documentation provided below under "Element 5: Provide for participation of all students" for further information on how the Navvy innovative assessment system meets the requirements outlined in Section 1111(b)(2)(B)(xiii).

Element 2: Align with challenging State academic content standards

The Navvy innovative assessment system is aligned with the challenging State academic standards under section 1111(b)(1) of ESEA, including the depth and breadth of such standards, for the grade in which a student is enrolled as required in section 1111(b)(2)(B)(ii). There are six main sources of evidence that demonstrate how the Navvy system meets or exceeds the requirement: (1) the standards-level nature of the Navvy assessments, (2) the detailed, standard-level assessment blueprints; (3) experience and expertise of item writing and review teams; (4) standards-level content and construct representation reviews by content experts; (5) administration of Navvy assessments throughout the year to measure the depth and breadth of the State's challenging academic content standards; and (6) the empirical data available through diagnostic psychometric methods.

First, key features of Navvy are the quality of items and the alignment of items to the State's academic standards. The Navvy assessments were developed from the ground-up to be aligned with the challenging State academic standards because the standards were operationalized as the latent variables for which the assessment was designed to measure. In this way, Navvy assessments measure the breadth and of the challenging State academic standards because the system uses data collected throughout the year targeted at individual standards. The diagnostic psychometric approach used by Navvy Education further requires a stronger degree of item alignment that is empirically vetted as alignment is directly modeled as a path (or regression coefficient) in the diagnostic psychometric model and is required for accurate classifications of mastery levels (Rupp & Templin, 2008).

Second, the Navvy assessment development teams delineated each standard with respect to depth of knowledge (DOK) required to fulfill the requirements of the standard and with respect to components (constituent parts) of the standard. Then, the teams determined assessment blue prints based on depth of knowledge targets (e.g., Standard X will be assessed by 25-35% DOK 1 items, 35-50% DOK 2 items, and 15-25% DOK 3 items) and based on component targets (e.g., Standard X will be assessed by 30-40% Component 1 items and 60-70% Component 2 items). Item writing teams created items to be reflective of the target proportions. Thus, alignment between Georgia's challenging academic standards and the Navvy assessment items is explicitly addressed a priori in the item design process.

Third, experienced educators across Georgia who are experts in both content and pedagogy, who have significant experience as a classroom teacher, and who have extensive knowledge of the State's standards served on item authoring and review teams for Navvy Education. Navvy Education provided necessary training in item writing and review practices and relevant assessment literacy for the team. Items were written according to assessment best practices which included utilizing Universal Design for Learning principles, ensuring construct representation, minimizing construct irrelevant variance, and attending to bias and sensitivity principles. The team of educators was comprised of master classroom teachers and of experts who have served in roles such as curriculum administrators in the GaDOE, curriculum directors at Regional Educational Service Agencies (RESA), and presidents of teacher organizations in Georgia.

Fourth, all individual items underwent content review to gather validity evidence based on test content through expert review (*Standards for Educational and Psychological Testing;* AERA, APA, & NCME, 2014). See Appendix D-13 for the list of references cited throughout the Putnam Consortium's information. Reviewers sought to identify (a) systematic influences on the item response outside of the target construct, (b) ambiguities in wording or context that would confuse students or obfuscate the item's intent, and (c) inappropriate levels of item difficulty for the target population. Reviewer feedback was used formatively to improve items, and reviewers worked collaboratively with authors in an iterative fashion to revise items and review them again until consensus is reached on the quality of the final

version of the item. Specifically, Navvy training materials instructed reviewers to "review the items to determine the extent to which each item:

a. is aligned to the target standard in terms of content, rigor, depth and coherence.
b. is aligned to the target depth of knowledge.
c. has clear and concise wording.
d. has one answer this is correct.
e. has incorrect options that are plausible and based on common misunderstandings students are likely to have."

The Navvy training materials further instructed reviewers to provide suggestions for improvement where applicable.

In addition to individual item reviews, sets of items comprising the item banks for the standards were reviewed as a collection and, according to the Navvy training materials, were reviewed "to evaluate the extent to which the set meets the depth of knowledge and component targets and is reflective of a representative sample of

a. the depth of knowledge as required by the standard.
b. the content required by the standard.
c. the rigor required by the standard."

The Navvy training materials further instructed reviewers to provide recommendations on the distribution of new items that need to be authored to fulfill DOK or component targets or improve content representation.

Fifth, the Navvy method of creating assessment forms ensures the assessments fulfill the assessment blueprints with respect to depth of knowledge targets and component targets (see "Assessment Design" under Proprietary-Appendix E-1).

Sixth, Navvy Education uses a psychometric approach where the standards are operationalized as distinct latent variables that are predictors of item responses. As such, the hypothesized relationship between a standard and an item is directly modeled as a path in the psychometric model. As a modeled path, the hypothesized relationship can be empirically examined and determined to be statistically meaningful or not. Weak paths will provide evidence for flagging the item for examination during data review so the item can be revised as needed to strengthen its relationship with the standard. This represents an opportunity to provide strong evidence for this requirement.

In addition to these sources of evidence for alignment to the State's standards, during the course of the IADA period, the GaDOE will hire an external evaluator to conduct an independent alignment study to provide additional standards-alignment evidence, along with an annual summative determination comparability study. Results of this study, and any modifications to the Navvy assessments responsive to feedback, will be reported to USED upon completion.

Measures students on grade level. All students attending schools or districts participating in the Navvy innovative assessment system will be have their academic proficiency determined based on the challenging State academic standards for the grade in which the student is enrolled.

Element 3: Express student results consistent with state standards and identify students not attaining proficiency on standards

The previous section detailed how the Navvy assessment questions were designed from the ground-up to measure the state's academic standards. As described in the introduction of the "Innovative Assessment System" section, the assessment and psychometric design of the Navvy assessment system was purposefully created to provide targeted evidence to support inferences about student understandings on a standard-by-standard basis, to monitor which standards students have learned and which ones require remediation. In this way, Navvy is designed to validly and reliably diagnose student understandings at the standards level.

While a large number of "formative assessment systems" exist for grades 3 through high school, Navvy is unique because it is designed to produce an evidence-based argument that the feedback at the standards level is valid and reliable according to rigorous professional standards (American Educational Research Association, American Psychological Association, & the National Council of Measurement in Education, 2014). Many assessment systems provide standards-based results by conducting post-hoc analyses (usually tallying subscores or calculating a percent correct score), but this standards-based feedback would not meet professional standards of acceptable reliability. Thus, the Navvy standards-level design goes a step further: cutting-edge psychometric methodology is designed to provide inferences for interpretation—and supply evidence to support the reliability of the inferences—at the standards level.

The key difference in a standards-based system and Navvy as a standards-level system is the target construct chosen to be measured at the beginning of the assessment development process. The target construct, which is delineated as a latent variable or set of latent variables in the psychometric model, defines the student characteristic(s) about which the assessment is designed to make valid and reliable inferences. In assessment systems that provide an overall ability score, there is one latent variable defined as overall ability and the assessment is designed to make valid and reliable inferences for that overall ability. In Navvy, competency of each standard represents a latent variable and thus the assessment is designed to make valid and reliable inferences for individual standards. This distinction is important because the actionable information—the information that teachers use—from an assessment system is typically at a smaller grain size than overall ability (e.g., typically at the domain-, cluster-, or standard-level), so the assessment and psychometric design needs to match the grain size that teachers act on.

Motivated by providing trustworthy and reliable feedback at an actionable grain size, we aim to implement a research-proven innovation: a standards-level assessment system that is designed to reliably identify students' personalized needs related to specific learning objectives so that instruction and interventions can be accurately tailored to support those needs. A cornerstone of our value proposition is that currently school districts act upon standards-based information that does not meet technical requirements of validity and reliability, and, as such, the Navvy assessment system presents a marked improvement over district level assessments used to more accurately and reliably guide instruction throughout the year. In addition, as described in the next section, the wealth of information the Navvy system collects on each student's understanding of state standards throughout the year will be summarized to produce annual summative determinations for accountability purposes, without requiring additional testing time for students or schools.

Element 4: Generate results, including annual summative determinations, that are valid, reliable, and comparable for all students and for each subgroup of students

The Navvy innovative assessment and accountability system is designed to provide annual proficiency determinations that are valid, reliable, and comparable for all students and for each subgroup of students described in 34 CFR 200.2(b)(11)(i)(A)-(I) and sections 1111(b)(2)(B)(xi) and 1111(h)(1)(C)(ii) of ESEA, to the results generated by the State academic assessments described in 34 CFR 200.2(a)(1) and section 1111(b)(2) for such students. The Navvy assessment system is used for purposes for which assessments are valid and reliable, consistent with relevant, nationally recognized professional and technical testing standards; objectively measures academic achievement, knowledge and skills; and does not evaluate or assess personal or family beliefs and attitudes, or publicly disclose personally identifiable information as required in section 1111(b)(2)(B)(iii). Furthermore, the Navvy assessment system is of adequate technical quality for each purpose required under ESEA and consistent with the requirements of section 1111, the evidence of which will be made public, as required in section 1111(b)(2)(B)(iv). For the duration of the demonstration period, the annual reports submitted to USED will document the technical evidence of quality and evidence will be posted on the GaDOE website.

<u>Navvy standards-level competency classifications are valid and reliable.</u>
The Navvy assessments were designed to meet or exceed the guidelines established by The *Standards for Educational and Psychological Testing* (AERA, NCME, & APA, 2014), hereafter referred to as the *Standards*. The *Standards* is the authoritative document in educational measurement for evaluating the technical quality of assessments. Navvy assessments were designed to adhere to the *Standards* with respect to the three foundational components of an assessment the *Standards* describe: validity, reliability, and fairness.

Validity
Validity refers to the accuracy and defensibility of the inferences drawn from the assessment results (i.e., Navvy classification of competency vs. lack of competency on a standard) and the appropriateness of the assessment results for their intended uses. The Navvy standards-level competency classifications have two intended uses: (1) Diagnostic feedback for formative use: to provide feedback on what students do and do not understand to provide information that can be used to personalize learning for students, and (2) Summative descriptions for accountability: to provide an account of what students do and do not understand to provide information that can be used to personalize support that the state and school districts provide for schools to ensure all students have opportunities to learn and be college and career ready. The demonstration and evaluation of validity is an ongoing process of collecting evidence to support an evidence-based argument, rather than validity being a property that does or does not exist. In this section, we focus on validity evidence for the competency diagnoses (i.e., that interpretations of demonstrating competence of standards are valid inferences); this evidence is important for both diagnostic use and for accountability uses as both rely on these diagnoses. The following section “Annual determinations are valid, reliable, and comparable” focuses on evidence for annual summative determinations based on competency diagnoses, inferences that will be used for accountability purposes.

The validity evidence for the standards-level competency inferences from Navvy assessments includes both process evidence and empirical evidence.

Process validity evidence. The design of the Navvy assessment system is grounded in Dr. Bradshaw’s program of research and prior collaborations on assessment development projects which have demonstrated the promise of the diagnostic psychometric design underlying Navvy. This methodology greatly influences the utility, meaning, and reliability of assessment results. Bradshaw’s research provides advancements and innovations in the area of diagnostic psychometric models. Bradshaw, in

collaboration with her graduate advisees (marked by *), has vetted the statistical properties of diagnostic psychometric models in terms of test designs (Madison* & Bradshaw, 2015), invariance (Bradshaw & Madison*, 2016), and model-data fit (Jurich*, Bradshaw, & DeMars, 2014). Dr. Bradshaw has developed extended diagnostic methodology to align with more nuanced cognitive theories (e.g., Bradshaw & Templin, 2014; Templin & Bradshaw, 2014; Jurich* & Bradshaw, 2012), including modeling transitions in knowledge states over time (Madison* & Bradshaw, 2018a; Madison* & Bradshaw, 2018b) and item selection methods for computer-based adaptive diagnostic models (Bao* & Bradshaw, 2017). Bradshaw has also conducted further research to answer key questions of how to design diagnostic-modelbased assessments from the ground up and implement them in practice through collaborations on federal grant projects with math educators (e.g., NSF *Diagnosing Teachers' Multiplicative Reasoning*; Bradshaw, Izsák, Templin, & Jacobson, 2014; NSF *Assessing the Structure of Knowledge for Teaching Mathematics*) and with the Partnership for Assessment of Readiness for College and Careers (PARCC) for whom Bradshaw provided technical expertise for a diagnostic suite of assessments (Bradshaw, 2014; 2015).

A key part of the Navvy assessment system design was creating every item in the system from the ground up to be in sync with the diagnostic assessment design. Research has repeatedly demonstrated that retrofitting assessments to fit with diagnostic psychometrics is not successful; thus, using existing item banks for diagnostic purposes would not have been a successful path to follow. Developing items to be squarely aligned to the State standards and having expert content reviews of the items as discussed in "Aligns with depth and breadth of challenging State academic standards" is a core component of content validity evidence and of evidence to ensure construct representation and avoid construct irrelevant variance.

Empirical validity evidence

During the duration of the IADA period, the Putnam Consortium will gather additional, empirical validity evidence to document the technical quality of the assessment system. Navvy Education will examine the internal structure of the assessments via empirical evidence provided by the diagnostic psychometric modeling framework to assess the relationship of the item responses and measured constructs. Evidence based on the internal structure of items describes the statistical properties of an assessment and supports the idea that students are applying the targeted construct(s) without applying additional constructs (Goodwin & Leech, 2003). Internal structure includes the underlying dimensionality of the construct, as well as the relationships of the latent construct(s) to the observed responses. To evaluate internal structure, Navvy Education will use the diagnostic psychometric framework to analyze results for item quality in terms of statistical information (Henson & Douglas, 2005) and competency effect sizes (akin to factor loadings in a confirmatory factor analysis; Templin & Henson, 2006), for differential item functioning (DIF; Hou, de la Torre, & Nandakumar, 2014; Li & Wang, 2015), and for item fit (Rupp, Templin, & Henson, 2010). Navvy will examine for DIF according to construct irrelevant factors such as gender and English as a second language. External validity evidence will be gathered via comparability studies with the Georgia Milestones results, as described below in this section. Finally, evaluation of the unintended consequences of the Navvy innovative assessment system will be examined through feedback gathered during the monthly meetings attended by leadership teams from participating LEAs and through multi-year, independent formative evaluation conducted to support continuous improvement.

Reliability

An important component of the Navvy design is determining test lengths for the assessments that are as short as possible to save instructional time, but sufficiently long to ensure the diagnoses from the

assessments (diagnoses of “competency” vs “non-competency”) are reliable. Dr. Bradshaw’s research has demonstrated the short test lengths being used in the Navvy system will produce reliability levels sufficiently strong for formative purposes and the methods for aggregation to produce annual summative determinations are sufficiently strong for accountability purposes. See “Test Lengths” under Proprietary Appendix E-1 for a more details.

During the duration of the IADA period, Navvy Education will compute the reliabilities of competency classifications and summarize results in the technical documentation and annual reports to USED. For any competency classification that is below the acceptable level of reliability, items contributing to the competency diagnosis will be reviewed and revised or additional items will be written to improve reliability as a part of a commitment to technical quality and continuous improvement of the assessment system.

Fairness

To ensure equitable access for all students, items were written to adhere to Universal Design for Learning (UDL) guidelines and Navvy Education conducted a review of all items to ensure UDL adherence. Specifically, Navvy Education reviewed the items, and edited as needed in collaboration with the item author and content reviewers, to ensure (a) the item was free of content or context features that introduce bias for or are culturally insensitive to a subgroup of students, (b) the item used wording that was concise, straightforward, and free of idioms or terms specific to a particular culture, (c) the format of the item in terms of placement of text and graphics and use of spacing provided a clear presentation of information, and (d) that text and visual resources are sufficiently clear or large for all students, including students with low vision.

Students are also provided accommodations according to their Individual Education Plan (IEP) to ensure equitable access to the assessments. See “Element 5: Provide for participation of all students” for a description of accommodations.

Navvy Education will gather empirical evidence on fairness by conducting analyses to ensure items do not systematically function differently for subgroups of students in a way that disadvantages one group of students over another. During the duration of the IADA period, Navvy Education will conduct differential item functioning (DIF) analyses and summarize results in the technical documentation and annual reports to USED. Items flagged by DIF results will be reviewed and revised or removed to improve fairness as a part of a commitment to technical quality and continuous improvement of the assessment system.

<u>Annual determinations are valid, reliable, and comparable</u>. Navvy standards-level competency results will be used to form annual summative determinations that are valid, reliable, and comparable. This section discusses validity evidence within a comparability-based framework to address the second intended, accountability-focused use of Navvy: to use the multiple, up-to-date Navvy results as the basis for categorizing students into the four Achievement Levels used by the current statewide assessment system. See Appendix D-1 for achievement level descriptors for Georgia Milestones. The Putnam Consortium will ensure annual determinations of student proficiency are valid, reliable, and comparable across the Navvy system and the statewide assessment program.

Comparability is a judgment based on an accumulation of evidence to support claims about the meaning of test scores and whether scores from two or more tests or assessment conditions can be used to support the same interpretations and uses. In this way, the comparability of two assessments exist to

various degrees; like validity, comparability is not a property that is present or absent, but rather a judgment that has varying degrees of evidence-based support.

For the IADA, score comparability is required at the level of the annual determinations. This means that evidence is provided to support the notion that if, for example, a student is determined to be a "Proficient Learner" in one district, had that student been assigned to another district's assessment system (for example, Navvy or Georgia Milestones) he or she could expect to also be deemed a Proficient Learner.

Before discussing score comparability across the two different assessment systems, it is important to note that, by design, annual determinations for all students participating with Navvy, regardless of school or school district, are comparable because the Navvy assessments have the same meaning regardless of the test form a student takes (see "Assessment Design" in Proprietary Appendix E-1 for details). This form of internal comparability is straightforward from a psychometric approach and analogous to the reasons students participating in the statewide assessment system, regardless of school or school district, are currently comparable even though each student completes only one of multiple potential test forms taken. Conversely, the same threats to internal comparability that may exist in current assessment systems (e.g., due to type of devices used, environment features, and the degree of reliability of the assessment forms) may exist in the innovative assessment system, highlighting the notion that comparability is never an absolute "yes" or "no," even when students are participating within the same assessment program.

Method for External Comparability Methods. In addition to internal comparability, external comparability demonstrates that the annual summative determinations are comparable across students taking Navvy assessments and students taking the statewide assessment system. Because the Navvy system will be implemented only in a subset of participating LEAs, a major requirement of section 1111(b)(2)(B) is that the innovative Navvy system results are comparable with the non-Navvy system results. Consistent with Georgia's evaluation plan under 34 CFR 200.106(e), Navvy Education will annually evaluate comparability across the Navvy and the statewide assessment system during each year of its demonstration authority period. Activities and audits that will occur to provide an evidence-based argument for comparability to support the validity of the innovative assessment and accountability system are described in detail below. The data needed to examine comparability across participating and non-participating schools and districts are supplied by the LEAs and schools participating in Navvy, as specified in the Memorandum of Understanding signed by the district Superintendents before joining the consortium as a participating or affiliate member (see Appendix D-2 for 2018-19 signatures).

By design, a meaningful degree of comparability exists: the Navvy assessments and the statewide assessments are comparable in that they measure the same standards, are administered under the analogous secure conditions, and provide the same accommodations for students. These comparable features are described in more detail below.

Measuring the same standards. By design, the Navvy assessments and the statewide assessments are comparable in that they are both aligned to the State's challenging academic standards and were created with input and expertise of Georgia educators. The GaDOE will have an independent consultant evaluate the alignment of Navvy assessments to the State's academic content standards toward the end of the IADA period to provide additional evidence that the Navvy assessments measure the state's academic standards.

Administered under the analogous testing conditions. The two assessment systems are also taken under analogous, secure testing conditions. Navvy assessment administration manuals use language from the statewide assessment administration manuals (see Appendix D-3 for excerpt). The Putnam Consortium will annually review the manuals to ensure testing guidelines are comparable, and Governor's Office of Student Achievement will conduct live testing audits to ensure testing conditions are appropriate.

Administered using the same accommodations. Participating LEAs can use the same accommodations for Navvy assessments as the statewide assessment program, which are detailed in the state's accommodations manual. See section "Element 5: Provide for participation of all students" for further description of accommodations provided. Currently, districts participating in Navvy assessments provide Braille forms for students and provide read-aloud or sign language accommodations using district personnel.

Also by design, important differences exist in the Navvy assessments and current statewide assessments. As described in the Project Narrative, Navvy has anticipated benefits of improved student achievement via timely feedback that can be acted upon by teachers to provide students with on-going, customized instruction and support. Inferences from the current statewide system are based on assumptions of unidimensional ability in a subject and grade level at the end of the year, while inferences from Navvy provide multidimensional diagnoses related to competencies of distinct standards throughout the year. Thus, this new system will provide assessment results that are actionable because psychometrically-sound feedback from the assessment system is given at an instructionally-relevant grain size (i.e., on standards competency vs general bell-curve ability) and is provided in real time. These improvements will inherently change the system in important ways. To establish and evaluate comparability, the different types of inferences from both systems can be summarized by the same achievement levels to produce meaningfully comparable annual summative determinations and fulfill the comparability requirement. The current descriptions of the statewide assessment systems 4 achievement levels (Beginning Learner, Developing Learning, Proficient Learner, and Distinguished Learner) are provided in Appendix D-1 and will be used by both assessment systems.

Requiring the results produced across the old and new systems, however, to tell the same story about student achievement has the very real potential to prevent meaningful innovation. Given this reality, we do not seek exact comparability, nor do we set a standard criterion, or comparability "bar", because comparability should be evaluated in light of the intended uses and contextual factors surrounding the two systems. However, it is worthwhile to consider what might be reasonable to expect for the amount of variability in proficiency classifications across the two assessment programs. We argue that a reasonable upper bound for comparability across Navvy and non-Navvy systems is the degree to which comparability is achieved across forms, modes, and years of administration for the statewide standardized assessment system. This is akin to the axiom that a test cannot correlate any more with another test than it does with itself (i.e., its reliability). The literature shows there are significant effects associated with mode of administration (including paper/computer/and across devices), accommodations, and forms across years. Due to the precedence for this type of variation within our current assessment systems, it may be reasonable to expect that the variability across the Navvy and non-Navvy systems would be at least as large as levels we see within current state testing programs.

The unit of analysis for evaluating comparability must be at the school and subgroup levels, given the school accountability purposes of the assessment results. However, because the subgroups may involve small sample sizes, the tolerance for comparability needs to be greater for the subgroup

analyses compared to the school level analyses. If school or subgroup differences across systems are detected, the practical implications of those differences should be evaluated for decision making within the accountability system.

There are two steps to producing annual summative determinations from Navvy results that are comparable to the statewide assessment system: (1) Establishing annual summative determinations based on Navvy results, and (2) Evaluating the degree of comparability across annual summative determinations from the two assessment programs. Methods for each step are described in greater detail below.

Establishing Annual Summative Determinations based on Navvy Results
Determinations of student proficiency in the Navvy grades/subjects required under Section 1111(b)(2)(B)(v) will be established in consultation with the district leadership teams and via a process which will be based on analyses conducted by Navvy Education and standard settings overseen by the Center for Assessment and completed with participants representing participating LEAs.

The process will first establish the relationship between (1) end of year annual summative determinations determined by Georgia Milestones, and (2) end of year competency profiles determined by Navvy Education. Students profiles of competencies determined by Navvy can be aggregated to produce a final, or summative, result in a number of meaningful ways, which will be discussed among participating LEAs and evaluated in conjunction with empirical results. Promising ways to describe the school year's worth of Navvy results include maintaining the multivariate profile of standards competency (i.e., the students' competency status for each standard), which represents the in-tact multidimensional result produce by the Navvy assessments, or consolidating the multivariate profile into a single numerical result, either (a) as a simple percentage of standards for which the student demonstrated competency (student is competent on 75% of standards) or (b) as weighted percentage of standards competency where some standards are given a stronger weight than others due to increased breadth, depth, or importance.

We intend to use the in-tact multivariate competency profiles to be consistent with the beliefs underlying the Navvy design. Namely, that students have diverse learning profiles that can be described in a multifaceted way and do not need to be consolidated for the purpose of producing a single number.

Establishing annual summative determinations for grade levels and subjects where both Navvy and Georgia Milestones were administered can be primarily based upon the empirical data from both assessment systems. For these grade levels and subjects, non-parametric clustering methods will be used to map the Navvy competency profiles to the nearest Georgia Milestones achievement level (Level 1, Level 2, Level 3, Level 4; see Appendix D-1) and then descriptions of profiles that map to each level (e.g., profiles in Achievement Level 2 are defined as those that have competencies of 30-45% of Type A standards and 15-20% of Type B standards, where Type A standards correspond to more basic skills or concepts than Type B) will be determined in a manner that maximizes classification accuracy. Clustering methods will probabilistically, not deterministically, map profiles to achievement levels which will serve as the empirical evidence that will be used in conjunction with expert judgment to determine relationships between profiles and achievement levels that will be established for annual summative determinations. Based on the final agreed up and approved mapping, achievement level descriptors will be written to summarize the types of profiles that fall into each achievement level.

An alternate, defensible plan for establish summative determinations is to compute numerical summaries of Navvy results (simple percentages of competency or weighted percentages), which could be used to determine cut scores that accurately classify the highest percentage of students into Georgia Milestones achievement levels. Logistic regression is used to determine the point in the score distribution where examinees have a 50% chance of being classified in the next performance level or above (e.g., the probability that a student is Level 3 or above is 50% at score X). A logistic regression analysis is run separately for each cut point—Level 2, Level 3, and Level 4—in each district, content area, and grade level.

Establishing annual summative determinations for grade levels and subjects where only Navvy assessments are administered will require a standard setting that takes an examinee-centered judgmental method called contrasting groups approach that includes (1) teacher judgments at the end of the school year regarding which Georgia Milestones achievement level best describes each of their students, (2) end of year competency results determined by Navvy for each student, and (3) end of year Georgia Milestones achievement level results from students in affiliate districts electing to (not required to) complete both Navvy and Georgia Milestones assessments. To gather teacher judgment, we ask teachers at the end of the school year to make judgments about which achievement level best describes each of their students. As described above, Navvy results may be based upon multivariate competency profiles or numerical summaries. In either case, the methods described above will be used, with the only difference being that observed Milestones achievement levels are replaced with teacher's placements of students into achievement levels. This standard setting methodology is designed so that the resulting levels are comparable in rigor and substance to the statewide academic assessment by using teacher's conceptions of achievement levels that are aligned across the two systems in conjunction with available empirical data. The achievement level distributions for grade levels and subjects established using the methodology of double testing will be used as guardrails to ensure the distributions resulting from the judgmental method produce meaningful interpretations across grades within each subject.

Evaluating the degree of comparability across annual summative determinations
To evaluate the comparability of annual summative determinations among Navvy assessments and the statewide academic assessments, the statewide assessment will be administered in a few grades and subjects to students in a sample of schools who are participating in Navvy assessments. These grades and subjects are provided in Table 1 and were chosen to be most useful for informing programs and auditing the innovative assessment system—grade 3 math, grade 4 ELA, grade 5 science, grade 6 math, grade 7 ELA, grade 8 science, and once in high school for each subject. In each grade and subject required for federal testing (grades 3-8 English and math, grade 5 and 8 science, and one course per each of the three subjects in high school), Navvy assessments will be administered by all participating schools. The statewide assessments are designed to serve as calibration tools, providing evidence about the comparability of student achievement across participating districts (giving Navvy assessments) and non-participating districts.

To evaluate the comparability of the annual summative determinations across assessment systems in the State, both concurrent and longitudinal comparability evaluations will occur.

Comparability across the two assessment systems is established through **concurrent comparability evaluations**. Importantly, the degree of comparability of the annual determinations across the two assessment systems within the State can be directly evaluated by administering an assessment that is common across the two programs to a sample of students (i.e., by double testing) and then comparing the accuracy of proficiency classifications. Since the statewide academic assessment is administered

once per grade span in grades 3-8 and high school, the comparability of the annual determinations between Navvy and non-Navvy districts is evaluated by directly comparing annual determinations for the students that participated in both assessment systems. By calculating two sets of annual determinations for these students, the state has both traditional and innovative data points for some of the students in each Navvy district. The degree of agreement between the two sets of annual determinations is then analyzed to provide further evidence regarding the comparability of the interpretations of the reported achievement levels, or if systematic differences are detected, inform decisions about calibrating results to provide for comparability when appropriate. The degree of similarity between the proficiency classifications provides further support to the comparability of the interpretations of the reported achievement levels across the two assessment systems. The accuracy of the proficiency classifications will be examined by grade and subject and also by waiver-reported subgroup. Results of the concurrent comparability evaluations will be reported annually to USED.

Comparability across the two assessment systems is established through **longitudinal comparability evaluations.** Since a sample of students participate in the statewide academic assessment once per grade span in ELA and math, we use this information to compare performance on the statewide academic assessment with performance on the Navvy innovative assessments for students in certain grades and subjects where there is overlap from one year to the next. This means comparing a student's performance on the statewide assessment in one year to their performance in the Navvy system in the next year. This also means the opposite—comparing a student's performance in the Navvy system in one year to their performance on the statewide assessment in the next year. These longitudinal comparability evaluations provide evidence that the meaning of the annual determinations is reasonably stable across years and assessment systems. We would expect the classification accuracies for the longitudinal comparability evaluations to be lower than the classification accuracies observed for the concurrent year comparisons because we would expect student achievement to vary across years. Similar to the concurrent comparability evaluations, the accuracy of the proficiency classifications is examined by grade and subject and also by waiver-reported subgroup. Results of the longitudinal comparability evaluations will be reported annually to USED.

Following suit with New Hampshire's comparability approach, results of the concurrent and longitudinal comparability analyses will be evaluated with respect to four cascading comparability questions:

1. Are differences across the innovative and statewide assessment systems greater than differences observed across assessment conditions within the statewide assessment system?
2. Are the differences meaningfully significant? Do they constitute a significant threat to the validity of the accountability system or to equity in the opportunity to demonstrate knowledge of the State's challenging academic standards?
3. Do differences vary across subgroups or institutions in a meaningfully significant way, as to disadvantages certain subgroups or institutions?
4. Is the disadvantage consequential enough to not be off-set by positive consequences of the innovative assessment system (e.g., positive impact on teaching and learning)?

We will evaluate the responses to all four of these questions to consider the degree to which the assessment systems can be considered comparable enough to support their intended uses. The Putnam Consortium Innovative Assessment Executive team in collaboration with Navvy Education will take additional steps to improve the comparability of the annual summative determinations to support the use of the innovative assessment system during the IADA period. These steps may include adjusting the performance standards (criteria or cut-offs for classifying students into Achievement Levels) to produce comparable results for the duration of the demonstration period.

Element 5: Provide for the participation of all students, including children with disabilities and English learners

The Putnam Consortium's innovative assessment system provides for the participation of all students pursuant to sections 1111(b)(2)(B)(vi and xiii) in three main ways: (1) the Navvy innovative assessment system is accessible for students with disabilities and English learners and (2) the Navvy innovative assessment system and assessment delivery platform provides appropriate accommodations as specified in a student's Individualized Education Plan, and (3) Navvy is inseparable from regular curriculum and instruction so all students will participate as a result of the regular teaching and learning cycle. The Putnam Consortium is committed to ensure that at least 95% of all eligible students in participating districts fully participating in the Navvy assessments. Further, the Putnam Consortium will monitor all participating schools and districts to ensure that at least 95% of students in each subgroup of students fully participates in Navvy.

Accessibility for SWDs and ELs. First, Navvy innovative assessments are designed to be accessible for students with disabilities and English learners because the Navvy design incorporates the principles of Universal Design for Learning (UDL). This meets with requirements specified in section 1111(b)(2)(B)(xiii). Teachers on Navvy item authoring and review teams are trained by Navvy Education to consider UDL in the development of items to proactively design accessible assessments for the widest range of student needs possible, and Navvy Education then provides a review of each item with respect to UDL features to provide additional UDL evidence.

Technology-enabled Accessibility Features. The Navvy assessments have the following Accessibility options: Adjust font size, adjust color scheme (e.g., Yellow on navy, White on black, Black on violet), and adjust zoom. Navvy assessments can be used with regular or braille keyboards and a touch screen or a mouse. Navvy assessments use an accessible color palette that meets the minimum color contrast ratio of 4.5:1 for the vision impaired. Navvy also provides an export of assessments as required for the district then printing the assessment in Braille. Navvy provides a highlighter tool and an answer eliminator tool for all items.

Provides Appropriate Accommodations. The Navvy system also provides for the participation of all students in innovative assessments because instructional and assessment accommodations are available for students with disabilities. Navvy assessments support free screen readers (e.g., Google Read and Write) for read aloud accommodations. Additionally, on the Navvy assessments, districts are allowed to provide additional accommodations that are not dependent upon the Navvy technology but are detailed in the state's accommodations manual. For example, districts may provide seating accommodations (e.g., administer the assessments individually to students or in small groups or using adaptive furniture), presentation accommodations (print assessments in Braille, sign assessments and materials, or read assessment aloud), response accommodations (e.g., Braille keyboard, students point to answers), and scheduling accommodations (e.g., frequent breaks, extended time, optimal time of day for testing).

Element 6: Annually measure in each participating school progress on the Academic Achievement indicator of at least 95 percent of all students, and 95 percent of students in each subgroup of students

Participating schools and districts will ensure that at least 95% of all eligible students fully participate in the Navvy assessments. Further, participating schools and districts will ensure that at least 95% of

students in each subgroup of students fully participates in Navvy assessments. Participation rates will be calculated and reported annually to USED.

Element 7: Generate an annual summative determination of achievement

The "Element 4: Generate results, including annual summative determinations, that are valid, reliable, and comparable for all students" section above describes in detail the methods for generating an annual summative determination of achievement based on the Navvy assessment results.

Element 8: Provide disaggregated results by each subgroup of students, including timely data

The Putnam Consortium Innovative Assessment Executive Team will consult with Navvy Education to provide reports through the Navvy platform that are disaggregated within the State, as well as each LEA and school, by all subgroups identified in section 1111(b)(2)(B)(xi), except in such cases in which the number of students in a subgroup is insufficient to yield statistically reliable information or the results would reveal personally identifiable information about an individual student. The participating LEAs and Navvy Education are committed to having the innovative assessment system results disaggregated by all relevant subgroups identified in section 1111(b)(2)(B)(xi) and reported to USED in the annual progress reports.

The Navvy system also provides timely and coherent information about student attainment of the challenging State academic standards and whether the student is performing at the student's grade level as required by section 1111(b)(2)(B)(ii and x). The Navvy system provides timely information because Navvy results detailing standards-competency are provided in real-time. The Putnam Consortium is committed to consulting with Navvy Education to ensure Navvy reports summative results alongside the statewide academic assessment system results and on the same time schedule when reporting to parents, teachers, and the public. The Navvy system results deliver coherent information because the Navvy results provide information about student's achievement level at the student's grade level using the same achievement levels as the statewide academic assessments.

Element 9: Provide an unbiased, rational, and consistent determination of progress toward the State's long-term goals for academic achievement

Georgia's state plan for accountability ensures that Navvy schools can be effectively and comparably included in all aspects of the system including the state's long-term goals for academic achievement, the academic achievement indicator, school identification for targeted or comprehensive support and improvement, and reporting on State and LEA report cards.

<u>Use in accountability system for academic achievement indicator</u>

The Navvy innovative assessment system has been designed to be comparable to the statewide system of assessments for the express purpose of use within the new state accountability system that was recently approved under the *Every Student Succeeds Act* (ESSA). Because the annual determinations are designed to be comparable, the determinations can be used to serve the same purposes within the accountability system (for more information see the section entitled "Element 4: Generate results, including annual summative determinations, that are valid, reliable, and comparable for all students"). Provides valid, reliable, and comparable annual proficiency determinations"). This means that a school's participation in Navvy under the Demonstration Authority will not systematically influence a school's

score on the achievement indicator, and likewise the overall summative determination within the accountability system.

Provides individual diagnostic reports for all students

The Navvy assessment system will produce individual student reports from Navvy assessment results that are consistent with the requirements specified in section 1111(b)(2)(B)(x). Navvy individual student reports will meet all 6 aspects of the requirements: (1) they are descriptive and diagnostic in nature, (2) they are consistent with clause (iii), (3) they allow stakeholders to understand and address the specific learning needs of students; (4) they are provided as soon as practicable after the assessment(s) is given; (5) they are provided in an understandable and uniform format consistent with the statewide academic assessment reports; and (6) they are provided, to the extent practicable, in a language parents can understand. Currently, the Navvy platform meets all requirements except for being uniform with statewide academic assessments (5). Once annual summative determinations based on Navvy assessment result have been determined, the Putnam Consortium Innovative Assessment Executive Team will collaborate with Navvy Education to design and develop reports that provide annual summative determinations based on Navvy results and are comparable with statewide assessment reports. Each aspect is discussed in turn below.

First, the innovative focus of the Navvy assessments is to use a diagnostic psychometric framework that has yet to be used in a statewide assessment system for the explicit purpose of providing diagnostic feedback to stakeholders in a way that is not currently done by statewide assessment systems. Thus, the design of Navvy assessment is uniquely designed to meet this requirement.

Second, by leveraging the diagnostic psychometric framework, the diagnostic standards-level feedback given to students is the inference for which the assessments are designed to be valid and reliable. In contrast, current statewide systems provide validity evidence for the overall, unidimensional scaled score and not for diagnostic information. Meeting these requirements is at the heart of the innovation of Navvy: the purpose of developing the Navvy system was to have a valid and reliable way to give actionable, diagnostic feedback to student, teachers, and stakeholders.

Third, the benefit of the reports of Navvy results is that they provide a profile of competencies of the State's academic standards, explicitly providing a multivariate view that details specific needs that students have with respect to the standards they are seeking to learn. Thus, individual student reports allow parents, teachers, principals, and other school leaders to understand and address the specific academic learning needs of students.

Fourth, Navvy provides individual student reports of Navvy results to stakeholders in real-time, which meets the requirement to provide results as soon as practicable after the assessment(s) is given. By providing information throughout the year, teachers can act upon the data to provide the timely support that students need to learn the standard. In this way, Navvy not only measures learning, which current statewide assessments do, but also supports learning, an added benefit and the impetus for assessment innovation in our state. In addition to real-time feedback, the Navvy assessment system will be designed to provide end-of-year annual summative determinations based on Navvy results and produce individual student reports to meet the requirements of sections 1111(b)(2)(B)(x and xii).

Fifth, the Putnam Consortium Innovative Assessment Executive Team in collaboration with Navvy Education will ensure individual student summative reports will be provided in an understandable format and, with respect to the annual summative determinations, will be provided in a comparable

format consistent with the statewide academic assessment reports. Reports will differ with respect to additional (non-federally mandated) information the respective assessment systems provide (e.g., competency profiles for individual standards will be provided for Navvy assessments but cannot be uniform with the statewide reports because statewide reports do not allow for these inferences).

Sixth, Navvy individual student summative reports will be provided in the same languages that Georgia Milestones reports are provided to parents.

Assurances

The required signed assurances can be found on page 2 of this document.

Initial implementation in a subset of LEAs or schools

1) **A description of each LEA, and each of its participating schools, that will initially participate, including demographic information and its most recent LEA report card under section 1111(h)(2) of the Act; and**

Cobb County School District

The Cobb County School District serves approximately 112,000 students in grades PreK-12. The system consists of 69 elementary schools, 26 middle schools, and 18 high schools. The school system consists of the following demographics: English Learners (ELs)—14%, Economically Disadvantaged—45%, Students with Disabilities (SWD)—14%. The following races/ethnicities are represented among our student population: Asian—6%, Black—33%, Hispanic—22%, White—36%, and Multi-Racial—4%.

Table 2. Cobb County School District 2017/2018 Report Cards

School Name	Content Mastery	Progress	Closing Gaps	Readi-ness	Grad. Rate	CCRPI Score	Single Score
All Elementary Schools	**72.6**	**83.2**	**55.3**	**84.5**		**76.1**	**79.6**
Acworth Intermediate	65.0	83.3	80.0	83.7		77.4	77.4
Addison Elementary	84.6	93.5	50.0	88.1		83.2	83.2
Argyle Elementary	55.7	81.7	63.6	80.3		70.9	70.9
Austell Elementary	61.4	78.7	80.0	80.2		74.0	74.0
Baker Elementary	81.7	89.2	39.3	86.6		78.9	78.9
Bells Ferry Elementary	85.7	82.7	59.6	86.3		80.9	80.9
Belmont Hills Elementary	42.1	74.3	67.5	74.4		63.6	63.6
Big Shanty Elementary	67.2	82.5	46.7	84.6		73.0	73.0
Birney Elementary	42.3	76.6	17.3	75.3		57.2	57.2
Blackwell Elementary	72.5	86.4	51.7	84.8		76.7	76.7
Brumby Elementary	48.5	75.0	46.4	76.2		63.0	63.0
Bryant Elementary	45.0	76.6	29.2	74.1		59.5	59.5

Bullard Elementary	84.1	86.7	92.3	90.6		87.5	87.5
Chalker Elementary	77.6	91.3	51.8	86.5		80.3	80.3
Cheatham Hill Elementary	79.8	85.4	67.2	86.8		81.3	81.3
Clarkdale Elementary	57.9	94.3	69.2	78.2		76.4	76.4
Clay Elementary	50.4	82.5	75.0	76.4		70.5	70.5
Compton Elementary	48.0	77.1	52.1	75.5		64.3	64.3
Davis Elementary	91.5	74.1	97.5	93.2		86.7	86.7
Devereux Ackerman Academy	TFS	NA	NA	TFS		NA	27.9
Dowell Elementary	63.2	78.8	31.3	81.3		67.5	67.5
Due West Elementary	93.6	91.5	80.6	91.7		90.5	90.5
East Side Elementary	97.5	88.5	69.2	94.3		89.5	89.5
Eastvalley Elementary	79.9	79.4	30.4	88.1		73.9	73.9
Fair Oaks Elementary	50.5	69.8	12.5	74.5		56.4	56.4
Ford Elementary	91.4	88.0	27.8	92.8		81.0	81.0
Frey Elementary	85.7	89.5	100.0	88.6		89.8	89.8
Garrison Mill Elementary	95.9	94.0	77.5	93.1		91.9	91.9
Green Acres Elementary	37.7	68.4	17.5	72.7		52.4	52.4
Harmony-Leland Elementary	56.4	85.0	26.9	81.3		67.0	67.0
Hayes Elementary	65.6	77.1	40.0	83.9		69.4	69.4
Hendricks Elementary	53.6	83.0	77.3	77.7		72.3	72.3
Hollydale Elementary	48.4	81.1	48.1	75.9		65.3	65.3
Keheley Elementary	83.4	82.4	40.0	91.2		78.1	78.1
Kemp Elementary	97.9	91.8	91.1	91.6		93.5	93.5
Kennesaw Charter	73.0	73.2	52.3	84.3		72.2	72.2
Kennesaw Elementary	64.6	100.0	10.7	80.9		57.1	57.1
Kincaid Elementary	75.0	73.8	33.3	87.2		70.8	70.8
King Springs Elementary	83.3	83.3	50.0	89.1		79.5	79.5
LaBelle Elementary	50.3	85.5	63.6	80.2		70.6	70.6
Lewis Elementary	74.3	87.7	96.7	85.4		84.6	84.6
Mableton Elementary	45.3	80.0	96.2	74.8		71.0	71.0
McCall Primary	67.8	82.1	64.3	81.4		71.6	71.6
Milford Elementary	53.4	74.2	79.2	76.3		69.1	69.1
Mount Bethel Elementary	99.5	90.1	100.0	95.9		95.6	95.6
Mountain View Elementary	98.0	92.7	76.9	92.4		91.9	91.9
Murdock Elementary	100.0	92.8	73.1	92.9		92.0	92.0
Nicholson Elementary	76.0	75.4	50.0	86.2		73.9	73.9
Nickajack Elementary	66.5	85.8	55.8	82.2		74.8	74.8
Norton Park Elementary	47.4	72.2	61.5	76.2		64.0	64.0
Pickett's Mill Elementary	85.4	91.1	100.0	87.9		90.1	90.1

Pitner Elementary	70.5	85.5	75.0	83.8		79.1	79.1
Powder Springs Elementary	52.0	74.9	29.2	78.5		61.9	61.9
Powers Ferry Elementary	47.9	72.3	66.7	76.4		65.0	65.0
Riverside Intermediate	40.7	82.0	47.9	72.4		62.6	62.6
Riverside Primary	44.4	97.6	95.0	69.8		66.9	66.9
Rocky Mount Elementary	93.8	77.3	60.4	92.3		82.7	82.7
Russell Elementary	54.2	84.6	71.2	78.7		72.3	72.3
Sanders Elementary	46.8	78.6	87.5	75.7		69.8	69.8
Sedalia Park Elementary	62.3	82.3	51.8	78.5		71.0	71.0
Shallowford Falls Elementary	94.1	76.9	67.5	92.0		83.7	83.7
Smyrna Elementary	55.9	79.9	71.4	77.0		70.8	70.8
Sope Creek Elementary	100.0	94.0	71.2	93.2		92.2	92.2
Still Elementary	80.9	75.9	16.7	89.1		71.2	71.2
Teasley Elementary	75.4	73.9	37.5	85.5		71.2	71.2
Timber Ridge Elementary	98.6	93.3	78.6	96.5		93.3	93.3
Tritt Elementary	96.6	72.3	75.0	96.0		84.7	84.7
Varner Elementary	66.3	83.3	41.7	84.2		72.1	72.1
Vaughan Elementary	87.0	83.3	45.8	90.1		80.1	80.1
All Middle Schools	**76.4**	**82.7**	**62.5**	**86.6**		**78.6**	**79.6**
Awtrey Middle	74.1	79.0	80.0	87.2		79.3	79.3
Barber Middle	68.6	85.3	53.3	86.6		75.8	75.8
Campbell Middle	58.5	82.2	59.4	79.1		71.1	71.1
Cooper Middle	63.3	87.8	80.4	82.1		78.2	78.2
Daniell Middle	65.8	70.3	30.9	85.0		66.0	66.0
Devereux Ackerman Academy	TFS	NA	NA	88.3		NA	27.9
Dickerson Middle	100.0	91.6	65.6	95.2		90.9	90.9
Dodgen Middle	99.3	91.4	73.4	95.2		91.8	91.8
Durham Middle	92.3	76.7	76.8	92.4		84.5	84.5
East Cobb Middle	62.6	79.0	31.3	79.8		67.1	67.1
Floyd Middle	53.6	80.6	78.3	77.3		71.5	71.5
Garrett Middle	46.9	72.8	31.7	78.7		60.0	60.0
Griffin Middle	59.8	75.6	68.8	81.3		71.0	71.0
Hightower Trail Middle	99.9	87.1	81.7	95.4		91.8	91.8
Lindley 6th Grade Academy	47.9	87.2	25.0	73.7		63.4	63.4
Lindley Middle	49.3	70.3	71.4	76.8		65.5	65.5
Lost Mountain Middle	95.1	86.2	51.8	92.8		85.0	85.0
Lovinggood Middle	83.9	77.6	59.4	91.9		79.6	79.6
Mabry Middle	92.8	81.6	63.3	93.8		84.7	84.7
McCleskey Middle	78.5	79.3	91.7	89.6		83.0	83.0

McClure Middle	89.4	91.2	90.6	91.9		90.7	90.7
Palmer Middle	81.6	90.5	65.0	88.4		83.6	83.6
Pine Mountain Middle	67.2	75.3	38.3	85.5		69.4	69.4
Simpson Middle	96.7	94.6	95.6	91.1		94.7	94.7
Smitha Middle	53.8	84.8	71.9	80.1		72.6	72.6
Tapp Middle	64.1	87.7	58.9	83.8		75.5	75.5
All High Schools	**84.2**	**91.9**	**80.0**	**78.1**	**85.7**	**85.4**	**79.6**
Allatoona High	91.9	94.1	74.2	84.4	92.4	89.7	89.7
Campbell High	74.1	73.4	84.7	72.7	83.0	76.1	76.1
Cobb Horizon High*	–	–	–	–	–	–	–
Devereux Ackerman Academy	6.7	47.6	9.1	64.9	6.3	27.9	27.9
Harrison High	100.0	98.1	68.8	88.7	96.0	94.0	94.0
Hillgrove High	95.6	95.6	78.6	83.8	93.4	91.8	91.8
Kell High	79.9	84.3	74.2	71.8	86.1	80.4	80.4
Kennesaw Mountain High	92.2	87.8	75.0	81.3	86.0	86.6	86.6
Lassiter High	100.0	97.8	84.4	90.7	96.0	95.8	95.8
McEachern High	66.6	87.3	60.9	68.0	85.2	75.2	75.2
North Cobb High	77.6	90.2	48.6	74.7	89.1	79.8	79.8
Osborne High	47.8	81.9	76.6	59.4	67.0	65.5	65.5
Pebblebrook High	53.5	91.5	69.0	58.8	71.3	69.9	69.9
Pope High	100.0	88.8	78.1	86.1	93.9	91.5	91.5
South Cobb High	63.7	92.9	74.2	65.2	73.9	75.3	75.3
Sprayberry High	80.1	95.5	67.1	76.2	87.5	83.9	83.9
Walton High	100.0	95.5	97.2	90.9	95.6	96.3	96.3
Wheeler High	86.3	97.8	100.0	70.5	80.0	87.8	87.8

*New school; opened in 2018–2019
TFS = Too few students

Georgia MAP Assessment Partnership

There are two types of partners engaged in the GMAP Pilot: collaborating members, who are full-members participating immediately in the decision-making, design, and development process; and affiliate partners, who remain informed about the development process and will give the assessments, but who are not participating in the decision-making, design, and development process.

2018-19 collaborating members are:

- Barrow County School District
- Clayton County Public Schools
- Dalton Public Schools
- Floyd County Schools
- Jackson County Schools
- Jasper County Charter System

- Marietta City Schools
- Polk County School District

The above school districts include more than 100,000 students across Georgia public schools and represent the diversity of Georgia's students in terms of geography, ethnicity, and economic status. Including diverse school districts in the GMAP Pilot allows GMAP to provide equitable representation of a variety of learners across Georgia.

The affiliate partner for 2018-2019 is:

- Haralson County Schools

It is anticipated that affiliate partners will transition to collaborating members in future years. It is also expected that the number of affiliate partners will grow, as there are currently fifty-six school districts in Georgia that use MAP Growth. At such time that they are interested in becoming participating members, and development activities are at a stage that supports it, GMAP and NWEA will work with the Georgia Department of Education to bring new partners on board, with the expectation that by the end of the GMAP Pilot, all districts who desire to participate will be supported.

Both collaborating members and affiliate partners will use MAP Growth in 2018-2019 and will also administer Georgia Milestones to students for accountability purposes. The affiliate partners will likely transition to collaborating status beginning the second year; the benefit of being an affiliate for the first year is to allow parents, students, teachers, and school leaders to learn the MAP Growth system and shift to the educational mindset that is required to leverage the instructional benefits that MAP Growth readily provides.

As for collaborating partners, GMAP aims to fully transition to use NWEA through-year assessments for Georgia for accountability purposes for grades 3–8 for the content areas of English language arts (reading) and mathematics in 2021-2022, and for grades 5 and 8 in science in 2022-2023,

Barrow County School District:

The Barrow County School System serves approximately 14,000 students in grades PreK-12. The system consists of nine elementary schools, four middle schools, and two high schools. The school system consists of the following demographics: English Learners (ELs)—13%, Economically Disadvantaged—54%, Students with Disabilities (SWD)—15%. The following races/ethnicities are represented among our student population: Asian—5%, Black—13%, Hispanic—19%, White—58%, and Multi-Racial—5%.

School Name	Content Mastery	Progress	Closing Gaps	Readiness	Graduation Rate	CCRPI Score	Single Score
All Schools - Elementary	68.0	79.8	15.3	81.3	NA	66.9	68.7
Auburn Elementary School	53.1	76.0	25.0	76.1	NA	61.5	61.5
Bethlehem Elementary School	70.8	69.5	69.6	82.1	NA	72.4	72.4
Bramlett Elementary School	76.6	88.0	56.3	84.4	NA	79.1	79.1

County Line Elementary School	70.6	83.8	62.5	82.8	NA	76.4	76.4
Holsenbeck Elementary School	67.6	81.7	39.6	81.8	NA	71.2	71.2
Kennedy Elementary School	74.9	85.4	57.1	80.8	NA	77.1	77.1
Statham Elementary School	62.9	80.6	7.8	80.4	NA	64.3	64.3
Winder Elementary School	64.8	77.7	NA	77.9	NA	73.2	73.2
Yargo Elementary School	70.7	74.9	50.0	84.1	NA	71.7	71.7
All Schools - Middle	64.0	70.4	41.7	82.7	NA	66.6	68.7
Bear Creek Middle School	73.8	83.1	95.0	83.3	NA	82.1	82.1
Haymon-Morris Middle School	60.9	64.5	20.0	83.9	NA	60.6	60.6
Russell Middle School	63.8	76.3	61.7	82.6	NA	71.6	71.6
Westside Middle School	57.8	57.2	38.3	81.1	NA	59.3	59.3

Clayton County Public Schools

Clayton County Public Schools (CCPS) is a public school district located in Jonesboro, Georgia, U.S. With almost 55,000 students, CCPS is the fifth largest school district in Georgia and is ranked among the 100 largest school systems in the U.S. Fully accredited through AdvancED- Southern Association of Colleges and Schools Council on Accreditation and School Improvement (SACS), Clayton County Public Schools consists of 38 elementary, 15 middle, and 11 high schools along with various other programs throughout the district. CCPS offers a variety learning options such as traditional schools, fine arts magnet schools and/or programs, Career, Technical, and Agricultural Education (CTAE) Pathways, online courses, and Gifted Education programs.

This school district is highly diversified with 90 different ethnicities and countries represented. Seventy-two (72) different languages are spoken, with the largest two foreign languages being Spanish and Vietnamese. As of the 2016-2017 school year, over 12,000 students speak a language other than English and over 6,000 are counted as English language learners.

Ethnicities: American Indian/Alaskan Native 0.2%, Asian/Pacific Islander 3.5%, Black 71.3%, Hispanic 20.2%, Multi-Racial 2.6%, and White 2.2%
Demographics: Economically Disadvantaged 100.0%, English Learners 13.5%, and Student with Disability 12.0%

Year 1

School Name	Content Mastery	Progress	Closing Gaps	Readiness	Graduation Rate	CCRPI Score	Single Score
All Schools - Elementary	49.1	82.5	63.2	74.6	NA	68.0	65.1

Swint Elementary School	52.3	77.7	82.5	76.2	NA	70.5	70.5
All Schools - Middle	46.3	78.2	44.4	71.7	NA	62.3	65.1
Morrow Middle School	50.1	84.0	51.6	71.5	NA	66.5	66.5

Future Years

School Name	Content Mastery	Progress	Closing Gaps	Readiness	Graduation Rate	CCRPI Score	Single Score
Anderson Elementary School	42.4	77.9	63.6	71.2	NA	63.8	63.8
Arnold Elementary School	69.8	90.5	97.5	82.5	NA	83.7	83.7
Brown Elementary School	41.4	68.5	17.5	72.3	NA	53.5	53.5
Callaway Elementary School	51.6	81.2	83.3	73.8	NA	71.2	71.2
Church Street Elementary School	53.7	87.0	100.0	74.5	NA	76.5	76.5
East Clayton Elementary School	45.6	77.1	25.0	75.3	NA	59.5	59.5
Eddie White Academy	43.3	81.4	62.5	74.2	NA	65.7	59.7
Edmonds Elementary School	42.4	87.4	72.7	70.6	NA	68.3	68.3
Fountain Elementary School	50.0	83.3	75.0	74.5	NA	70.3	70.3
Harper Elementary School	49.7	73.5	65.9	74.4	NA	65.4	65.4
Hawthorne Elementary School	54.0	87.8	90.9	76.2	NA	75.8	75.8
Haynie Elementary School	52.2	95.5	70.8	76.2	NA	74.9	74.9
Huie Elementary School	36.2	74.8	63.6	68.3	NA	60.2	60.2
James Jackson Elementary School	54.0	73.2	20.8	78.6	NA	60.7	60.7
Kemp Elem School	53.5	75.2	54.2	76.3	NA	65.8	65.8
Kemp Primary	50.4	100.0	0.0	75.5	NA	46.9	46.9
Kilpatrick Elementary School	42.1	69.1	66.7	72.0	NA	61.2	61.2
Lake City Elementary School	62.2	99.2	100.0	77.5	NA	83.9	83.9
Lake Ridge Elementary School	47.1	80.1	86.4	73.2	NA	69.8	69.8
Lee Street Elementary School	39.4	86.9	60.0	70.3	NA	65.3	65.3
Martin Luther King, Jr. Elementary School	38.9	76.3	78.1	70.7	NA	64.2	64.2

Morrow Elementary School	56.3	91.5	59.6	78.2	NA	73.5	73.5
Mount Zion Elementary School	45.2	75.2	28.6	74.5	NA	59.1	59.1
Mount Zion Primary	41.9	77.9	20.8	70.8	NA	46.6	46.6
Northcutt Elementary School	36.9	79.3	0.0	70.5	NA	52.9	52.9
Oliver Elementary School	43.5	82.8	63.9	75.8	NA	66.8	66.8
Pointe South Elementary School	47.5	77.3	65.0	72.9	NA	65.6	65.6
Riverdale Elementary School	42.0	73.1	85.4	70.1	NA	65.0	65.0
River's Edge Elementary School	58.7	86.9	59.4	78.5	NA	72.6	72.6
Roberta T. Smith Elementary School	57.2	97.1	98.2	79.8	NA	81.8	81.8
Suder Elementary School	42.5	70.9	6.8	73.8	NA	53.3	53.3
Tara Elementary School	47.2	80.3	52.1	73.2	NA	64.7	64.7
Thurgood Marshall Elementary School	54.6	96.6	58.3	73.0	NA	73.5	73.5
Unidos Dual Language School	61.9	99.3	100.0	79.4	NA	84.2	84.2
West Clayton Elementary School	33.2	76.5	27.8	68.6	NA	54.6	54.6
William M. McGarrah Elementary School	58.2	85.1	93.8	75.8	NA	76.5	76.5
Adamson Middle School	41.6	78.6	31.8	68.9	NA	58.5	58.5
Babb Middle School	55.6	87.8	35.9	77.8	NA	68.4	68.4
Eddie White Academy	39.9	75.5	5.0	73.0	NA	53.7	59.7
Elite Scholars Academy School	97.6	98.4	100.0	96.4	NA	98.0	96.0
Forest Park Middle School	37.1	75.3	85.4	70.8	NA	64.5	64.5
Jonesboro Middle School	35.8	66.7	48.2	66.4	NA	54.6	54.6
Kendrick Middle School	50.3	91.9	83.3	66.6	NA	73.1	73.1
Lovejoy Middle School	35.7	70.8	37.5	67.5	NA	54.6	54.6
M. D. Roberts Middle School	66.2	82.3	56.7	80.6	NA	73.3	73.3
Mundys Mill Middle School	41.5	73.0	59.6	70.6	NA	61.1	61.1
North Clayton Middle School	40.9	85.7	58.3	69.8	NA	65.0	65.0
Perry Career Academy - Eula Wilburn Ponds Perry Center for Learning	Too Few Students	NA	NA	100.0	NA	NA	29.9

Pointe South Middle School	36.6	64.5	43.8	72.3	NA	54.6	54.6
Rex Mill Middle School	49.9	72.3	60.7	73.8	NA	64.1	64.1
Riverdale Middle School	42.7	79.1	62.5	66.2	NA	63.1	63.1
Sequoyah Middle School	38.5	73.4	30.8	63.1	NA	54.5	54.5

Dalton Public Schools

Dalton, Georgia, is located in Whitfield County, northwest Georgia, immediately off I-75 in the foothills of the Blue Ridge mountains. Known as the "Carpet Capital of the World", 90% of the functional carpet manufactured in the world is manufactured in Dalton. In recent years the carpet industry has diversified to include the manufacture of not only carpet, but tile, wood, and other floor coverings.

According the 2010 census, Dalton's population is 33,128 and has an area of 19.8 square miles. Reporting the racial and ethnic population of the city can be confusing. In many reports the two are reported as if they were the same. It is important to understand that Hispanic is not a race, it is an ethnicity. According to CLRsearch.com, the racial makeup of Dalton is 67.39% White, 6.07% Black, 0.69% Native American, 1.65% Asian, 3.51% multiracial, and 20.71% other. Ethnically, Dalton is 52.24% Hispanic and 47.76 non-Hispanic and is now a minority majority city.

Immigration of Hispanic newcomers began in the 1990's. Today, as is the case with the city, Dalton Public Schools is a minority majority school system.

Dalton Public Schools is made up of two high schools, one middle school and six elementary schools. The DPS student population is 7,944. The student population is 69.5% Hispanic, 21% White, 0.2% American Indian, 2.0% Asian, 4.7% Black, and 2.6% two or more races. 72.6% of students receive free and reduced priced meals. During 2017-2018 our immigrant students came from 43 different countries. Dalton students speak 23 different languages. We have 444 students identified as homeless, 866 special education students, 774 gifted students, 1561 English Learner students with 364 of those identified as newcomers (coming from outside the U.S). Dalton Public Schools has 999 employees, 680 of whom are certified staff and 319 who are classified staff. 70% of Dalton's certified staff hold master's degrees or higher. 127 Dalton Public Schools' employees speak two or more languages.

School Name	Content Mastery	Progress	Closing Gaps	Readiness	Graduation Rate	CCRPI Score	Single Score
All Schools - Elementary	57.3	90.4	95.6	80.1	NA	79.2	74.5
Blue Ridge Elementary School	38.9	91.0	33.3	75.7	NA	63.7	63.7
Brookwood Elementary School	78.8	99.6	89.6	86.3	NA	89.2	89.2
City Park Elementary School	47.5	94.0	87.5	76.9	NA	75.7	75.7
Park Creek Elementary School	57.1	77.1	95.0	80.2	NA	74.4	74.4
Roan Elementary School	54.2	91.3	100.0	78.2	NA	78.9	78.9
Westwood Elementary School	64.7	77.2	75.0	82.1	NA	74.1	74.1

All Schools - Middle	54.1	81.2	44.1	81.8	NA	67.6	74.5
Dalton Middle School	54.1	81.2	44.1	81.8	NA	67.6	67.6

Floyd County Schools

Floyd County Schools is located in Rome Georgia. The system is comprised of 10 elementary schools, 4 middle schools, 4 high schools and 1 college and career academy. The total student population is 9500 students. The system has free and reduced lunch rate of 42%. Fifteen percent of the student population is identified as SWD and 5% of the student population is ELL. Twenty two percent of the student population is identified as a minority.

School Name	Content Mastery	Progress	Closing Gaps	Readiness	Graduation Rate	CCRPI Score	Single Score
All Schools - Elementary	65.2	83.9	98.4	80.6	NA	79.8	77.5
Alto Park Elementary School	57.4	80.7	64.6	77.3	NA	70.6	70.6
Armuchee Elementary School	71.2	88.2	97.5	81.6	NA	83.2	83.2
Cave Spring Elementary School	63.7	83.8	100.0	81.1	NA	79.7	79.7
Garden Lakes Elementary School	66.7	80.9	100.0	82.4	NA	79.8	79.8
Johnson Elementary	80.6	87.2	100.0	87.3	NA	87.2	87.2
Model Elementary School	63.7	71.9	81.3	80.5	NA	72.6	72.6
Pepperell Elementary	58.4	85.1	83.9	77.7	NA	75.4	75.4
All Schools - Middle	61.7	85.5	80.0	79.8	NA	76.4	77.5
Armuchee Middle School	58.1	70.1	6.3	82.2	NA	59.4	59.4
Coosa Middle School	54.6	92.0	94.6	75.3	NA	77.8	77.8
Model Middle School	72.7	96.9	72.5	84.4	NA	83.5	83.5
Pepperell Middle School	60.2	93.8	98.1	77.8	NA	81.2	81.2

Haralson County Schools (affiliate)

The Haralson County School District is a small school system serving approximately 3,500 students in rural West Georgia. The student population is between 60-70% Economically Disadvantaged and roughly 95% Caucasian.

As an affiliate member of the cohort, the Haralson County School District will not fully participate in the first year of the GMAP Pilot. Once the HCSD joins as a fully participating member, all third through eighth graders except for those participating in the GAA 2.0 will participate in the GMAP Pilot.

School Name	Content Mastery	Progress	Closing Gaps	Readiness	Graduation Rate	CCRPI Score	Single Score
All Schools - Elementary	58.9	83.7	35.0	76.0	NA	67.4	71.3
Buchanan Elementary School	60.0	84.2	37.5	77.4	NA	68.6	68.6

West Haralson Elementary School	58.0	83.2	47.2	76.0	NA	68.8	68.8
All Schools - Middle	64.4	94.9	65.0	82.9	NA	78.9	71.3
Haralson County Middle School	64.4	94.9	65.0	82.9	NA	78.9	78.9

New School: Haralson County Rebel Academy

Jackson County Schools

The Jackson County School System serves approximately 8,000 students in six elementary, two middle, and two high schools. With approximately 67,000 residents, Jackson County also is home to two city school systems, the only county in Georgia with three LEAs within its borders. Six of JCSS's 10 schools are Title I schools, with 50.7 percent of its students identified as economically disadvantaged. Students with disabilities comprise 15.8 percent of the enrollment, and 7.5 percent are English language learners. Hispanic students represent 14.5 percent of the school population, with 5.9 percent black, 3.7 percent multiracial, 2.6 percent as Asian/Pacific Islander, three-tenths of one percent American Indian/Alaskan native, and the remaining 73 percent white. The system's graduation rate of 93.6 percent puts JCSS in the top 20 percent of school systems in Georgia and ranks it as No. 6 among school systems its size or larger. In the 2018 College- and Career-Ready Performance Index (CCRPI), JCSS is ranked No. 18 of the 206 city, county, state, and state-and-commission charter schools in Georgia and its elementary schools were ranked No. 10 overall. The JCSS School Climate Star Rating averaged 4.5 on a 5-point scale for its 10 schools. One of the largest employers in Jackson County, JCSS has nearly 600 certified staff members among its 1,200 employees.

School Name	Content Mastery	Progress	Closing Gaps	Readiness	Graduation Rate	CCRPI Score	Single Score
All Schools - Elementary	71.7	92.3	100.0	81.8	NA	85.2	81.7
East Jackson Elementary School	75.6	89.0	63.6	84.8	NA	80.3	80.3
Gum Springs Elementary School	78.3	99.0	91.7	84.6	NA	88.8	88.8
Maysville Elementary School	56.1	82.6	88.9	76.0	NA	74.3	74.3
North Jackson Elementary School	74.3	90.8	100.0	82.7	NA	85.6	85.6
South Jackson Elementary School	63.9	94.6	68.2	78.7	NA	78.3	78.3
West Jackson Elementary School	71.6	84.8	81.3	80.5	NA	79.5	79.5
All Schools - Middle	67.4	80.8	57.8	82.4	NA	73.7	81.7
East Jackson Comprehensive High School	64.2	84.0	NA	81.6	NA	76.4	82.1
East Jackson Middle School	59.5	81.6	68.8	78.6	NA	72.5	72.5

West Jackson Middle School	72.1	80.9	53.6	84.7	NA	74.9	74.9

Jasper County Charter System

Jasper County Charter System is a rural district in central Georgia comprised of 3,500 students with a make-up of 65% Caucasian, 25% African American, and 10% Hispanic students. All schools in the district are Title 1 with nearly 75% of the student population qualifying as economically disadvantaged.

School Name	Content Mastery	Progress	Closing Gaps	Readiness	Graduation Rate	CCRPI Score	Single Score
All Schools - Elementary	51.4	79.5	53.9	78.8	NA	67.1	71.2
Washington Park Elementary School	51.4	79.5	53.9	78.9	NA	67.1	67.1
All Schools - Middle	58.5	90.9	59.1	83.3	NA	74.9	71.2
Jasper County Middle School	58.5	90.9	59.1	83.3	NA	74.9	74.9

Marietta City Schools

Marietta City Schools is a charter system that is about 15 miles northwest of Atlanta and is the Cobb County seat. Marietta City is about 23 square miles with about 61,000 citizens. The city of Marietta was founded in 1834 and Marietta City Schools was established in 1892.

Marietta City Schools serves approximately 8,900 students in grades PK-12 with about 1,200 employees. The district includes twelve schools: a pre-kindergarten school, seven K-5 elementary schools, one sixth grade academy, one middle school, one high school, and one grades 3-5 elementary magnet school (Marietta Center for Advanced Academics). The district consists of the following demographics: English Learners 20%, Economically Disadvantaged 62%, and Students with Disabilities 9.9%. The district race/ethnicities are: Asian 2%, Black 39%, Hispanic 36%, White 19%, and Multiracial 3%.

School Name	Content Mastery	Progress	Closing Gaps	Readiness	Graduation Rate	CCRPI Score	Single Score
All Schools -Elementary	67.7	85.8	55.6	82.0	NA	75.1	75.2
A.L. Burruss Elementary School	62.4	80.7	38.6	82.5	NA	69.3	69.3
Dunleith Elementary School	60.0	99.0	100.0	78.7	NA	83.4	83.4
Hickory Hills Elementary School	50.9	83.1	7.1	78.1	NA	61.0	61.0
Lockheed Elementary School	51.2	79.3	81.3	77.2	NA	70.8	70.8
Marietta Center for Advanced Academics	100.0	90.5	100.0	96.2	NA	95.9	95.9
Park Street Elementary School	45.5	72.3	15.9	73.7	NA	56.1	56.1

Sawyer Road Elementary School	52.8	81.4	0.0	78.3	NA	60.0	60.0
West Side Elementary School	96.0	87.7	85.7	90.8	NA	90.5	90.5
All Schools - Middle	65.9	80.2	67.7	79.8	NA	74.0	75.2
Marietta Middle School	65.5	77.1	52.9	78.7	NA	70.3	70.3
Marietta Sixth Grade Academy	68.0	86.0	100.0	81.8	NA	81.9	81.9

Polk County School District

Polk School District is a public school district located in Cedartown, Georgia. It serves the communities of Aragon, Cedartown, Rockmart, and parts of Taylorsville. It is located approximately sixty miles northwest of Atlanta. Polk School District currently serves the public
education needs of over 7,915 preschool through twelfth grade students in an area that covers 312 square miles. The county is predominantly rural with an estimated population of 41,524 residents.

Polk School District employs more that 550 certified employees, and over 450 classified employees. The District is comprised of two high schools, two middle schools, and six elementary schools. It offers a full range of educational programs addressing the academic, college-readiness, career-readiness, and extra-curricular needs of the diverse learners enrolled.

Polk School District demographics are made up of approximately 57% white, 21% Hispanic, 15% Black, 6% Multi-Racial, and 1% other. The District is a Community Eligibility Provision (CEP) district. This provision allows low-income schools and districts to serve breakfast and lunch at no cost to all enrolled students without collecting household applications. The District's free and reduced lunch rate is 53.41%.

School Name	Content Mastery	Progress	Closing Gaps	Readiness	Graduation Rate	CCRPI Score	Single Score
All Schools - Elementary	57.8	82.1	82.8	75.1	NA	73.5	71.5
Cherokee Elementary School	57.7	86.4	60.4	76.5	NA	71.9	71.9
Eastside Elementary School	71.3	84.0	100.0	78.3	NA	81.5	81.5
Northside Elementary	54.3	93.5	100.0	75.5	NA	79.1	79.1
Van Wert Elementary School	45.3	73.6	60.4	69.7	NA	62.4	62.4
Westside Elementary School	59.9	74.2	75.0	76.7	NA	70.5	70.5
Youngs Grove Elementary School	56.8	76.0	72.7	72.5	NA	69.0	69.0
All Schools - Middle	52.2	78.9	40.6	78.0	NA	65.0	71.5
Cedartown Middle School	49.6	78.6	58.6	76.7	NA	66.5	66.5
Rockmart Middle School	55.8	81.7	22.9	79.5	NA	64.7	64.7

Putnam Consortium

Please see Appendix D-8 for a description of the LEAs participating in the Putnam Consortium.

2) **An assurance from each participating LEA, for each year that the LEA is participating, that the LEA will comply with all requirements of this section.**

The necessary assurances can be found in Appendix B-8 for the Cobb County School District, Appendix C-4 for the Georgia MAP Assessment Partnership, and Appendix D-11 for the Putnam Consortium.

Selection Criteria

Project narrative

1) **The rationale for developing or selecting the particular innovative assessment system to be implemented under the demonstration authority, including –**
   - **(i) The distinct purpose of each assessment that is part of the innovative assessment system and how the system will advance the design and delivery of large-scale statewide academic assessments in innovative ways; and**
   - **(ii) The extent to which the innovative assessment system as a whole will promote high-quality instruction, mastery of challenging State academic standards, and improved student outcomes, including for each subgroup of students described in section 1111(c)(2) of the Act;**

The State of Georgia established an Innovative Assessment Pilot Program that allows up to 10 school districts or groups of districts to develop alternate assessment and accountability systems aligned with state academic content standards beginning in 2018. In order to select the innovative assessments that would be part of the program, the State Board of Education (SBOE) held a competition in summer of 2018, with two application deadlines of August 1, 2018 and September 1, 2018. See Appendix A-7 for the Innovative Assessment Pilot Program Application Announcement. The Innovative Assessment Pilot Application contained nine elements, including:

- Description of Assessment Pilot
- Alignment and Comparability
- Technical Quality
- Accessibility and Accommodations
- Test Administration and Security
- Stakeholder Engagement
- Accountability
- Conflict of Interest
- Goals and Deliverables

See Appendix A-8 for the Innovative Assessment Pilot Application and its requirements. The SBOE reviewed the applications and supporting evidence from all submitted applications, ultimately approving three applications for participation in the pilot.

The purpose of the Cobb Teaching and Learning System Assess platform (CTLS-Assess) is to support students and teachers in the learning process by utilizing valid and reliable assessments given

throughout the year. CTLS-Assess assessments indicate a student's mastery of each standard in a course (for example, every standard in third-grade mathematics). CTLS-Assess assessments are delivered using a scalable, online platform that provides a student's progress on the assessments to teachers in real time. With CTLS-Assess, teachers give assessments throughout the year as students are ready instead of waiting until the end of the year. CTLS-Assess is designed to provide information on each standards so that students and their teachers know how they are doing throughout the year. This detailed, standards-level information for each student can be combined at the end of the school year for state and federal accountability.

The purpose of MAP Growth for Georgia, a through-year model, is to create a system that would eliminate the need for an additional traditional annual summative assessment and provide a solution that helps facilitate student learning throughout the year. GMAP will provide timely data and narrative insights about student and class achievement, performance against grade-level expectations (and performance below or above grade level), show longitudinal academic growth within and across years, maximize test efficiency for each student (for example, if students demonstrate command of particular grade-level concepts in fall or winter, they need not be retested on them in spring), include recommendations for classroom-based performance tasks tailored to student needs, provide national comparisons, and yield summative proficiency scores by aggregating grade-level performance data from the three interim assessments.

The purpose of Navvy is to assess real-time competencies of the state's academic standards throughout the year, thereby increasing both the quality of instructionally-relevant feedback provided to support teaching and learning and the quality of data collected for monitoring the learning opportunities provided by schools. Navvy allows teachers to flexibly administer on-demand assessments as needed to sync naturally with classroom teaching and learning. The Navvy system is unique because it is designed using novel data science methods that allows diagnostic feedback generated from short assessments to be both instructionally-useful and technically sound (i.e., valid and reliable). Thus, teachers can confidently act upon the real-time feedback to inform personalized instruction for students. After students are provided personal supports, they are given additional opportunities, at their own pace, to update their competency statuses in the Navvy system, thereby fostering student engagement and ownership in the learning and assessment processes for all students. At the end of the year, the wealth of information the Navvy system collects on each student throughout the year will be summarized for accountability purposes, without requiring additional testing time for students or schools.

All three innovative assessments that are part of Georgia's innovative assessment pilot program utilize interim assessments as a method of providing more immediate feedback that can be used to guide instruction. With the proposed innovative assessments, testing opportunities will occur throughout the year, providing more immediate, actionable feedback that can be used to guide instruction and improve student performance prior to the end of the school year.

Throughout the IADA period, districts/consortia using the approved innovative assessment systems will administer those assessment systems in the grades, content areas, and courses for which they exist, and those results will be used for accountability purposes. The districts/consortia will also administer Georgia Milestones assessments as necessary to establish comparability. State assessments (Georgia Milestones) will be administered in any grade, content area, and course for which an innovative assessment is not available, as required in federal law to satisfy all requirements of Georgia's accountability system as approved by the U.S. Department of Education.

Throughout the demonstration authority, the State of Georgia will conduct a technical evaluation of the innovative assessment systems and collect stakeholder feedback in order to select one assessment system for possible statewide expansion.

Cobb County School District

The Cobb County School District (CCSD) is committed to syncing accountability with supporting learning for all students to be successful in their college and career paths. By accounting for real-time competencies of the state's academic standards, CCSD will be increasing the quality of instructionally-relevant feedback provided for schools and stakeholders, while simultaneously increasing the quality of data collected for monitoring the learning opportunities provided by schools in the state. We expect both improved feedback and accountability to improve student outcomes.

CTLS-Assess will be a collection of district-developed, formative assessments which are aligned to the Georgia Standards of Excellence (GSEs) in English Language Arts, mathematics, and science. The district-developed formative assessments will be administered throughout the school year and assessment results will be delivered instantly to teachers at the standard and standard element level.

CTLS-Assess was designed specifically to meet the assessment needs of students, teachers, and educational leaders in Georgia. With CTLS-Assess, CCSD will provide its participating schools with the technology, assessment resources, and instructional resources to fully implement a formative assessment process. We anticipate improved teaching and student learning of key concepts included in the state standards. CTLS-Assess will provide an on-demand, web-based assessment system that provides immediate feedback that can be used to monitor learning and assist students with setting achievement goals. School leaders will be able to use CTLS-Assess to identify teaching and learning successes and areas for improvement.

Development of CTLS-Assess

For eight years, the Cobb County School District (CCSD), led by Superintendent Chris Ragsdale, has been developing and enhancing the Cobb Teaching and Learning System (CTLS), an innovative teaching and learning resource utilized in all 112 CCSD schools at scale for several years by more than 112,000 students and 7,500 teachers in the Cobb County School District. CTLS is currently being used by teachers across the Cobb County School District to deliver over 890,000 assessments during 2017-2018 school year.

The assessment component of the Cobb Teaching and Learning System, CTLS-Assess, supports the complete assessment process, from creating items and standards-based assessments, to administering and scoring, then providing real-time actionable data. CTLS Assess provides teachers with real-time, standards-based determinations of student mastery which empowers teachers to make better, timely instructional decisions for students.

The platform enables teachers to quickly and easily assess students before, during and after instruction. Through classroom assessments, teachers can effectively tailor instruction directly to individual student needs.

Rationale for the CTLS-Assess Assessments

The CTLS-Assess assessments will allow teachers to more effectively support students achieve mastery of state standards by providing valid and reliable assessments that are administered throughout the school year rather than only at the end of the school year. In addition to providing teachers and administrators with actionable, immediate assessment data, CCSD's goal is for students to use CTLS-Assess as a teaching and learning tool for K-12 teachers and students.

Teacher and student-friendly assessment reports provide quick and easy-to-understand results of student performance at the standard and standard element level.

Anticipated Benefits of CTLS-Assess Assessments

CCSD's primary objective for CTLS-Assess is to support and improve learning of key concepts required by state standards.

The expected impact of CTLS-Assess is to provide teachers and students with information they need to attain student success. The CTLS-Assess provides immediate assessment results that teachers can use to easily recognize student progress toward mastery of state standards throughout the year rather than at the end of the year. By utilizing assessments that provide data at the standards and standard elements level, CTLS-Assess will provide a personalized tool for improving teaching and learning.

Georgia MAP Assessment Partnership

Teachers need information during the year showing how students are performing against state standards, and about where students are along the learning continuum even when a student is performing outside grade-level expectations. Systems also want unified solutions to reduce overall testing.

Through-year assessment provides a way to meet these needs in a way that provides immediate, actionable data throughout the year, when teachers still have time to adjust instruction based on results and hone in on skills needed to get students ready for what is next, shifting the focus from testing to learning.

This model will use adaptive assessments administered in fall, winter, and spring to yield longitudinal growth data, instructionally relevant insights, and summative proficiency scores.

Specifically, each assessment will:

- Provide timely data and narrative insights about student and class achievement, including performance against grade-level expectations (and performance below or above grade level).
- Show longitudinal academic growth within and across years.
- Maximize test efficiency for each student (for example, if students demonstrate command of particular grade-level concepts in fall or winter, they do not necessarily need to be retested on them in spring).
- Include recommendations for classroom-based performance tasks tailored to student needs.
- Feature the option to include performance tasks with each assessment or only in spring, depending on the theory of learning and the intended balance of assessment and instructional time.

- Yield summative proficiency scores for the year by summing up grade-level performance data from the three assessments.

The through-year system eliminates the need for tests that are "high stakes" only – the "testing for the test" – by using actionable benchmark assessments to aggregate what we learn about students without losing the utility of the data to drive instructional change. GMAP partners have control over how they use the data. Ultimately, we are not advocating that our tests be high stakes; rather, we are increasing connections to standards and instruction.

The through-year system eliminates the need for tests that are "high stakes" only – the "testing for the test" – by using actionable benchmark assessments to aggregate what we learn about students without losing the utility of the data to drive instructional change. The through-year system decreases the stress around the assessment by giving students more opportunity to show what they know and can do. GMAP partners have control over how they use the data. Ultimately, we are not advocating that our tests be high stakes; rather, we are increasing connections to standards and instruction.

GMAP proposes to partner with NWEA to thoughtfully create a unified assessment system that reduces testing time, provides educators with instructional guidance, and challenges students to develop the higher-order thinking skills they need to succeed in college and careers.

At the end of the five-year GMAP Pilot, the result will be a state-of-the-art comprehensive assessment system that:

- Provides high-quality student growth data, regardless of where on the continuum of learning a student falls.
- Returns scores that give information about summative proficiency status relative to grade-level standards.

The intent of this partnership is to create a system that would allow a through-year model to be used in lieu of a traditional annual summative assessment and provide a solution that helps facilitate student learning throughout the year. NWEA also has assessments for grades K–2 and 9–12, and welcomes discussion of supporting Georgia students at those grade levels in a manner that is aligned with the through-year model, creating the potential for a fully-integrated system that can measure student growth throughout the entirety of their academic careers.

During the five-year GMAP Pilot, NWEA, in partnership with Georgia stakeholders, intends to:

- **Years 1-2:** Develop the through-year model while implementing MAP Growth.
- **Years 3-4:** Pilot and field test the through-year model and continue testing with MAP Growth as needed; conduct comparability studies for the through-year model and Georgia Milestones.
- **Year 5:** Scale the through-year model, resulting in a comprehensive assessment system that meets both district and State needs, yielding data that can be used throughout the year to inform instruction and be aggregated at the end of the year to make determinations about summative proficiency.

<u>Putnam Consortium</u>

The Putnam Consortium is committed to syncing accountability with supporting learning for all students to be successful in their college and career paths. By accounting for real-time competencies of the

state's academic standards, the Putnam Consortium will be increasing the quality of instructionally-relevant feedback provided for schools and stakeholders, while simultaneously increasing the quality of data collected for monitoring the learning opportunities provided by schools in our state. We expect both improved feedback and improved accountability to contribute to improved student outcomes.

With statewide interest and the support of the State Board of Education for participation in the innovative assessment pilot, the Putnam Consortium's proposal described in this application sets forth a clear path for this new, learning-focused assessment and accountability system to continue to be implemented and evaluated and, as such, satisfies all of the application requirements and selection criteria.

Navvy was designed specifically to meet the assessment needs of students, teachers, and educational leaders in Georgia. The Putnam Consortium will implement this field-based innovation that leverages new psychometric methods to support a critical shift in assessment practice where standards and assessment are better aligned —a shift away from ubiquitous general ability tests and towards assessment systems that provide *reliable* diagnostic data upon which teachers can act to customize learning opportunities for students. With Navvy, the Putnam Consortium will provide schools a tool to implement a formative assessment process, while simultaneously collecting robust data for accountability purposes. We anticipate improved student learning of key concepts delineated by state academic standards for all students by implementing Navvy an on-demand, web-based diagnostic assessment system that provides feedback that is useful to students for setting goals and monitoring learning; to teachers for identifying students who need additional support or instruction to learn specific standards; and to administrators for identifying trends in successful teaching and learning in a multifaceted way.

We present details of how Navvy meets the selection criteria outlined in this application, organized in two main sections and associated subsections below:

1. Background and Rationale for Navvy assessments, including:
    a. The distinct purpose of each components of the innovative assessment system and how the system will advance the design and delivery of large-scale, statewide academic assessments in innovative ways; and
    b. The anticipated benefits of the system to promote personalized learning, mastery of challenging State academic standards, and improved student outcomes, including for each subgroup of students described in section 1111(c)(2) of ESEA.
2. Implementation plan for Navvy
    a. Plan for developing assessments
    b. Strategy for scaling

Background and Rationale for Navvy Assessments

For four years, Putnam County, led by Superintendent Eric Arena, and Dr. Laine Bradshaw, Associate Professor of Quantitative Methodology at the University of Georgia, have been collaborating on innovative assessment solutions that meet the needs of schools in our state. To design standards-level assessments that would have technical qualities of validity and reliability, Dr. Bradshaw founded Navvy Education, LLC. Dr. Bradshaw and Putnam County's collaboration extended to curriculum experts across the state and to additional school districts who piloted Navvy in 2017-2018 and then to a total of 12 school districts using Navvy assessments in the 2018-2019 school year. Dr. Bradshaw and Navvy

Education continue to work alongside experts in Putnam County and other participating counties and a team of over 30 top educators across Georgia to design and develop Navvy assessments.

Superintendent Arena has met regularly with the Governor's office, Senate Education Committee, GaDOE, and State Board of Education leadership for the past 1.5 years to discuss transitioning to a through-year assessment system that provides timely information to support personalized instruction and with superintendents representing districts seeking innovative solutions.

The Putnam Consortium's primary objective is to support learning of key concepts delineated by state academic standards for all students by implementing Navvy as an on-demand, web-based diagnostic assessment system. Navvy is a learning-focused assessment system that integrates state assessment with teaching and learning. The purpose of the standards-level assessments in the Navvy system is to diagnose, for each standard, whether the student has competency of the standard or needs additional support to gain competency of the standard. This diagnostic information serves two purposes: (1) instructionally-relevant feedback for teaching and learning and (2) accountability.

Key features of the Navvy assessment system are provided in the "Innovative Assessment System" section and the rationale for these features are reiterated here. Navvy is an evidence-based, through-year assessment system that identifies, and keeps track of, which standards students understand and which they still need help to learn. Navvy supports a substantial shift in assessment philosophy and practices that will better focus our state assessment efforts on helping students learn through the year. The system:

- Shifts towards a competency-based assessment system—diagnosing students' competencies of State standards
- Leverages innovative data science to efficiently provides diagnostic information designed to be both actionable *and* reliable so that teachers can confidently act upon feedback to inform personalized instruction for students
- Provides timely feedback to teachers, students, and school leaders via through-year assessments to identify student's specific needs so instruction can be personalized for students
- Provides students multiple opportunities to show what they have learned and provides up-to-date reports detailing which standards students have learned

As articulated in the logic model (see Appendix D-7) and further described in the next section, these features of the system are expected to (a) enable teachers to better implement an effective formative assessment process that tailors instruction to students' personalized needs, (b) to enable school leaders to better use data to support teacher practices, and (c) increase student agency of learning by allowing students to use results to monitor their own learning. Together, we expect these short-term outcomes to subsequently improve student achievement for all students and ultimately better prepare students for success in their postsecondary studies and careers.

Anticipated Benefits of Navvy

To enable personalized learning, there is a strong need to create assessments that can efficiently identify students' understandings at the standard level and effectively communicate that information to teachers and students. Without assessments that enable teachers to quickly identify students' understandings, the promise of personalized learning systems that are specifically designed to target student weaknesses cannot be realized: Put simply, teachers cannot target weaknesses that they do not know exist. Research has shown that without targeted interventions to correct incomplete student

conceptions, incomplete student conceptions may become more prevalent and resistant to change (e.g., Cepni, Tas, & Kose, 2006; delMas et al., 2007). On the other hand, when using educational interventions designed to alleviate incomplete student conceptions, significant gains are observed in students' successful acquisitions of correct conceptions (e.g., Cepni, Tas, & Kose, 2004; Gürbüz & Birgin, 2012; Liu & Lin, 2010; Russell, O'Dwyer, & Miranda, 2009).

As discussed in the "Element 3: Express student results consistent with state standards and identify students not attaining proficiency on standards" section, the Navvy system is unique because it is designed using novel psychometric methods that allows diagnostic feedback generated from short assessments to be both instructionally-useful *and* technically sound (i.e., valid and reliable). Thus, the quality of the instructionally-relevant data provided from Navvy is stronger than formative assessment systems that local school districts use that do not provide evidence to support more detailed inferences at the standards level. This improvement in quality of feedback is important so that teachers can confidently act upon the real-time feedback to inform personalized instruction for students.

The expected impact of Navvy is to provide school leaders, teachers and students with information they need for each student to learn successfully. The system is designed to provide real-time feedback that students and teachers can trust, allowing students to be recognized and celebrated for standards they have learned and helping identify standards they still need support to learn. For teachers day-to-day use, the platform provides easy-to-use reports that communicate actionable information: for each standard and student, reports show whether the student has competency of the standard or not. Looking within a student's results, teachers can see which standards individual students need support to learn (e.g., this 6th grade math student needs help learning MGSE.6.EE.2 and MGSE.6.EE.5). Looking across students within a standard informs how teachers can create meaningful groups of students for differentiated instruction (e.g., these 4 students have not yet mastered standard MGSE.6.EE.5 and need additional support to learn the standard). Administrator and teacher dashboards have comprehensive tabular results and meaningful visualizations of summaries that are readily exportable.

Results are also displayed on student dashboards with a badging system for acknowledging new learning of standards and for indicating standards that students are working on. By focusing the assessments at the standards level, the assessments are in sync with curriculum objectives, allowing students to set short term, tangible goals for learning and allowing teachers to meaningfully group students for personalized instruction to support learning.

Promise Based on Prior Research Assessment Design and Development

The Navvy design is motivated by research about effective formative assessment (Gallagher & Worth, 2008; Sadler, 1989; Black and Wiliam, 1998; Clark, 2011; Heritage, 2010). Although the use of formative assessment has become widely accepted as a tool to improve student learning, specific characteristics influence its effectiveness. First, formative assessment results should be available quickly (ideally, immediately) upon administration (Gray, Thomas & Lewis, 2010; Popham, 2006). To fulfill this need, Navvy assessments are administered online and immediate results are provided. Second, results should be actionable, meaning that they are used to inform changes to the instructional approach with the goal of better addressing student needs (e.g., Gray et al., 2010; Pellegrino, Chudowsky, & Glaser, 2001; Popham, 2006). The diagnostic nature of the Navvy results is inherently more actionable than typical test results because they group students according to standards they have and have not learned, supporting small-group and differentiated instruction. Third, results should provide new information for students and teachers. Navvy assessments provide information at a grain size that is beyond what teachers are able to observe. Many so-called formative assessments provide little new information to

teachers, typically correlating to teachers' predictions of students' ability (e.g., Cullen & Shaw, 2000; Demaray & Elliot, 1998; Fuller, 2000; Hoge & Coladarci, 1989; Mulholland & Berliner, 1992; Nichols, Chipman, & Brennan, 1995). They fail to provide reliable information at the standards level (or lower level such as elements that comprise standards). Navvy assessments are specifically designed to identify *which specific standards* students have learned; this level of information cannot be observed or recalled by a single teacher with a typical teaching schedule: With 20-30 standards per course and 5 classes totaling 100-125 students, keeping track of which students understand which standards would require tracking 2000 to 3,750 student-by-standard interactions, which is not feasible. Thus, Navvy assessments offers information that teachers cannot feasibly observe, nor access through other assessment systems. Last, formative assessment should be an ongoing process, not a static test. Navvy supports this requirement by allowing students to re-test on the same standard, meaning each student is given multiple attempts to demonstrate competency for each standard. Navvy supports repeated testing using methodology that allows for comparisons of results over time to assess growth (See Proprietary Appendix E-1). Growth for diagnostic psychometric models constitutes transitions among latent groups; of interest for Navvy are student transitions from lack of competency to competency of a standard. Many existing commercially-available or locally- produced progress monitoring, diagnostic, or interim assessment systems produce reliable scores at the domain or overall ability level and then also report standards-level feedback (number/percent correct, or classification based on number/percent correct). However, that type of standards-level feedback produced from post-hoc analyses is not designed to be reliable and is not designed to be invariant, meaning the feedback cannot be used to monitor changes in standard-level competencies over time. Thus, Navvy provides a needed method for providing feedback of standards competency over time to support an on-going assessment that provides up-to-date measures of competency throughout the year.

Information in this section to this point has focused on Navvy assessments as a diagnostic assessment tool that supports a formative assessment process. That is a primary goal of our consortium--to use assessments to help students learn. In addition, we value the civil rights goals of ensuring a quality education is provided to each child and value the use of high-quality information upon which the state can act to provide supports to LEAs as needed. An advantage of Navvy is that we will have rich data to report to meet the accountability goals without having to sacrifice our learning and teaching goals.

After giving Navvy assessments throughout the year, districts in our consortium will have rich data that details the competency status (i.e., "competency" or "non-competency") by standard for each student. Instead of taking an end-of- year assessment that gives a wide overview of students' understandings of standards, we will utilize the detailed Navvy data at the end of the year to produce annual summative determinations. Using extant data to produce summative determinations will fulfill federal requirements without interrupting our valued process of teaching and learning. Based on some participating LEA's previous approach to student assessment with Georgia Milestones, we estimate increasing instructional time by as much as 7-9 weeks by shifting to the innovative assessment system. Appendix D-5 shows an example of a school district's curriculum map for fifth grade math under the current statewide assessment system. The key observation is that new teaching ends in March, indicating the knowledge, skills, and abilities required by all standards need to be taught by then, though school ends in third week in May. After March, 2-4 weeks are spent preparing for the Milestones test by reviewing previously-taught material. Then, 2-3 weeks is required to administer Milestones, and no new instruction is provided during this time. Finally, the last couple of weeks left of school after Milestones testing is over is used for retesting. During these weeks, it is challenging, if possible, to get students motivated to learn new material after state testing is finished. Thus, our 36-week school year is reduced by 19-25% due to end of year testing; this is critical learning time for our students, especially given learning required by

our state standards is difficult for many students to achieve with a school year of instruction, much less 75% of a school year of instruction. By using the Navvy assessments, we plan to be providing instruction for the whole school year, as students will still be working daily to check off standards competency until the very end of the year. When school districts replace local common assessments (e.g., unit tests, benchmarks, interim assessments) that are currently used for through-year monitoring of learning with Navvy assessments *and* are not required to complete the end-of-year Milestones assessments, schools will spend less time testing and more time teaching and personalizing student support to learn. In addition, utilizing Navvy assessments in lieu of local common assessments relieves the burden on local district personnel to create, administer, and score common assessments.

2) The plan the SEA or consortium, in consultation with any external partners, if applicable, has to –

(i) Develop and use standardized and calibrated tools, rubrics, methods, or other strategies for scoring innovative assessments throughout the demonstration authority period, consistent with relevant nationally recognized professional and technical standards, to ensure inter-rater reliability and comparability of innovative assessment results consistent with 34 CFR part 200.105(b)(4)(ii), which may include evidence of inter-rater reliability; and

(ii) Train evaluators to use such strategies, if applicable

<u>Cobb County School District</u>

Rationale for the CTLS-Assess Platform

CTLS-Assess supports the complete assessment process, from creating items and standards-based assessments, to administering and scoring, then providing immediate data. CTLS features include:

- The blueprinting tool allows teachers to build standards-based assessments with specific levels of rigor, DOK and Revised Bloom's Taxonomy (RBT).
- The platform supports PDF versions of existing tests so teachers do not have to re-create existing assessments in the platform – they can simply create an answer key and administer.
- Teachers are excited about the performance of the platform – online assessments load and advance instantly for students even during high scale usage. These assessment reports load instantly.
- The proctoring tool enables teachers to see test results in real-time (without refreshing their screens) while observing the overall pace of the class, each students' progress, length of time on each question, and have immediate access to assessment results.
- Teachers love the fact that they can personalize their real-time dashboard to see the information that is relevant and important to them.
- The platform provides an assessment builder that allows users to search by standard, grade and/or subject. Users can add items or drag items to rearrange the order of the items on the assessment.
- The platform delivers elegant reports in easy-to-understand formats that are available online or in PDF format.

CTLS enables teachers to quickly and easily assess students before, during and after instruction. Through classroom assessments, teachers can effectively tailor instruction directly to individual student needs.

- **Before:** Pre-assessments can be used to determine what students already know and can do in order to determine readiness for a lesson; identify misconceptions and gaps in knowledge or skills; and identify students in need of differentiated instruction. Pre-assessments are used for instructional decision-making, not to assign grades. Pre-assessments help teachers determine what knowledge and skills their students already have. They help gauge whether students are ready for a lesson on a given indicator (whether they have the necessary prerequisites) or whether they need additional support. This support might take the form of adjusting grouping arrangements or altering the level of content materials.
- **During:** Ongoing instructional assessment helps teachers monitor student progress and make adjustments based on student performance and needs. Assessment results can help teachers make day-to-day decisions about the pacing and complexity of lessons and activities.
- **After:** Post assessment allows educators to assess student learning and mastery of content, skills or strategies. Post-assessment enables teachers to determine what students know, at what level they are able to perform, if instruction was effective, and what additional activities are needed for students to meet academic standards.
- **End of Unit or Grading Period:** Summative assessments can be used to get a picture of students' overall performance and progress against grade-level indicators. Summative assessments are often the basis for student evaluation. Summative assessments also help ensure long-term student learning as they require students to integrate and retain information over a period of learning.

Item & Assessment Creation

CTLS-Assess supports expansive item types. Users can create items using the item editor and/or utilize pre-loaded item banks. CTLS-Assess enables effective assessment design allowing users to build standards-based assessments with specific levels of rigor, DOK and RBT utilizing the Advanced Blueprinting tool. CTLS-Assess supports the use of 'external assessments' (e.g. pdf versions of tests) by creating an answer key. This minimizes teachers having to recreate the assessments.

By utilizing the CTLS-Assess item creation tool, teachers can create multiple choice items (with one or more correct responses and distractor rationales) as well as constructed response items. During item creation, the user can preview the item.

As items are created in CTLS-Assess, users will tagged the assessment items with the following information:

- Georgia Standard
- Depth of Knowledge
- Revised Bloom's Taxonomy
- Grade
- Subjects
- Item Bank
- Response Type (multiple choice with one or multiple correct answers or constructed response)
- Teacher Read Instructions (instructions that are to be read by the teacher that are not displayed to the student)

Assessment Administration

CTLS-Assess allows teachers to control when they administer assessments they create. CTLS-Assess was designed for maximum performance and scalability and allows for easy administration of both online and paper-based assessments from one convenient interface. CTLS-Assess easily allows users to publish and target assessments specifically to grade, subject, course and class taking the assessment and schedule for use. The system's proctoring tools allows users to see test results in real-time while observing the overall pace of the class, each students' progress, the length of time on each question, and have immediate access to assessment results.

Assessment Development

CTLS-Assess will develop assessments that standards-level assessments through collaboration with Georgia educational practitioners, assessment experts, and content area experts. Standards-level assessments will be provided for grades 3-8 in ELA and math; in the high school ELA and math courses that have a corresponding statewide assessment; and in science, for grades 5, 8 and one high school course.

Assessment Scoring

CTLS-Assess allows teachers to select how an assessment is scored. CTLS-Assess supports full credit, partial credit, and rubric-based scoring. All digitally scored items are scored as right/wrong by default. The application allows evidence-based selected response and multi-part items to be scored with partial credit. CTLS-Assess supports rubric-based manual scoring and is currently used for scoring written constructed response items. Rubric scored items are weighted based on the maximum number of points within the rubric. Additionally, users may alter the weighting of items on a test by adjusting the number of possible points. The application displays both percent and raw scores and allows user-defined performance levels for each assessment.

Security features of CTLS-ASSESS

CTLS-Assess provides for secure administration of assessments. CTLS-Assess is hosted in the cloud with Amazon. The database is encrypted at rest and backups are performed nightly. The Enhanced platform utilizes a role-based security model. Access to features can be turned on or off by role and for specific users. Access to system data (schools, teachers, classes, students) is controlled by a setting on each role. Each role is assigned a single option to limit access. The available options are None, Restrict to Region, Restrict to School and Restrict to Class.

Access to assessment results data is also controlled through the role restrictions. Teachers can access any assessment results for students in their classes. School-based users can access any assessments results for students in their school. District-based users can access all assessment results for all students.

Item Banks have a security structure to allow districts to control access. Each district created item bank has the following permissions – None, Read, Edit, Add.

Assessments are organized into Content Banks and tagged with a Test Type. There is a security model in place to allow districts to control which roles or users can create assessments for each content bank and test type.

Georgia MAP Assessment Partnership

GMAP educators will be integral in the design and development process of the assessment and will be provided training and support to contribute. The Georgia Center for Assessment will facilitate workshops with educators to help examine learning progressions, blueprints, and achievement level descriptors in a standardized way. Work will also be done with teachers as critical thought, and potentially development, partners to develop performance tasks that measure standards in a manner that can be used to help teachers triangulate data and inferences about students in the classroom.

NWEA has plans to develop performance tasks to confirm higher-order thinking skills and writing skills are addressed as part of the through-year assessment system. To that end, NWEA plans to phase-in performance tasks, scoring protocols, and training over three years, starting in Year 3.

To align the performance tasks with the through-year assessment model, NWEA intends to collect sample responses to the performance tasks, guide teachers in matching student work to Georgia Achievement Level Descriptors, and build training guides and next-step guides. As a result, teachers can both administer the tasks and have a framework for analyzing student thinking along learning progressions. Including performance tasks in the through-year assessment system will ultimately improve alignment of the testing system and the validity of the summative scores.

Putnam Consortium

The Putnam Consortium Innovative Assessment Executive Team in partnership with Navvy Education have a comprehensive implementation plan to ensure the success of the innovative assessment system. This plan includes many components, but we highlight the three most relevant to the application here:

- Plan for developing and scoring assessments
- Plan for delivering assessments and reporting results
- The strategy for scaling Navvy

Plan for developing assessments

The Navvy assessment system is comprised of standards-level assessments developed through collaboration with Georgia educational practitioners from the Putnam Consortium, assessment experts, and content area experts. Standards-level assessments will be provided for grades 3-8 in math and ELA; in the high school math and ELA courses that have a corresponding statewide assessment; and in science, for grades 5, 8 and one high school course.

The assessments produce competency profiles for each student. These profiles are produced via a diagnostic psychometric algorithm (See Appendix D-4 for primer on methodology). Student responses to Navvy assessment items are objectively scored as correct/incorrect via machine, automated scoring to allow for real-time feedback. This response data is used to determine competency profiles via the diagnostic psychometric algorithm. These profiles provide a competency status by standard, i.e., competency or not classification for standard *a*. These profiles are then used to determine annual determinations that are comparable to the statewide assessment annual determinations.

Each standards-level Navvy assessment was developed from a principled assessment approach, where three important understandings were carefully coordinated during the assessment design process: (a) the delineation of the construct--the skills, knowledge, and abilities required by the State's academic standards, (b) the construction of questions to adequately elicit observable responses to as

manifestations of the construct components, and (c) the specifications of psychometric models to aptly characterize the construct-response relationship (Bradshaw, 2017). As described in the "Element 2: Aligns with depth and breadth of challenging State academic standards" section, the questions in the Navvy assessments were designed to be representative of the construct operationalized upon the requirements of a given State academic standard, in terms of (a) the components of the construct that were essential to competency of the standard and the (b) depth of knowledge required by the standard. Items were developed iteratively with a rigorous review process requiring collaboration among authors, content experts, and assessment experts, also described in the "Element 2: Aligns with depth and breadth of challenging State academic standards" section. While strong content validity evidence is collected from this process, additional internal validity evidence will be collected from psychometric analyses where hypotheses from content experts, authors, and reviewers about item alignment will be vetted empirically. The empirical vetting of alignment of items to specific standards is an advantage over the current statewide assessment model, where alignment is posited by content experts but not verified empirically due to the inability to do so under the statewide assessment psychometric framework that utilizes item response theory (see Appendix D-4 for distinction between item response theory and the innovative psychometric approach taken by in the development of the Navvy assessments).

In addition to providing information to evaluate the performance of the items to elicit the construct, psychometric results will also be used to evaluate the performance of the assessments as a whole to provide reliable diagnoses. Psychometric results on the strength of the construct-response relationships (informed by observed item statistics, estimated item parameters, model-data fit statistics, and differential item functioning) will inform Data Review sessions. In Data Review sessions, a committee of teachers and content experts representing the participating districts will provide additional reviews of items that were flagged by psychometric results. Items will be revised and re-piloted or removed from the assessment. Navvy Education will provide technical documentation on the psychometric properties of the assessments and will update documentation annually. The Georgia Innovative Assessment TAC will review technical properties of Navvy at regular meetings.

While the psychometric analyses are necessary practices for evaluating the quality of innovative assessments for the intended uses of formative feedback, the quality of the assessment system will also be evaluated on the basis of the quality of the assessment information generated by the system for serving its intended use of accountability. For detailed evidence supporting the appropriateness of the annual determinations produced by the Navvy competency profiles for drawing inferences about student achievement for use within the accountability system, please see the section entitled "Element 4: Generate results, including annual summative determinations, that are valid, reliable, and comparable for all students"

Plan for delivering assessments and reporting results

The Navvy assessment platform is currently being used in all 12 participating LEAs to deliver and score the Navvy assessments online to provide real-time standards-level diagnoses of student competencies. Reports for students, teachers, school level administrators, and district-level administrators are updated in real-time when a student completes an assessment; thus, all users have up-to-date results anytime they log into the platform. Once annual summative determinations are established and standards are set for reporting achievement levels, reports to communicate these results will be developed and provided through the Navvy platform as well.

Strategies for scaling

In the 2017-2018 school year, four LEAs participated in the initial pilot year of Navvy assessments. This number organically grew to 10 LEAs for the start of the 2018-2019 school year through a local grassroots movement and through the support of leaders of state level educational organizations (e.g., Professional Association of Georgia Educators and the Charter System Foundation) that set up opportunities for LEAs to learn about participating. Two additional LEAs have joined since the start of the school year, bringing the total to 12 member LEAs as part of the Putnam Consortium. These LEAs are participating because the innovative assessment system is first and foremost good for students and useful as a formative system to support teaching and learning.

LEA participation to this point has been propelled by a collaborative partnership with participating districts, where districts that have input on decision making are invested in the implementation and success of the system as not only participants but also leaders of the innovation. As word spreads that participating districts' voices are heard and their input is actively shaping the implementation of the assessment system and its use for accountability measures, other districts are encouraged that their voices too will be heard and valued.

Approval of this application, with the promise of lessening the burden of double testing after comparability is established, is expected to expediate interest in implementing Navvy in additional LEAs. The GaDOE recently facilitated the Innovative Assessment Task Force Committee and invited local leaders of the three innovative assessment consortia to introduce the assessment systems to members who are representative of over 10 LEAs in Georgia. To systematically grow participation in the Navvy innovative assessment system, Putnam County in collaboration with Navvy Education and the Georgia Innovative Assessment Team will hold quarterly Innovative Assessment Summits (described under "Technology and Capacity Supports" section) to facilitate in-person presentations at geographically diverse locations across the state and will provide webinar opportunities for all LEAs to learn more about participating.

In addition, the Putnam Consortium Innovative Assessment Executive Team and Navvy Education will work with a communications vendor to develop and produce a series of short informational videos that introduce the Navvy assessment system to interested LEAs. The videos will explain the innovative assessment system is clear language and will allow LEAs to be introduced to the system without having to drive to an in-person meeting.

Given the current rate of growth combined with the support and leadership from the legislative and governing bodies in the state of Georgia, we have confidence that we will be able to scale Navvy within the period of the Demonstration Authority. To ensure success of implementation, the scaling plan includes three key points:

- Provide LEAs multiple entries points to participation, moving at a pace that allows schools to implement innovative assessments successfully
- Provide guardrails for participation and oversight for entry into participation
- Provide technology and capacity supports to LEAs during all levels of participation

Multiple Entry Points to Participation

To ensure LEAs are prepared for successful implementation, there are four tiered levels of participation in this innovative system: Full Participant, Partial Participant, Full Affiliate, Partial Affiliate. All members will administer Navvy assessments to provide real-time, actionable feedback about students'

competencies of State standards. Only participating members will use Navvy for accountability purposes. Both participating and affiliate members agree to implement Navvy assessments with fidelity to have the greatest impact on teaching and learning, to preserve the security of the assessments, and to produce valid data for assessing the validity and reliability of the assessments. LEAs will enter the pilot as an affiliate member and are expected to transition to full members.

This tiered participation approach allows districts and schools to implement Navvy assessments with those teachers and leaders that the district leadership feels are most ready, whether that is in a single content area or focused on a single grade span, and to transition to stronger level of participation when ready. The benefit of being an affiliate for the first year is to allow students, teachers, and school leaders to learn the Navvy system and shift to the educational mindset that is required to leverage the benefits of the information the assessments provide. This mindset includes a commitment to on-going assessment that informs teaching practices to customize learning to meet specific needs of individual students and a commitment to re-assessing and continuing to differentiate instruction to help the student reach the level of competency the standard requires.

Full Participant
We have been describing the full model throughout this application whereby districts and schools implement Navvy assessments in ELA, mathematics, and science in the grades depicted in Table 1 earlier in this application and use Navvy assessments to produce annual summative determinations for accountability.

Partial Participant
Districts implementing this model would select at least one content area (e.g., mathematics) and implement it in at least one grade span. These districts will use Navvy assessments, in lieu of the statewide assessments, to produce annual summative determinations for accountability for the grade levels and content areas that Navvy assessments are implemented. These districts will use the statewide assessments to produce annual summative determinations for accountability for the grade levels and content areas that Navvy assessments are not implemented.

Full Affiliate
Full affiliates implement Navvy as depicted in Table 1 for formative feedback, as Full Participating districts do, but do not use Navvy assessments to produce annual summative determinations for accountability. Thus, these districts are fully participating with the statewide assessment system for accountability.

Partial Affiliate
Districts implementing this model would start with a subset of content areas (e.g., mathematics) and/or a subset of grade levels (e.g., middle school) for diagnostic feedback, but not use the Navvy results to produce annual summative determinations for accountability for any content areas or subjects. Thus, these districts are fully participating with the statewide assessment system for accountability.

Providing these four levels of participation will help districts more easily engage in the pilot, a key to successful scaling to all districts.

Guardrails for Participation

Requirements and commitments differ in some respects for participating and affiliate districts, as described in the sections below. Participating or affiliate LEAs alike provide two commitments: Implementation with fidelity and collaborative leadership. Appendix D-2 provides signed Memos expressing these commitments from the 12 participating and affiliate LEAs in the Putnam Consortium.

Implementation with fidelity. Participating and affiliate districts commit to implementing the Navvy assessment system with fidelity for the grades and/or content areas where it is implemented. Implementation with fidelity includes participating in external training provided to implement the system and continued local support for leaders and teachers as needed on how to implement the system with success: how to administer the assessments, how to keep the assessments secure, how to interpret results from the assessments, and how to use assessment results to inform instruction and support personalized learning for our students. Fidelity implementation also includes a commitment to shifting to an educational mindset and practices follow with the transition to on-going assessments that inform teaching practices to customize learning to meet specific needs of individual students. That is, to leverage assessment feedback to celebrate student successes and identify standards where students need additional support and to providing differentiated instruction to help the student reach the level of competency the standard requires.

Collaborative Leadership. In order to be a participating or affiliate LEA, districts must commit to having representatives on the Putnam Consortium Innovative Assessment Leadership Team and working with the leadership team members to provide input and feedback on the innovative assessment and accountability system. The LEA commits to being a collaborative member of the consortium and to being a partner in innovating assessment and accountability solutions that will best support our common goal of helping students learn and excel.

Requirements for participating districts. Participating LEAs (full or partial) must have met its performance contract goals from the last year. Participating LEAs must have demonstrated the leadership and educator capacity to participate effectively. Such local capacity is evaluated through a systematic interview and vetting process. Participating LEAs provide commitments to implement with fidelity and participate in collaborative leadership. Until comparability is established, participating LEAs are required to administer Georgia statewide assessment system (Georgia Milestones) at least once per grade span, depending on the implementation model (see Table D-1), which will serve as both an internal and external audit of school and district performance.

Requirements for affiliate districts. Affiliate LEAs (full or partial) are not required to meet performance contract goals from the last year. All LEAs are expected to have the leadership and educator capacity to participate as an affiliate effectively, as affiliates are using the Navvy assessments to support an effective formative assessment process only and all LEAs currently implement local formative assessment systems. Affiliate LEAs provide commitments to implement with fidelity and participate in collaborative leadership. Affiliate LEAs are required to fully participate in the Georgia statewide assessment system (Georgia Milestones).

Technology and Capacity Supports

All participating LEAs will have technology and capacity supports to transition to Navvy assessments, each discussed in turn.

Technology supports. A potential barrier to participation in a through-year, web-based assessment system is lack of technology infrastructure to support online assessment. Currently, the statewide assessment system is administered 100% online for school districts in Georgia, so participating LEAs are expected to have the technology infrastructure including devices and internet connectivity to deliver Navvy. The nature of Navvy being a through-year assessment system where assessment windows are decided by school districts (or even schools or teachers) means fewer concurrent assessments are being offered within the same school. This non-concurrent assessment relieves some burden of the number of devices required for statewide assessment, in comparison to current statewide testing that occurs in the same testing window for all students within a school.

Capacity supports. See section "Prior Experience, Capacity, and Stakeholder Support" for a description of the professional development that participating LEAs will be provided to ensure that all LEAs have the leadership and capacity required to implement an innovative assessment system.

Demographic Similarity

Currently, 7% of school districts in Georgia use Navvy assessments, and these districts serve a total of 75,582 students. The Putnam Consortium is in current conversations with 3-5 additional LEAs who are interested in joining the consortium, and in early spring will, in collaboration with Navvy Education, hold the next informational session that is open to any LEA interested in learning more about joining the consortium. The Putnam Consortium, thus, anticipates by August of 2019, the start of Year 1 of the IADA period, having additional participating LEAs. Our current set of set of participating LEAs reflect geographically and demographically diverse LEAs and schools, including diversity described in section 1111(c)(2) of the ESSA, and reflect representative diversity in terms of student achievement. The Putnam Consortium is committed to ensuring, during the Demonstration Authority period, that the inclusion of additional LEAs and schools will continue to reflect geographic and demographic diversity that is representative of the state's population.

Table D-2 shows the racial and ethnic demographic information for the state of Georgia and for the current set of districts committed to participating in the innovative assessment program during the initial year of the Demonstration Authority. The distribution of student subgroups in the participating LEAs is comparable to the state of Georgia.

Table D-2
Student Subgroup Distribution for the State of Georgia and Participating LEAs

	Georgia	Participating LEAs
English Learners	9.7%	4.4%
Economically Disadvantaged	65.1%	61.7%
Students with Disabilities	13.0%	11.3%
Asian/Pacific Islander	4.1%	2.6%
Black/African American	38.0%	39.4%
Hispanic	15.6%	11.1%

White	38.4%	42.1%
Multiracial	3.7%	4.7%

Figure D-1 shows geographic diversity, with participating LEAs from north Georgia, middle Georgia, coastal Georgia, South Georgia, and Southwest Georgia.

Participating LEAs are also representative of the state with respect to past performance on the state accountability measure (CCRPI). The average CCRPI scores across participating LEAs in 2017-2018 was comparable to the state average, with an average 4.7 points less than the state average. Figure 2 provides the LEA's individual CCRPI scores and shows that participating LEAs represent a range of LEAs scoring above, at, and below the state average CCRPI score.

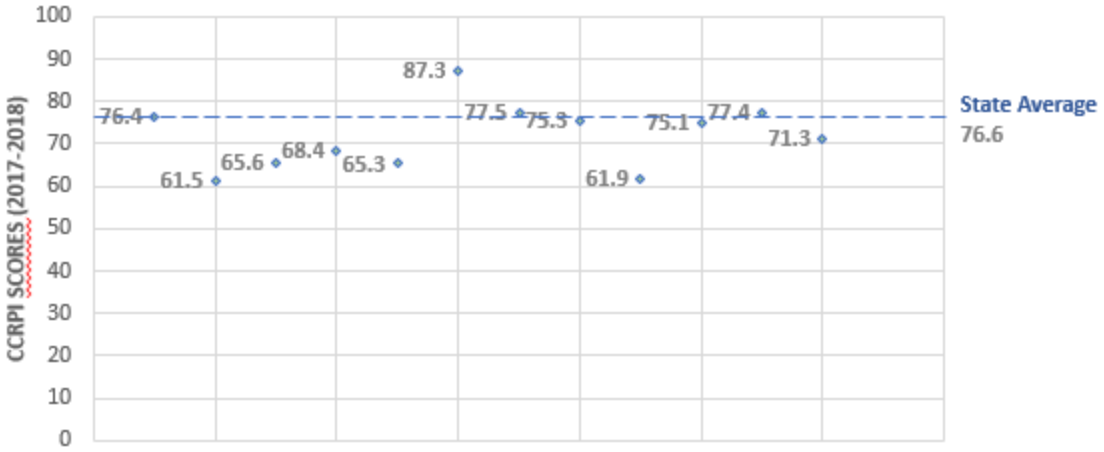

Figure D-2. CCRPI scores for participating LEAs

The Putnam Consortium Innovative Assessment Executive Team commits that it will continue to maintain this demographic representation as it adds new districts throughout the Demonstration Authority. The consortium will do so by updating the information in Table 2 each year and by purposefully recruiting Georg school districts according to diversity targets as needed.

3) If the system will initially be administered in a subset of schools or LEAs in a State –

(i) The strategies the SEA, including each SEA in a consortium, will use to scale the innovative assessment to all schools statewide, with rationale for selecting those strategies;

(ii) The strength of the SEA's or consortium's criteria that will be used to determine LEAs and schools that will initially participate and when to approve additional LEAs and schools, if applicable, to participate during the requested demonstration authority period; and

(iii) The SEA's plan, including each SEA in a consortium, for how it will ensure that, during the demonstration authority period, the inclusion of additional LEAs and schools continues to reflect high-quality and consistent implementation across demographically diverse LEAs and schools, or contributes to progress toward achieving such implementation across demographically diverse LEAs and schools, including diversity based on enrollment of subgroups of students described in section 1111(c)(2) of the Act and student achievement. The plan must also include annual benchmarks toward achieving high-quality and consistent implementation across participating schools that are, as a group, demographically similar to the State as a whole during the demonstration authority period, using the demographics of initially participating schools as a baseline.

<u>State of Georgia</u>

A report will be provided upon request to the State Board of Education (SBOE) describing the progress made by all innovative assessment systems. At that time, all districts/consortia will have the opportunity

to include additional school districts in the consortium for the following year. Districts that choose to join one of the approved innovative assessments would be required to seek amendment of their state performance contracts with the SBOE, which currently require them to use only Georgia Milestones.

In order to select the innovative assessments that would be part of the program, the SBOE held a competition in summer of 2018. Initial approval of the three participants was based on the following criteria (see Appendix A-8):

- Whether their inclusion reflects the capacity and ability for high-quality and consistent implementation across demographically diverse districts and schools and would contribute to progress toward achieving such implementation across demographically diverse districts and schools, including diversity based on enrollment of subgroups of students described in section 1111(c)(2) of the Act and student achievement.
- The strength of their description of their proposed assessment system – including the type of assessment (i.e., single summative assessment, series of interim assessments, computer adaptive, etc.), administration mode (i.e., technology-based, paper/pencil, etc.), grades and content areas and/or courses to be included, purpose of the assessments, and intended interpretations and uses of the results – with an emphasis on the innovative nature of the piloted assessments and need for participation in this pilot, including anticipated benefits for the district, schools, and for student learning.
- Whether they were in at least the planning stage on the fidelity continuum, indicating the intent to meet all requirements.
- Their signed assurances that the district/consortium:
    - Had read USED's New Peer Review Guidance and that their efforts would be in alignment with a federal peer review and/or demonstration authority submission.
    - Will assess students as necessary to establish comparability per ESSA statute and USED regulations – and that they were in at least the planning stage on the following criteria:
        - Aligns with Georgia's academic content standards (breadth and depth of those standards for all grade-levels and content areas or courses assessed)
        - Identifies which students are not making progress toward Georgia's academic content standards
        - Produces results that are comparable to the Georgia Milestones assessments (include methods in the narrative or as attached evidence)
    - Will meet the following technical quality requirements – and that they were in at least the planning stage on the following criteria:
        - Works with expert(s) (external partner or in-house) to ensure technical quality, validity, reliability, and psychometric soundness of the innovative assessment
        - Establishes validity and reliability evidence consistent with nationally recognized testing standards
        - Assesses student achievement based on state academic content standards in terms of content and cognitive processes, including higher-order thinking skills, and adequately measures student performance across the full performance continuum
        - Produces individual and aggregate reports that allow parents, educators, and school leaders to understand and address the specific needs of students
        - Provides reports in an easily understandable and timely manner to students, parents, educators, and school leaders
        - Developed, to the extent practicable, consistent with the principles of universal design for learning

- Will provide required accommodations to students as required by state and federal law regulations – and that they were in at least the planning stage on the following criteria:
    - Appropriate accommodations will be provided for students with disabilities as defined via their IEP or IAP (provide list of available accommodations as an attachment)
    - Appropriate accommodations will be provided for English Learners as defined via their EL/TPC (provide list of available accommodations as an attachment)
- Will deliver the innovative assessment in line with the state adopted guidelines for test security and integrity, including agreeing to allow the Governor's Office of Student Achievement (GOSA) to monitor test administration and will provide GOSA with data needed for audits to ensure test security and integrity – and that they were in at least the planning stage on the following criteria:
    - Develops and implements policies and procedures to ensure standardized test administration (i.e., test coordinator manuals, test administration manuals, accommodations manuals, test preparation materials for students and parents, and/or other key documents provided to schools and teachers that address standardized test administration and any accessibility tools and features available for the assessments)
    - Delivers training for educators and school leaders to ensure a standardized test administration
    - Develops and implements a monitoring process to ensure standardized test administration
    - Develops and implements policies and procedures to prevent test irregularities and ensure the integrity of test results
    - Develops and implements policies and procedures to protect the integrity and confidentiality of test materials, test-related data, and personally identifiable information
- Will meet stakeholder engagement requirements – and that they were in at least the planning stage on the following criteria:
    - Develops assessment in collaboration with stakeholders representing the interests of students with disabilities, English learners, and other vulnerable populations; teachers, principals, and other school leaders; parents; and civil rights organizations
    - Develops capacity for educators and school and district leaders to implement the assessment, interpret results and communicate with stakeholders
- Will ensure that the percentage of all students (and the percentage of students in each subgroup) assessed is at least as high as the percentage assessed using the Georgia Milestones assessments in the year previous to the start of the pilot – and that they were in at least the planning stage on the following criteria:
    - Produces a single, summative score for every student
    - Produces a comparable growth measurement that can be used for the Progress CCRPI component
    - Produces a comparable achievement measurement that can be used for the Content Mastery and Closing Gaps CCRPI components (alignment to Beginning, Developing, Proficient, and Distinguished Learner achievement levels)
    - Produces a comparable literacy (Lexile) measurement that can be used for the Readiness CCRPI component

        - Produces subgroup results consistent with federal accountability and reporting requirements (e.g., race/ethnicity, gender, English Learners, students with disabilities, migrant, homeless, foster, parent on active military duty)
    - Will ensure that there is no conflict of interest (financial or otherwise) for the interested parties in participating in the pilot program and that all activities that are related to this pilot shall abide by local procurement requirements.

The selection criteria described above also will be applied to the selection and inclusion of additional LEAs and schools within the existing approved pilots. This will ensure that any additional participants continue to reflect high-quality and consistent implementation across demographically diverse LEAs and schools and contributes to progress toward achieving such implementation across demographically diverse LEAs and schools, including diversity based on enrollment of subgroups of students described in section 1111(c)(2) of the ESEA and student achievement.

While each participating district/consortium will work with technical experts to design and implement its assessments, Georgia will contract with an external technical assistance provider to provide independent technical assistance to the pilot districts as well as provide an annual report of activities, needs, and next steps.

Georgia also will contract with an external provider to evaluate the alignment between the pilot assessment systems and the state academic content standards, the Georgia Standards of Excellence (GSEs) as well as the comparability between the pilot assessment systems and the state's assessment system, Georgia Milestones. This process will help maximize the technical quality of the pilot assessment systems, establish comparability, and establish a system of continuous improvement.

All participating districts/consortia are required to provide an annual report to the State that addresses annual benchmarks toward achieving high-quality and consistent implementation across participating schools that are, as a group, demographically similar to the State as a whole during the demonstration authority period, using the demographics of initially participating schools as a baseline. These reports will inform the state's annual report to the U.S. Department of Education on the overall progress of the state's implementation.

Prior experience, capacity, and stakeholder support

1) **The extent and depth of prior experience that the SEA, including each SEA in a consortium, and its LEAs have in developing and implementing the components of the innovative assessment system. An SEA may also describe the prior experience of any external partners that will be participating in or supporting its demonstration authority in implementing those components. In evaluating the extent and depth of prior experience, the Secretary considers –**
    - **(i) The success and track record of efforts to implement innovative assessments or innovative assessment items aligned to the challenging State academic standards under section 1111(b)(1) of the Act in LEAs planning to participate; and**
    - **(ii) The SEA's or LEA's development or use of –**
        - **(A) Effective supports and appropriate accommodations consistent with 34 CFR part 200.6(b) and (f)(1)(i) and section 1111(b)(2)(B)(vii) of the Act for administering innovative assessments to all students, including English**

learners and children with disabilities, which must include professional development for school staff on providing such accommodations;

(B) Effective and high-quality supports for school staff to implement innovative assessments an and innovative assessment items, including professional development; and

(C) Standardized and calibrated tools, rubrics, methods, or other strategies for scoring innovative assessments, with documented evidence of the validity, reliability, and comparability of annual summative determinations of achievement, consistent with 34 DFR part 200.105(b)(4) and (7).

State of Georgia

The state of Georgia has prior experience in developing both traditional and innovative formative assessment systems.

Georgia Milestones is the state's current summative assessment system. With the transition to Georgia Milestones beginning in 2014-2015, the state has expanded the use of technology to support assessment. In 2018-2019, Georgia Milestones will be administered 100% online, except for students who cannot interact with a computer due to their disability. Additionally, Georgia Milestones has included technology-enhanced items since 2015-2016. Georgia Milestones *Substantially Met Requirements* in its April 2018 federal peer review decision letter from the U.S. Department of Education.

Georgia has recently developed and launched Keenville, a game-based formative assessment for grades 1 and 2. In Keenville, students develop avatar Keens and navigate the town, helping Keens solve problems by engaging in literacy and mathematics challenges. Keenville formatively assesses student understanding of English Language Arts and mathematics standards in grades 1 and 2, with content ranging from Kindergarten to grade 3 to meet the needs of all students. The development process included significant input from Georgia educators to identify the appropriate standards for inclusion, brainstorm game ideas, identify the type of feedback that would benefit their instruction, design dashboards and data reporting elements, and test game prototypes with students and provide feedback. The development process also included work with external assessment experts and gaming experts to carry out test development activities and develop Keenville games and dashboards. Dashboards populate with data real-time, enabling educators to review student performance and use it to inform instruction. The development of this innovative assessment, along with the integration of Keenville into the state's Statewide Longitudinal Data System (SLDS) demonstrates Georgia's capacity to be a leader in developing and implementing innovative assessment solutions.

All three consortia have experience with their respective assessment systems and are working with external experts who have expertise in innovative assessments and the requirements outlined in this section.

The state of Georgia will develop and monitor an implementation plan to review each consortium's progress in meeting the requirements outlined in part ii of this section.

Cobb County School District

With CTLS-Assess, the CCSD will ensure that all students have access to effective supports and appropriate accommodations consistent with relevant federal and state laws by using a consistent set of support and accommodation requirements and resources. CTLS-Assess will utilize the same accommodation guidelines as Georgia Milestones and will be consistent with the statewide system moving forward as the state potentially transitions from the current state assessment system to CTLS-Assess.

Supports for Educators, Students, and Parents

CTLS-Assess will produce individual student summative reports consistent with the requirements required by section 1111(b)(2)(B)(x). CTLS-Assess provides easy-to-understand, visually pleasing reports that are available online or in PDF format. Individual student assessment reports will allow teachers and parents to better understand and address specific learning needs of students immediately after assessments are administered. Student reports will allow students to more effectively and efficiently take ownership of their learning. School and district level reports allow internal and external stakeholders to more thoroughly understand how schools are performing.

Partnering with GaDOE and Professional Development Experts

As indicated throughout this application, this Innovative Assessment pilot is fully supported by the state of Georgia and the GaDOE will provide oversight for implementation.

The robust menu of training opportunities developed and utilized in Cobb County School District for CTLS-Assess will be utilized to support CTLS training and support for leaders, teachers, and support staff (see Appendix B-1 for training CTLS Assess options). These trainings are designed to be delivered in 30-45-minute sessions which minimizes the need for substitute teacher utilization. Training topics include, Navigating the Dashboard, Sound Assessment Practices, Data Analysis for Teachers, Data Analysis for Administrative Teams, Item Builder, Assessment Builder, etc. Professional learning sessions for CTLS-Assess are available through face-to-face trainings as well as through a digital format.

<u>Georgia MAP Assessment Partnership</u>

NWEA currently partners with over 9,800 education organizations worldwide to provide assessment solutions, reports, instructional resources, professional learning, and research services. These partnerships include school districts of various sizes; state departments of education; private schools and charter schools; foundations; international schools; and national education organizations such as the Bureau of Indian Education.

NWEA demonstrates capacity for large-scale online testing through statewide administrations in Nebraska, Arkansas, and Nevada; and through our partnerships with national education organizations such as the Bureau of Indian Education. NWEA has a history of delivering large-scale assessments across the country, including in some of the country's largest school districts, such as Chicago Public Schools in Illinois, Charlotte-Mecklenburg Schools in North Carolina, and Baltimore County Public Schools in Maryland.

Each of the GMAP districts bring a depth of knowledge and a wealth of experience to the GMAP consortium. As each district will have a main contact, each will have many educators participate in the process of developing Georgia MAP. Many of the districts have been a partner with NWEA for several

years and have developed a great understanding of how Growth MAP works and how to ensure a successful administration. Please see Appendix C-3 for résumés of key GMAP district leaders.

Case Study: Chicago Public Schools Celebrates Student Achievement

Chicago Public Schools (CPS), the nation's third-largest school district, began assessing its K–8 students across the district with MAP Growth in 2012. CPS leaders worked diligently to be deliberate in the tests that were administered within the district. Combining the actionable information from our rich reports with investments in social and emotional learning programming and training, CPS has seen unprecedented growth and progress across all demographics.

CPS students are scoring higher in reading and mathematics than their national peers on MAP Growth assessments, with consistent improvement over the past five years. Multiple independent studies have shown that CPS students are making academic gains faster than their peers. In addition, CPS celebrated its highest graduation rate on record, growing from 56.9 percent in 2011 to 78.2 percent in 2018 — a 37 percent increase.

The CPS 2018 Academic Progress Report demonstrated growth for the city's students "by every measure," including not only graduation rate, but also record-high mathematics and reading MAP Growth scores, a record $1.33 billion in scholarships, and the percentage of freshman on track to graduate (89.4 percent).

"Chicago's record-breaking gains shows that our students, educators, principals, and parents have made huge strides and are working together to build on this momentous academic success for students across the city," said CPS CEO Dr. Janice K. Jackson. "As a district, we are committed to building upon this progress by continuing to invest in strong academic programs and increasing equity and access to ensure every student in every neighborhood has the high-quality education they deserve."[22]

CPS uses the following NWEA products and services:

- Full-time NWEA account and program management
- Professional learning to support districtwide use of NWEA assessments
- MAP Growth Mathematics and Reading districtwide for students in grades 2–8
- MAP Reading Fluency in sixty schools for students in grades K–2
- MAP Skills in eighty schools for students in grades 3–5
- MAP Growth Science for use with Next Generation Science Standards (NGSS) in some schools for students in grades 3–8
- Spanish-language version of MAP Growth Mathematics for students in grades 2–8
- Spanish-language version of MAP Growth Reading as a pilot program
- Spanish-language MAP Reading Fluency as a pilot program
- Instructional Report is used for school improvement planning
- MAP Growth assessment data is used districtwide for high stakes decisions such as:
    - Promotion to the next grade in grades 3, 6, and 8
    - Course placement
    - Entrance into selective academic center programs and elite high schools

[22] City of Chicago (September 11, 2018.) *Annual CPS Academic Progress Report Shows Record-Breaking Student Achievements.* Office of the Mayor.

- Teacher evaluation
- Principal evaluation
- School Quality Ratings Policy

Effective Supports and Appropriate Accommodations

As standard practice, NWEA develops products considering universal design and accessibility standards from the start. For example, alternative text descriptions (alt-tags) for images are an important feature on a website to provide access to those using screen readers. Alt-tags provide descriptions of pictures, charts, graphs, etc., to those who may not be able to see the information. Laying this foundation means NWEA products are accessible for students using various accommodations.

Please see descriptions of supported accommodations, universal features, and designated features for MAP Growth throughout this application. The new through-year test designs and assessments will be built upon existing supported accommodations and features.

Putnam Consortium

The Putnam Consortium in collaboration with Navvy Education has demonstrated success in implementing Navvy. The state legislature and the State Board of Education have provided support for and encouragement of the innovation of Navvy assessments beginning three years ago and evidenced by collaboration and support culminating to the Georgia Innovative Assessment Pilot established by Georgia Senate Bill 362. The Putnam Consortium using the innovative Navvy assessment system was approved by the State Board of Education and is currently being implemented; the Putnam consortium is not proposing an innovative assessment system that will be built for the future, but instead a system that is being actively used by 12 school districts.

In addition, the state is seeking funds to support the innovative assessment districts/consortia with annual technical assistance and a technical evaluation towards the end of the demonstration authority. The Putnam Consortium is committed to continuing the practice of gathering rigorous technical evidence to demonstrate that the Navvy innovative assessment system continues to meet all of the requirements of the Demonstration Authority.

Founder of Navvy Education, Dr. Laine Bradshaw, provided technical expertise to design a diagnostic assessment system for the Partnership for Assessment of Readiness for College and Careers (PARCC) at the time when PARCC was a consortium of 11 states. The system was an online assessment system designed to diagnose mastery of 4-6 major topics for each grade level in Grades 3-8 mathematics and for elementary level English language arts decoding skills. With no previous examples of implementing diagnostic psychometric methodology in practice to guide implementation, Dr. Bradshaw conducted research to answer key questions to inform the design of the system including assessment test length, calibration methods, and field test designs (Bradshaw, 2014; 2015) and this design was approved by the PARCC technical advisory committee. Dr. Bradshaw then, as a subcontractor, conducted the item analyses, psychometric calibrations, and evaluations of technical quality for the PARCC diagnostic assessment system. Thus, Dr. Bradshaw has experience in designing a diagnostic assessment system for large scale use and independently leading the technical aspects that require psychometric analyses, evaluation, and documentation.

The Center for Assessment has a long history of leadership in developing rich and innovative assessment systems to support instructional reforms for enhancing student learning. Most noteworthy, as the lead technical partner and key policy advisor for New Hampshire's innovative assessment and accountability pilot, Performance Assessment of Competency Education (PACE), the Center is ensuring the quality and rigor of PACE performance assessments and designing methods for evaluating the comparability of student results across districts. PACE served as a model for creation of the Innovative Assessment and Accountability Demonstration (IADA) in the recently-passed ESSA, which opened the door for seven states to pursue the type of innovation experienced in New Hampshire.

The Center for Assessment supported both New Hampshire and Louisiana in winning approval as the first two states granted flexibility under the IADA in 2018 and continues to serve as a critical technical and policy partner in New Hampshire as well as serving as a lead technical partner on Louisiana's innovative assessment system.

The Center's work in Gwinnett County, Georgia, Pittsburgh, Pennsylvania, Polk County, Florida, and Guilford County, Connecticut are further examples of partnerships with school districts interested in the design and development of innovative, balanced assessment systems.

The Center will provide technical expertise and policy assistance as needed for the Putnam Consortium. See Appendix D-9 for detailed description of The Center's corporate capacity to fulfill this role.

The SEA's or LEAs development or use of—
Effective supports and appropriate accommodations consistent with 34 CFR part 200.6(b) and (f)(1)(i) and section 1111(b)(2)(B)(vii) of the Act for administering innovative assessments to all students, including English learners and children with disabilities, which must include professional development for school staff on providing such accommodations;

The Putnam Consortium will ensure that Navvy provides all students with access to effective supports and appropriate accommodations consistent with relevant federal and state laws by using a consistent set of support and accommodation policies. Navvy has adopted the same policies and set of accommodations as the state in its first two years of administration and will continue to be consistent with the statewide system moving forward.

Navvy provides for the participation of all students pursuant to sections 1111(b)(2)(B)(vi and xiii) in three main ways: (1) the Navvy innovative assessment system is accessible for students with disabilities and English learners and (2) the Navvy innovative assessment system and assessment delivery platform provides appropriate accommodations as specified in a student's Individualized Education Plan, and (3) Navvy is inseparable from regular curriculum and instruction so all students will participate as a result of the regular teaching and learning cycle. The Putnam Consortium is committed to ensure that at least 95% of all students in participating districts fully participate in the Navvy assessments. Further, the Putnam Consortium will monitor all participating schools and districts to ensure that at least 95% of students in each subgroup of students fully participates in Navvy.

Accessibility for SWDs and ELs. Navvy meets with requirements specified in section 1111(b)(2)(B)(xiii) as described under "Element 5: Provide for participation of all students" section.

Technology-enabled Accessibility Features. The Navvy assessments have the following Accessibility options: Adjust font size, adjust color scheme (e.g., Yellow on navy, White on black, Black on violet), and

adjust zoom. Navvy assessments can be used with regular or braille keyboards and a touch screen or a mouse. Navvy assessments use an accessible color palette that meets the minimum color contrast ratio of 4.5:1 for the vision impaired. Navvy also provides an export of assessments as required for the district then printing the assessment in Braille. Navvy provides a highlighter tool and an answer eliminator tool for all items.

Provides Appropriate Accommodations. The Navvy system also provides for the participation of all students in innovative assessments because instructional and assessment accommodations are available for students with disabilities, as well as students for whom English is not their native language. Navvy assessments support free screen readers (e.g., Google Read and Write) for read aloud accommodations. Additonally, on the Navvy assessments, districts are allowed to provide additional accommodations that are not dependent upon the Navvy technology but are detailed in the state's Accommodations Manual. For example, districts may provide seating accommodations (e.g., administer the assessments individually to students or in small groups or using adaptive furniture), presentation accommodations (print assessments in Braille, sign assessments and materials, or read assessment aloud), response accommodations (e.g., Braille keyboard, students point to answers), and scheduling accommodations (e.g., frequent breaks, extended time, optimal time of day for testing).

(A) Effective and high-quality supports for school staff to implement innovative assessments an and innovative assessment items, including professional development; and

Participating LEAs need support for their district and school leaders, their assessment and content leaders, and their teachers. A key premise of the Navvy theory of action is that local education leaders are supported by the Putnam Consortium and by Navvy Education. Thus, the Putnam Consortium is committed to ensuring adequate supports are provided.

These supports will focus on high-quality training sessions to provide teachers and administrators with the supports needed to be able to interpret and appropriately use results from Navvy. Teachers' abilities to understand and use assessment results to inform instructional decisions plays an integral role in student learning (e.g., Popham, 2017; Engelsen & Smith, 2014; Black, Harrison, Lee, Marshall, & William, 2004) and administrators' understanding of assessment plays a critical role in decision-making and supporting teachers (e.g., Fink, Markholt, & Bransford, 2011; Impara & Plake, 1996; McMillan, 2000). Teachers and administrators, however, often lack the assessment literacy necessary to adequately use results (e.g., Xu & Brown, 2016; Stiggins & Suke, 2008) and may often *mis*use assessment data (DeLuca, 2012; Popham, 2009). Training sessions will aim to fill this gap in critical knowledge and will be informed by professional best practices outlined as critical by assessment literacy initiatives (e.g., CCSSO, 2011; DeLuca & Klinger, 2010; Xu & Brown, 2016; Roeber, 2011).

The Putnam and leaders of Navvy Education have a track record of success in implementing Navvy and will work together to provide implementation supports for Navvy. Navvy to date has been successfully implemented with a large number of students and this success is due, in part, to the professional development provided to administrators, curriculum and assessment directors, and teachers.

For the Navvy assessments, all new joining members were provided face-to-face, on-site professional development that included: (a) an overview of implementation from an administrative perspective, (b) an in-depth introduction to the Navvy components of the assessment system including how its differences from traditional assessments enable new feedback for schools and how to make appropriate interpretations of Navvy results, (c) a hands-on training of how to use the online technology, and (d) an

introduction to the assessment design and development from a content perspective. This level of support for participating LEAs has proven to be a sufficient level of support for the district to then use internal structures to launch implementation, though individual districts have varying efficiencies in scaling within district. Putnam County leadership and Navvy Education personnel continue to be accessible to districts for questions and supports for implementation; additionally, participating LEAs receive supports through collaborative monthly meetings with the Putnam Consortium Innovative Assessment Leadership Team.

As a strategy for scaling to additional LEAs, Putnam County, the Putnam Consortium Innovative Assessment Executive Team, and Navvy Education will seek to provide additional supports in three primary ways: (1) by holding quarterly innovative assessment summits, (2) by partnering with professional development experts who have had immense success in training educational leaders, and (3) by creating accessible, web-based training content to facilitate full-scale implementation supports for all participating administrators and teachers.

Quarterly Innovative Assessment Summits

Quarterly summits provide the organizational form for participating LEAs to learn more about Navvy, receive hands-on training for Navvy, and participate in shared decision making for Navvy. The summits will provide in-person training sessions for LEAs at various levels of participation, including (1) *Introduction to* Navvy, an presentation providing information for districts interested in learning more about Navvy assessments and the corresponding accountability system; (2) *On-boarding for Navvy*, a training for getting new members started; (3) *Content Collaboratives*, meetings for in-person collaboration, discussion, and/or professional development about assessment content; (4) *Implementation Collaboratives*, meetings for collaboration, discussion, and/or professional development around implementation opportunities and challenges. These break-out groups through in-person meetings will facilitate collaboration among districts and feedback for continuous improvement. The Putnam Consortium Innovative Assessment Executive Team and Navvy Education will facilitate the meetings and will partner with summit hosts in different locations across the state. See letters of collaboration for hosts including the University of Georgia College of Education, First District RESA, and Putnam County in Appendix D-10.

Partnering with Professional Development Experts

The Putnam Consortium Innovative Assessment Executive Team and Navvy Education will partner with the Institute for Performance Improvement (the “Institute”) to provide school leaders with training that will effectively support implementing Navvy with fidelity and success. See letter of collaboration from the Institute Part 4: Other Attachments. The Institute is currently partnering with the GaDOE to train and assess state and regional education center staff assigned to support district and school improvement, and, under ESSA, will train and assess principal supervisors and other district leaders, school leadership teams and academic coaches supported and served by the GaDOE and the Regional Education Service Agencies, with state and regional staff serving as peer coaches. This training, term the LAUNCH! Training, is further described in Appendix D-6. For Navvy, the Institute will develop an add-on training to LAUNCH! that is tailored for supporting district level personnel to implement Navvy successfully using their evidence-based approach that ensures that participants can demonstrate proficiency, or they are provided feedback to determine what they have to do to reach performance. Trainings will feature embedded videos so that users of Navvy will to experience peer-to-peer learning that has been proven so valuable.

The Institute describes this add-on training addressing problems of practice that are consistently identified by participants in every state in which they work:

> (1) Weakness of teachers to teach effectively to the standards at the needed depth of rigor.
> The Institute has recognized that this is rooted in multiple factors, one of which Navvy addresses via performance support. Because the standards are "unpacked" when viewed by teachers, it reduces the variability inherent in the process of individual teachers defining the elements and their application at the Depth of Knowledge required from recall to fluent demonstration. This is particularly valuable for novice teachers, but is also useful to ensure that veteran teachers do not assume that their practices are resulting in the learning transfer to application, and fail to teach in ways that support learning at the required Depth of Knowledge.
>
> (2) Weakness of administrators in conducting classroom observations and feedback, and effectively evaluating teachers.
> Likewise, the performance support provided via Navvy allows administrators to understand the standards at the element level, and at the ranges of Depth of Knowledge, even though they may not be experts in the academic area of teachers they are observing. Reducing variability inherent in human performance in this context, supports teaching and learning, as well as effective performance management and instructional leadership."

Accessible Content for Full-scale Support
Online modules will be created to provide the necessary information for a district to launch Navvy. Content for online modules will be created by Navvy Education and members of the Putnam Consortium Innovative Assessment Leadership Team and online modules will be produced by a communications vendor.

2) The extent and depth of SEA, including each SEA in a consortium, and LEA capacity to implement the innovative assessment system considering the availability of technological infrastructure; State and local laws; dedicated and sufficient staff, expertise, and resources; and other relevant factors. An SEA or consortium may also describe how it plans to enhance its capacity by collaborating with external partners that will be participating in or supporting its demonstration authority. In evaluating the extent and depth of capacity, the Secretary considers –

(i) The SEA's analysis of how capacity influenced the success of prior efforts to develop and implement innovative assessments or innovative assessment items; and

(ii) The strategies the SEA is using, or will use, to mitigate risks, including those identified in its analysis, and support successful implementation of the innovative assessment.

<u>State of Georgia</u>

Since the transition to the Georgia Milestones Assessment System in 2014-2015, Georgia has expanded the use of technology to support assessment. During the 2018-2019 school year, 100% of Georgia Milestones assessments will be administered online.[23] Additionally, Georgia Milestones has utilized technology-enhanced items since 2015-2016. Georgia's ability to transition successfully to online

[23] Paper/pencil assessments are available for accommodated students who cannot interact with a computer due to their disability.

assessments and technology-enhanced item types was driven by the state's investment in technological infrastructure for educational purposes.

In April of 2012, Governor Nathan Deal signed an executive order creating a task force to implement digital learning in Georgia's K-12 schools. On December 18, 2013, the task force released its final report that included 12 recommendations divided into three areas: Infrastructure, Digital Content and Courses, and Blended and Competency-Based learning.

In the spring of 2014, grant funding was established to provide infrastructure upgrades that would allow school districts to receive increased internet bandwidth from the State's K-12 network. In June of 2015, all school districts received a single internet connection bandwidth upgrade equal to 100 Mbps per school. Over the next three years, grant funding continued that supported additional infrastructure upgrades that increased internal school capacity and wireless access. These grant funds also included student devices for schools that served economically disadvantaged areas of the state.

Georgia is currently analyzing the utilization of the internet bandwidth being consumed by school districts and will be preparing a request to support upgrades in 2020-2021.

This support of technological infrastructure at the state level, combined with local support, has led to the success of Georgia Milestones and Keenville implementation and ensures Georgia is prepared to support multiple innovative assessments that utilize online assessments and troubleshoot problems that may occur.

As described previously, Georgia law established the state's innovative assessment pilot and includes the necessary requirements to enable Georgia to implement the innovative assessment pilot and scale it statewide.

Georgia will be seeking additional funds from the General Assembly to hire five state-level positions to support the innovative assessment pilot. As previously noted, Georgia believes the General Assembly will provide the funding for these positions.

A Program Manager will manage activities and projects related to the innovative assessment pilot program, including managing and working with contractors; serving as the liaison in working with technical assistance groups, ensuring the completeness of state and federal reporting requirements, communicating with districts and consortia, and ensuring activities are on-schedule and meeting timeline requirements. This individual will be responsible for developing and monitoring an implementation plan for each participating pilot and the state and ensuring that statutory requirements are being met, including annual reporting requirements. This individual will also oversee the collection of evidence supporting the state's technical evaluation of the assessments included in the innovative assessment pilot.

An Assessment Specialist will be hired to assist the Program Manager with these responsibilities.

An Accountability Specialist will be hired to support the inclusion of the innovative assessments' data in Georgia's accountability system, the College and Career Ready Performance Index (CCRPI). This position will support calculations for Georgia's accountability system (College and Career Ready Performance Index – CCRPI) for schools and school districts included in the innovative assessment pilot, including developing and coordinating a plan for producing CCRPI reports with pilot assessment data; preparing a

process and timeline for receipt and utilizing of assessment data from pilots; working with the Information Technology (IT) team; ensuring the accuracy of data calculations; developing and maintaining accountability documentation; and communicating with participating schools and districts.

A Database Developer and a Web Application Developer will manage efforts to utilize the assessment pilots' data in CCRPI calculations and other relevant reporting systems. This positions will collaborate with the Accountability Specialist to develop a process, plan, and timeline for integration of the pilot assessment data into CCRPI; help in the design, development, and implementation of new and existing IT applications related to the innovative assessment pilot; develop stored Functions, Procedures, Packages, and triggers using SQL and Scripts as part of IT application needs related to the innovative assessment pilot; consult with the data architect and tech lead; participate in IT application design and development; and perform code reviews and unit testing and prepare the build bundle scripts for CCRPI reports for schools and school districts in the innovative assessment pilot.

See Appendix A-9 for job descriptions associated with these five positions.

As described previously, Georgia is seeking the assistance of external experts through a Request for Proposals (RFP) process to assist Georgia and its pilot districts in planning, developing, implementing, evaluating, and scaling Georgia's innovative assessment pilot program. Among other activities, the provider will provide the state with an annual report summarizing the technical assistance needs addressed at technical advisory committee (TAC) meetings and through technical assistance hours, lessons learned, and recommendations for future pilot program activities. Georgia will utilize this information to identify risks, continually improve its technical supports, and improve implementation of the innovative assessment pilot program.

Cobb County School District

For eight years, the Cobb County School District (CCSD), led by Superintendent Chris Ragsdale, has been developing and enhancing the Cobb Teaching and Learning System (CTLS), an innovative teaching and learning resource utilized in all 113 CCSD schools at scale for several years by more than 112,000 students and 7,500 teachers in the Cobb County School District. CTLS is currently being used by teachers across the Cobb County School District to deliver over 890,000 assessments during 2017-2018 school year.

Georgia MAP Assessment Partnership

GMAP districts, beginning as early as 2013, have been using MAP Growth as a benchmark assessment throughout the school year to measure the academic growth of their students on an equal-interval scale. Teachers can see if what they are doing is working and, if not, can adjust their instruction during the school year rather than waiting until receiving results on the annual summative test.

Support for Georgia

The State and GMAP districts will have the support of NWEA organizational resources, including a Georgia-based account management team.

Key NWEA staff engaged in the design and development of this work bring extensive state and assessment consortia experience to the table, are familiar with the peer review expectations, and have

helped to successfully shepherd new assessments through the design, development, implementation, and approval process.

The following NWEA teams are responsible for supporting the Georgia Department of Education and Georgia districts and schools with assessment administration and services:

- The **Partner Services team** provides our partners with implementation and technical support. Partner Services staff members are well-versed in the implementation and ongoing delivery of computer adaptive assessment systems.
- The **Product Management team** has dedicated resources that work with partners to understand requirements for NWEA assessments. Individual Product Managers work with cross-functional teams across the organization to implement requirements through the management of the product roadmap to best support the needs of NWEA partners.
- The **Content Solutions team** works to provide tests that address the instructional material our partners want to measure, creating item specifications, and guiding item development to ensure congruence with subject matter content. Additionally, this team provides content expertise and first-class facilitation of educator committees to guide educators in item development and review.
- The **Professional Learning team** creates transformational change through innovative and sustained professional learning provided in collaboration with partners. Relying on accurate and comprehensive data to inform each student's optimal learning path, the Professional Learning team delivers workshops and webinars on topics such as reports, applying data to instruction, and student goal setting.
- The **Partner Accounts team** sustains partner satisfaction by constantly monitoring partner needs and helping facilitate solutions. This team supports our partners by delivering value and providing account management services for current and prospective partners.
- The **Research** and **Psychometrics Solutions teams** conduct research that informs organizational practice and policy and verifies the quality of our assessments.
- The **Program Management team** is composed of dedicated Program Managers, many with Project Management Professional (PMP®) certification. This team focuses internal resources to deliver services accurately and in a timely manner to our partners. In support of our mission, our Program Managers work cooperatively with partners to promote open lines of communication, establish and implement program work, coordinate and/or conduct program-related meetings, and work closely with program subcontractors and other vendors as needed.

User Guides

Clear, thorough test administration guideline documents and training materials for MAP Growth, including for administrations with accommodations, are available. They can be read online as a PDF or printed by Georgia educators with a user login. Resources for the through-year assessment will be made available as the test is developed, and GMAP members will be involved in the review/feedback of these guides as they are used in Years 3-5.

MAP Growth test administration materials contain:

- Clear directions for use by Georgia educators
- Specific details regarding how MAP Growth is administered and by whom
- Instructions for assigning accommodations
- Guidelines for a secure test environment

- Information regarding recommended testing windows

MAP Growth training materials include screenshots and are delivered via narrated PowerPoint web presentations, interactive online courses, and as PDF documents available online or in print.

Embedded Online Resources and Training

MAP Growth includes embedded online resources, available at any time, to provide help materials, tutorials, videos, and training for Georgia educators.

Online Help Center

Although NWEA assessments are easy to use for administrators and educators of all technical abilities, help resources and troubleshooting support are built into the system. These materials include step-by-step training and guides for proctors, educators, and administrators. These resources, including test administration guidelines and materials, are available online in the Help Center seen in Figure C-9.

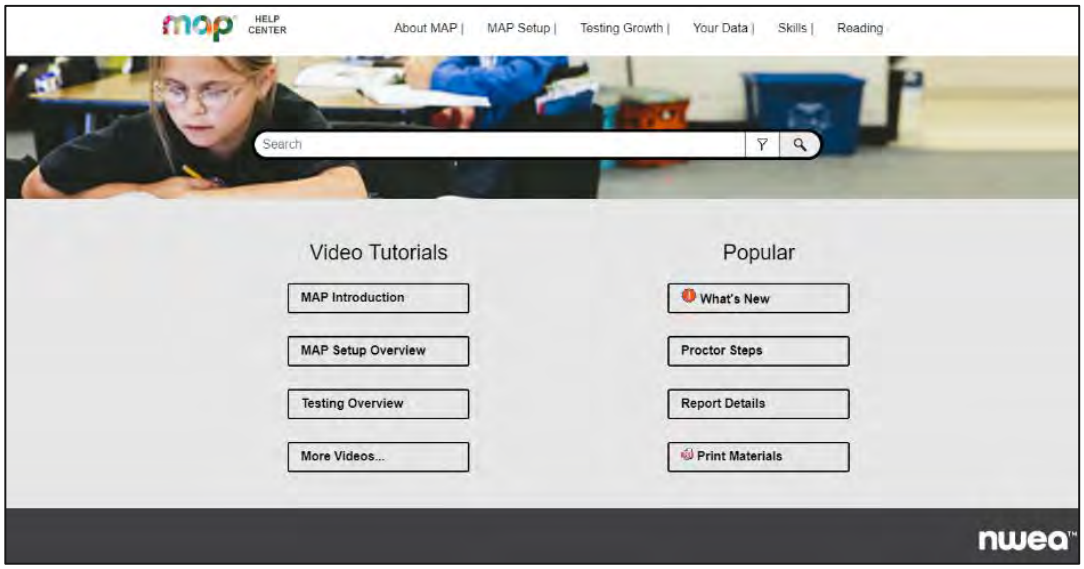

Figure C-9: MAP Help Center. This easy-to-navigate help page within the system provides users with resources and training materials.

NWEA Professional Learning Online

Online, on-demand training in the NWEA Professional Learning Online system is available free to partners. This one-stop eLearning site empowers educators with important training and resources for all staff — at educators' pace and on their schedules. It incorporates a wide range of activities, from learning the basics of MAP Growth assessments to using data to support student learning.

Professional Learning Online tracks completion of courses and provides certification by individual.

NWEA Professional Learning Online, shown in Figure C-10, is available at any time, from any location with an internet connection.

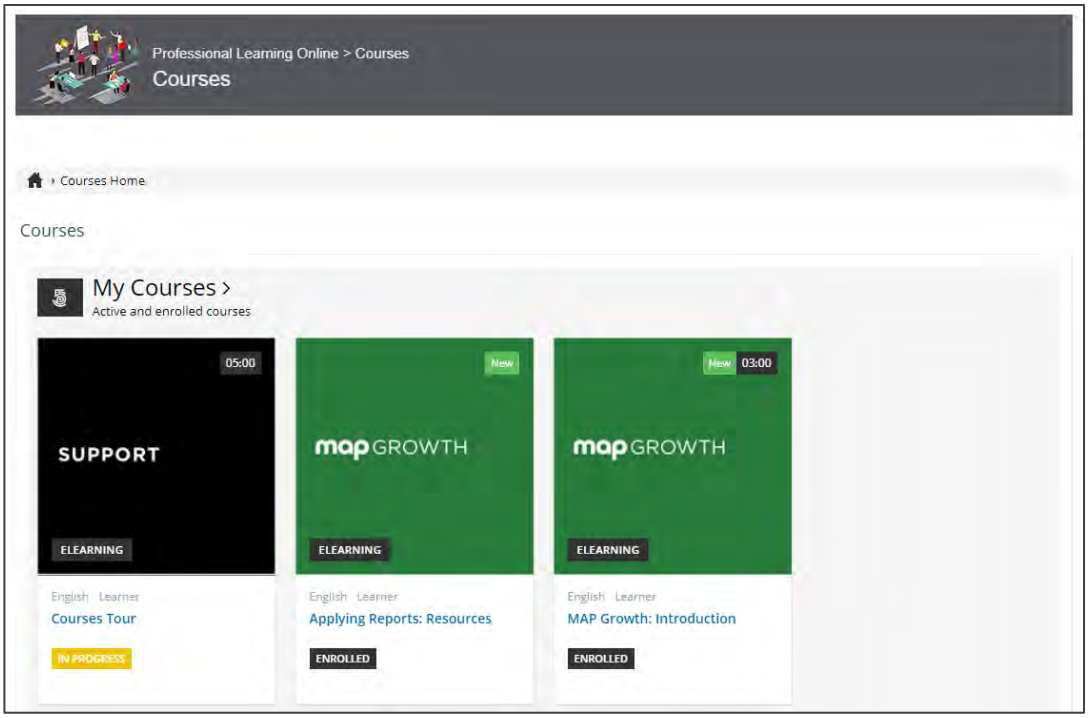

Figure C-10: Professional Learning Online. Training through the NWEA eLearning site is available at any time and on educators' schedules.

NWEA Connection

NWEA provides opportunities for educators and education leaders to ask and find answers to questions and interact with other NWEA assessment users through a role-based community site, NWEA Connection, shown in Figure C-11. Live chat support is also available from NWEA Connection.

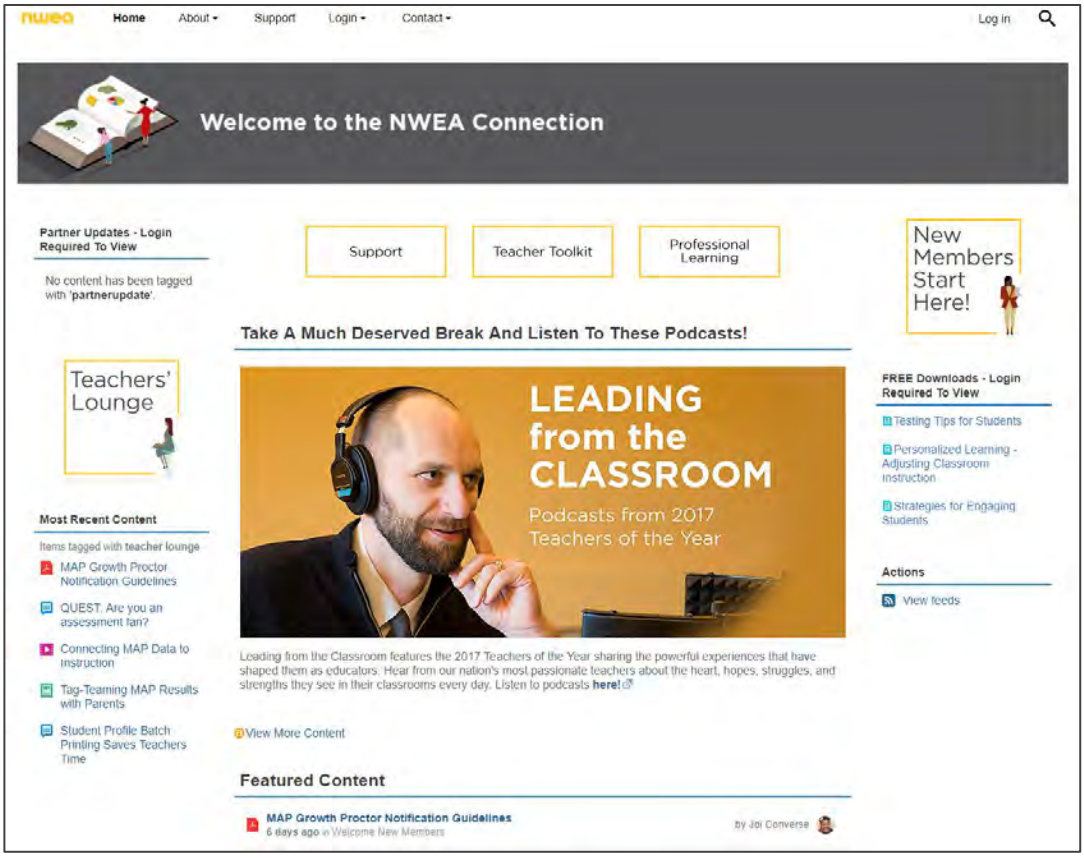

Figure C-11: NWEA Connection. Educators can join an online NWEA community for updates, quick support, answers to questions, and conversation with other NWEA assessment users.

On the NWEA Connection community pages, educators can:

- Chat with an NWEA Partner Support representative
- Access exclusive and customized content
- Participate in Georgia-specific discussion topics
- Quickly search the Support Knowledge Base for answers to product questions
- View their own support ticket status
- Log in using NWEA Professional Learning Online credentials
- Join online discussions within their chosen professional learning workshops
- Connect with other NWEA partners on various topics

Professional Learning

NWEA professional learning options will support Georgia educators to address their primary concern: how to get the best results for Georgia students. By addressing key classroom applications of assessment literacy and formative classroom practice, and by providing guidance on the best instructional use of learning progressions and results from through-year assessments, NWEA will help to strengthen the capacity of all Georgia educators to use assessment for learning.

As through-year assessments are rolled out, NWEA will provide Georgia educators with a sound foundational understanding of the intended purposes and appropriate uses for all types of assessment results. NWEA assessment literacy professional learning will provide key research and best practice

information, while developing assessment-literate practices for Georgia educators in both classroom and leadership roles.

Risk Mitigation

Risks are inherent to any program, regardless of size or complexity. At NWEA, we believe that thorough risk planning and management will serve as a key element of program control. The NWEA program team is versed in industry best practices set forth in the Project Management Body of Knowledge (PMBOK®) and has a clear understanding of the scope, costs, and activities required to successfully complete this program. Using this knowledge — and under the experienced leadership of a Program Manager — this team will identify potential risks and employ strategies and processes to mitigate these impacts before they become issues. These risks will be managed/mitigated internally and shared with stakeholders during regular team meetings. Some risks identified may be on the GMAP side and, if so, those will be identified with the GMAP consortium as the owner to manage/mitigate.

System Requirements

MAP Growth assessments have been delivered online since 2001. The NWEA testing platform supports over sixty million student test events each year. In September 2018, the platform supported over one million test events in a single day. The platform is designed with highly scalable architecture and is capable of scaling up based on partner needs.

The computer-based assessments are used with a variety of software programs, devices, operating systems, and browsers to support the technology students are using in the classroom. Computer equipment must meet the minimum requirements specified by the manufacturers of the operating system and browser in use.

Supported browsers and operating systems, as of the time we printed this response, are included in Table C-9 and Table C-10.

Table C-9: Student Testing Requirements

Device	Operating System	Browser Options
Windows PC	Windows 7, 8.1, or 10	▪ NWEA secure testing browser for PC ▪ Firefox® 58 or higher ▪ Chrome™ 65 or higher
Macintosh	macOS® X 10.11, .12, or .13	▪ NWEA secure testing browser for Mac, running on Safari® 9 minimum to 11 maximum ▪ Safari 9–11 ▪ Firefox 58 or higher ▪ Chrome 65 or higher
iPad	iOS 10 or 11	▪ NWEA Testing App ▪ Safari 9–11
Chromebook	Chrome OS™ 65 or higher	▪ NWEA Chromebook Testing App ▪ Chrome 65 or higher
Recommended: Computer user accounts dedicated to testing; disable assistants such as Siri® or Cortana®.		

Table C-10: Teacher and Staff Requirements

Device	Operating System	Microsoft Edge and Internet Explorer	Safari	Firefox	Chrome
Windows PC	Windows 7, 8.1, or 10	Microsoft Edge® or Internet Explorer® 11	Not supported	50 or higher	41 or higher
Macintosh	macOS X v10.10, .11, .12, or .13	Not supported	8–11	50 or higher	41 or higher
Chromebook	Chrome OS (41 or higher is best)	Not supported			41 or higher
iPad	Not supported				
Other requirements: PDF viewer, such as Adobe Reader®. Also, follow specific browser settings.					

The NWEA Partner Support team provides timely, knowledgeable, and courteous support to partners across the State. The Partner Support team can be contacted via a toll-free telephone number, email, and our chat support platform.

The GMAP districts all have a basic structure of support for administering assessments in their district.

- District Test Coordinator
- School Test Coordinator
- District Technology Director
- School Technology Specialists (some are shared between schools)

Each of the districts are administering MAP Growth online and the Georgia Milestones Assessment System in 2018-2019, and most districts have been testing with MAP Growth for many years.

- Barrow County School District - uses desktop computers, laptops, and Chromebooks
- Clayton County Public Schools - Google system that is in year three of a five year phase in to implement 1:1 Chromebooks for grades K-12
- Dalton Public Schools – 1:1 devices for all students testing
- Floyd County Schools – 1:1 with Chromebooks
- Gilmer County Schools (affiliate)
- Haralson County Schools (affiliate) – 1:1 Chromebooks for all students in grades 3-12
- Jackson County Schools – is a Google system that is in year three of a five year phase in to implement 1:1 Chromebooks for grades 3-12
- Jasper County Charter System – 1:1 device per child for all on-line assessments. The bandwidth capacity exceeds the recommendations from NWEA.
- Marietta City Schools – 1:1 testing with personal computers and Chromebooks
- Polk County School District – 1:1 with iPads (currently changing to Chromebooks)

Putnam Consortium

Success of Prior Efforts

The Putnam Consortium is not proposing a new assessment system, but rather has successfully implemented the innovative assessment system in 12 school districts. The Putnam Consortium will work collaboratively with Navvy Education to coordinate continued implementation and scaling of Navvy and have demonstrated capacity to scale the solution to 7% of the state's school districts in a short amount of time. Year 1 of the IADA will be year 10 of Putnam County implementing local accountability based on the learning of individual standards and year 3 of districts using the Navvy assessment system. Thus, the collaboration among the consortium and Navvy Education has a proven track record for implementation, and as evidenced by SB 362, all organizations have experience in working collaboratively together to make progress in innovative in our state.

Strategies to Mitigate Risks and Support Successful Implementation
As described in the "Provides valid, reliable, and comparable annual summative determinations" section, the Putnam Consortium in collaboration with Navvy Education has put in place processes to evaluate the technical quality of the assessment system to ensure the system produces valid, reliable, and fair results. As part of on-going evaluation and continuous improvement, external partners will provide additional evaluation and feedback as an independent source of evidence to ensure validity, reliability, and fairness.

The Putnam Consortium will work collaboratively with Navvy Education and professional development partners to carry out the plans for providing implementation supports and for successfully scaling as described through this application including in the "Prior experience, capacity, and stakeholder support" and "Strategies for Scaling" sections.

3) **The extent and depth of State and local support for the application for demonstration authority in each SEA, including each SEA in a consortium, as demonstrated by signatures from the following:**
   - (i) **Superintendents (or equivalent) of LEAs, including participating LEAs in the first year of the demonstration authority period.**
   - (ii) **Presidents of local school boards (or equivalent, where applicable), including within participating LEAs in the first year of the demonstration authority.**
   - (iii) **Local teacher organizations (including labor organizations, where applicable), including within participating LEAs in the first year of the demonstration authority.**
   - (iv) **Other affected stakeholders, such as parent organizations, civil rights organizations, and business organizations.**

The State Board of Education's September 27, 2018 resolution in support of this application can be found in Appendix A-10. The SBOE's December 13, 2018 resolution in support of this application be found in Appendix A-11.

Reference letters of support from LEAs for the Georgia MAP Assessment Partnership are provided in Appendix C-5.

Signed applications and memoranda of understanding from LEAs for the Putnam Consortium are provided in Appendix D-2.

Timeline and budget

The quality of the SEA's or consortium's timeline and budget for implementing the innovative assessment demonstration authority. In determining the quality of the timeline and budget, the Secretary considers –

1) **The extent to which the timeline reasonably demonstrates that each SEA will implement the system statewide by the end of the requested demonstration authority period, including a description of –**
   - **(i) The activities to occur in each year of the requested demonstration authority period;**
   - **(ii) The parties responsible for each activity; and**
   - **(iii) If applicable, how a consortium's member SEAs will implement activities at different paces and how the consortium will implement interdependent activities, so long as each non-affiliate member SEA begins using the innovative assessment in the same school year consistent with 34 CFR part 200.104(b)(2); and**

State of Georgia

Year 0: 2018-2019

Georgia Senate Bill 362 established the innovative assessment pilot program. In the summer of 2018, the State Board of Education (SBOE) held its first statewide competition, approving three pilots (Cobb County School District, Georgia MAP Assessment Partnership, Putnam Consortium). In the fall of 2018, the GaDOE released a Request for Proposals (RFP) seeking the services of a technical assistance provider to support the state's innovative assessment pilot. This contract is expected to begin in January of 2019. The General Assembly provides funding for this contract for the first year. Georgia will request additional funding from the General Assembly to support the technical assistance contract in future years as well as fund five state-level project management positions.

Year 1: 2019-2020

Georgia continues to contract with an external technical assistance provider to support the state's innovative assessment pilot. The GaDOE's Program Manager will oversee the project with support from the Assessment Specialist while the Accountability Specialist, Database Developer, and Web Application Developer work to include pilot assessment data in the state's accountability system. Georgia will request continued funding from the General Assembly to support the technical assistance contract in future years as well as the state-level project management positions.

Year 2: 2020-2021

Georgia continues to contract with an external technical assistance provider to support the state's innovative assessment pilot. The GaDOE's Program Manager will oversee the project with support from the Assessment Specialist while the Accountability Specialist, Database Developer, and Web Application Developer work to include pilot assessment data in the state's accountability system. Georgia will request continued funding from the General Assembly to support the technical assistance contract in future years as well as the state-level project management positions.

Year 3: 2021-2022

Georgia continues to contract with an external technical assistance provider to support the state's innovative assessment pilot. The GaDOE's Program Manager will oversee the project with support from the Assessment Specialist while the Accountability Specialist, Database Developer, and Web Application Developer work to include pilot assessment data in the state's accountability system. Georgia will request continued funding from the General Assembly to support the technical assistance contract in future years as well as the state-level project management positions.

Year 4: 2022-2023

Georgia continues to contract with an external technical assistance provider to support the state's innovative assessment pilot. The GaDOE's Program Manager will oversee the project with support from the Assessment Specialist while the Accountability Specialist, Database Developer, and Web Application Developer work to include pilot assessment data in the state's accountability system. Georgia releases an RFP seeking services for a technical evaluation of all three innovative assessment systems, including assessing comparability with Georgia Milestones and content alignment studies. Georgia will request continued funding from the General Assembly to support the technical assistance contract in future years as well as the state-level project management positions and will request additional funding to support the external technical evaluation planned for Year 5.

Year 5: 2023-2024

Georgia continues to contract with an external technical assistance provider to support the state's innovative assessment pilot. The GaDOE's Program Manager will oversee the project with support from the Assessment Specialist while the Accountability Specialist, Database Developer, and Web Application Developer work to include pilot assessment data in the state's accountability system. An external technical evaluation of all three innovative assessment systems is conducted. Georgia will complete its evaluation and select one assessment system for possible statewide expansion beginning in 2024-2025. Georgia will request additional funding, if needed, to implement the selected assessment system statewide.

Cobb County School District

Table B-3 provides an overview of the tasks to be accomplished throughout the implementation period of CTLS-Assess. The tasks included in the table include the development of additional assessments, technology implementation and training, assessment administration implementation and training, data collection. These tasks will continue throughout the IADA period to allow for possible statewide expansion by the end of the demonstration authority period.

Table 3

Year 0 (18/19) – Supplement and Modify Existing CTLS-Assess Assessments

- Modify current CTLS-Assess to meet new usage requirements
- Audit CTLS-Assess for usage restrictions
- Initiate field tests
- Continue to administer Georgia Milestones

Year 1 (19/20) – Psychometric Studies

- Scale implementation of CTLS-Assess

- Validation study (CTLS-Assess compared to Georgia Standards)
- Reliability study (CTLS-Assess psychometric quality)
- Continue field tests

Year 2 (20/21) – Field Testing and Continued Psychometric Studies

- District-wide implementation at all grade levels
- Refine assessments based on results of psychometric studies
- Comparability study (CTLS-Assess equated to Georgia Milestones)
- Student growth study
- Continue field tests

Year 3 (21/22) – Continue to Expand/Improve Assessments and Begin to Scale Assessments

- Refine and expand assessments
- Continue psychometric monitoring and vetting of new items
- Train staff on platform enhancements
- Continue technology enhancements of assessments/platform
- Larger scale implementation

Year 4 (22/23) – Scale Assessments

- Refine and expand assessments
- Continue psychometric monitoring and vetting of new items
- Continue training staff
- Continue technology enhancements of assessments/platform

Georgia MAP Assessment Partnership

Table C-11 describes the proposed timeline for the GMAP Pilot. A further description of each year's activities follows the timeline.

Table C-11: GMAP Pilot Timeline

Activity	Year	Owner
Administer MAP Growth	ELA/Math – 1, 2 Science – 1, 2, 3	GMAP Consortium
Administer Through-Year Assessment	ELA/Math – 3, 4, 5 Science – 4, 5	GMAP Consortium
Administer Georgia Milestones	ELA/Math – 1, 2, 3 Science – 1, 2, 3, 4	GMAP Consortium
Work with Georgia stakeholders to conduct a thorough review of the Georgia Standards of Excellence and alignment criteria.	ELA/Math – 1 Science – 3	NWEA/GMAP Consortium
Analyze the pacing guides of schools to understand how much variability there might be and determine options to address concerns.	ELA/Math – 1 Science – 3	NWEA
Work with GMAP to define intended inferences and evaluate the ability of the existing MAP Growth item pool to support those inferences.	ELA/Math – 1 Science – 3	NWEA

Table C-11: GMAP Pilot Timeline

Activity	Year	Owner
Alignment study to identify gaps between MAP Growth items and Georgia Standards of Excellence in ELA, Reading and Mathematics.	ELA/Math – 1 Science – 3	NWEA
Collaborate with State and educators about items and specifications to gain deeper understanding of the standards.	ELA/Math – 1 Science – 3	NWEA/GMAP Consortium
Develop item/test specifications and share with Georgia educators. Develop Georgia blueprints and review with Georgia educators.	ELA/Math – 1, 2 Science – 3	NWEA/GMAP Consortium
Produce a multi-year item development plan for the Consortium to review.	ELA/Math – 2 Science – 3	NWEA
Conduct item development to fill in gaps identified through the previous analysis and continually refine test alignment and expand item pool (working with Georgia educators). Includes involving educators in content and bias review of items.	ELA/Math – 2, 3, 4, 5 Science – 4, 5	NWEA/GMAP Consortium
Begin field testing new items.	ELA/Math – 2, 3, 4, 5 Science – 4, 5	NWEA/GMAP Consortium
Conduct new linking studies that establish functional relationships between the MAP Growth/through-year assessment scores and Georgia Milestones summative scores. Provide documentation to the Georgia Department of Education Technical Advisory Committee for feedback.	1, 2, 3, 4, 5	NWEA
Begin performance task development for ELA/Mathematics (1 per grade per content area), and then Science.	2 and ongoing	NWEA
Development of adaptive algorithms for through-year and continue testing/refine of the algorithm.	2, 3, 4	NWEA
Consult stakeholders to review/design through-year model score reports.	2, 3, 4	NWEA/GMAP Consortium
Make decisions about the standardization of test administration for Year 3 (for through-year pilot), develop test administration materials.	2, 3, 4	NWEA
Train Georgia educators on test administration procedures (training ongoing throughout program).	3, 4, 5	NWEA
Run simulations: 1) Through-year model simulations to test the summative score aggregation method. 2) Constraint engine simulations to refine and validate the adaptive algorithms.	1, 2, 3, 4, 5	NWEA
Compare scores from summative and through-year assessments to confirm comparability. This may include linking studies, as needed.	3, 4	NWEA

Table C-11: GMAP Pilot Timeline

Activity	Year	Owner
Professional learning in systems, score reports, test administration.	3, 4, 5	NWEA/GMAP Consortium
Begin performance task field testing.	ELA/Math – 3 Science – 4	NWEA/GMAP Consortium
Administer an augmented pilot version of MAP Growth assessments.	ELA/Math – 3 Science – 4	GMAP Consortium
Item analysis/calibration activities.	ELA/Math – 3, 4 Science – 4, 5	NWEA
Administer a full field-test administration of a through-year assessment.	ELA/Math – 4 Science – 5	GMAP Consortium
Lead efforts to compare scores from summative and through-year assessments to confirm comparability. This may include linking studies, if needed.	ELA/Math – 4 Science – 5	NWEA
Conduct standard setting.	5	NWEA/GMAP Consortium
Develop technical report.	5	NWEA

Year 1: Growth Scores and Deep Design (2018-2019)

Student and Teacher Experience

Partner schools will implement off-the-shelf MAP Growth assessments in reading, language usage, mathematics, and science in grades 3–8; and engage in professional learning. While untimed, assessments will take approximately forty-five minutes per subject, per administration, allowing each assessment to be completed in an average class period. This minimizes disruption of valuable instructional time. Sites that are ready to implement early will have given their first administration of the assessments in fall 2018, although the goal will be that all sites will administer MAP Growth starting in January 2019.

In Year 1, a special effort will be made to provide GMAP educators with professional learning to help connect assessment data to instructional, programming, and planning needs. This will include workshops designed to:

- Help teachers and teacher leaders increase their ability to interpret MAP Growth data to inform instruction and set goals.
- Help instructional coaches develop skills to support teachers in instructional applications of MAP Growth data.
- Give school and district leaders expertise in using MAP Growth reports to build a data-informed culture and set long-term growth goals.

GMAP and NWEA Development Activities

During winter and spring terms of Year 1, GMAP will work with NWEA to define intended inferences and evaluate the ability of the existing MAP Growth item pool to support those inferences in English language arts and mathematics. NWEA intends to reach agreement about an alignment model that would build comparable inferences to the Georgia Milestones. A principled alignment model — as

recently used by NWEA in the State of Nebraska — aligned to the Georgia Milestones Achievement Level Descriptors (ALDs) is anticipated. An alignment process will be developed, and NWEA plans to complete an alignment study by the end of summer 2019.

At the end of Year 1, through the combined work of Georgia stakeholders and NWEA, initial test specifications and blueprints aligned to the Georgia Standards of Excellence will be complete. This information will be utilized to inform development activities in Year 2 of the project.

Year 2: Growth Scores and Targeted Development (2019-2020)

Student and Teacher Experience

Partner schools will continue to implement off-the-shelf MAP Growth assessments in reading, language usage, mathematics, and science in grades 3–8; and engage in professional learning.

Summer 2020 will include opportunities for additional training in system and test administration for Year 3 test activities.

GMAP and NWEA Development Activities

During fall and winter terms of Year 2, item development and initial field testing will begin to address any gaps in the English language arts and mathematics item pools identified in the preceding year's alignment studies. Stakeholders will be consulted to help review and design through-year model score reports.

Item types will be identified to maximize alignment to Georgia content standards. NWEA plans to create at least one performance task for formative assessment in the 2020-2021 school year. Continued development of these tasks is anticipated in every year of the project.

NWEA plans to make decisions about standardization of test administration for the first through-year model. NWEA Content Specialists will verify that items provide coverage of the test blueprints developed in Year 1, and Research Scientists will run simulations and check the algorithms.

Year 3: Growth Scores and Pilot of Through-Year Test (2020-2021)

Student and Teacher Experience

NWEA intends for partner schools to administer the following tests to students in grades 3–8:

- An augmented version of MAP Growth assessments in English language arts and mathematics, which will include through-year test items developed in Year 2
- Off-the-shelf MAP Growth Science

GMAP educators will continue to engage in professional learning.

After each administration, NWEA Research Scientists will conduct an item analysis and calibration activities. Item writing activities will continue to help fill in any gaps discovered. Score reports to support claims will be evaluated with significant stakeholder input.

During summer 2021, in partnership with Georgia educators, NWEA intends to revise test specifications, score reports, and test administration manuals. NWEA plans to roll out training in the system, score reporting, and test administration to GMAP educators over the summer. NWEA researchers plan to lead efforts to compare scores from summative and through-year assessments to confirm comparability. This may include linking studies, as needed.

Science Development

During fall and winter terms of Year 3, GMAP will work with NWEA to define intended inferences and evaluate the ability of the existing MAP Growth item pool to support those inferences in science. NWEA intends to reach agreement about an alignment model that would build comparable inferences to the Georgia Milestones. A principled alignment model — as recently used by NWEA in the State of Nebraska — aligned to the Georgia Milestones Achievement Level Descriptors (ALDs), is anticipated.

An alignment process will be developed and an alignment study will be completed by the end of summer 2021. Over the summer, NWEA intends to develop items in partnership with Georgia educators to fill gaps, and initial test specifications and blueprints aligned to the Georgia Standards of Excellence are expected to be complete. This information will be utilized to inform development activities in Year 4 of the project.

Year 4: Field Testing ELA and Mathematics; Development of Science (2021-2022)

Student and Teacher Experience

GMAP districts are anticipated to administer a full field-test administration of a through-year assessment in English language arts and mathematics in grades 3–8. After each administration, NWEA research scientists will conduct an item analysis and calibration activities. Item writing will continue to help fill any gaps. Score reports to support claims will be evaluated with significant stakeholder input.

During summer 2022, NWEA intends to revise test specifications, score reports, and test administration manuals. If needed, NWEA plans to roll out training in the system, score reporting, and test administration to GMAP educators over the summer. NWEA researchers plan to lead efforts to compare scores from summative and through-year assessments to confirm comparability. This may include linking studies, if needed.

Science

NWEA intends to augment MAP Growth Science to include through-year test items developed in Year 3. After each administration, NWEA research scientists will conduct an item analysis and calibration activities. Item writing will continue to help fill any gaps. Score reports to support claims will be evaluated with significant stakeholder input.

During summer 2022, NWEA intends to revise test specifications, score reports, and test administration manuals. NWEA plans to roll out training in the system, score reporting, and test administration to GMAP educators over the summer. NWEA Researchers plan to lead efforts to compare scores from summative and through-year assessments to confirm comparability. This may include linking studies, if needed.

Year 5: Full Implementation (2022 and beyond)

GMAP districts are expected to administer through-year assessments in English language arts, mathematics, and science in grades 3–8. NWEA anticipates completing standard setting in summer 2022, and then completing a technical report that documents the validity of the through-year assessment system. The technical report could be used as part of a peer-review submission.

Putnam Consortium

Table D-3 provides an overview of the typical activities that take place in the course of a school year in the Navvy innovative assessment system. These activities represent the assessment design and development, assessment implementation, data collection, data analyses, score and technical reporting, and project management meetings necessary for ensuring the high-quality implementation of Navvy. These activities will re-occur each year of the demonstration authority period and will allow Navvy to possibly scale statewide by the end of the demonstration authority period.

Timeline	Activities	Responsible Agent(s)
August-May	Monthly Putnam Consortium Innovative Assessment Leadership Team meetings via conference call	Putnam Consortium Executive Team and Navvy Education
	Field testing and pilot of Navvy assessment items that will be released (for practice) or be added to the item banks (for operational use) in the following school year	Navvy Education
	Technical Advisory Committee Meeting	GaDOE, Putnam Consortium Executive Team, Navvy Education
	Quarterly Innovative Assessment Summit	Putnam Consortium Executive Team, Navvy Education, Professional Development Partners
June—August	Monthly Putnam Consortium Innovative Assessment Leadership Team meetings via conference call	Putnam Consortium Executive Team and Navvy Education
	Data Review and Standard Setting Meetings	Putnam Consortium Executive Team, Navvy Education, External Partners
	Quarterly Innovative Assessment Summit	Putnam Consortium Executive Team, Navvy Education, Professional Development Partners
July – Sept	Technical Advisory Committee Meeting	GaDOE, Putnam Consortium Executive Team, Navvy Education
	Technical Annual Report submitted to USED	GaDOE, Navvy Education

2) The adequacy of the project budget for the duration of the requested demonstration authority period, including Federal, State, local, and non-public sources of funds to support and sustain, as applicable, the activities in the timeline under paragraph (c)(1) of this section, including –

(i) How the budget will be sufficient to meet the expected costs at each phase of the SEA's planned expansion of its innovative assessment system; and

(ii) The degree to which funding in the project budget is contingent upon future appropriations at the State or local level or additional commitments from non-public sources of funds.

State of Georgia

The three innovative assessment consortia are bearing the cost of developing its innovative assessment solutions. The state of Georgia will seek funds from the General Assembly to perform the following activities:

- Contract annually with an external technical assistance provider to support the innovative assessment pilot.
- Fund five state-level positions to manage the innovative assessment pilot.
- Contract with an independent, external provider to evaluate the technical quality of the proposed innovative assessments.

The funds for the annual external technical assistance contract and the five state-level positions will be sought during the 2019 legislative session. Funds for the independent, external technical evaluation planned for year 5 will be sought during the 2022 legislative session. Table A-1 provides a break-down of the necessary funds. Appendix A-11 provides the SBOE's resolution in support of seeking these funds.

Table A-1: Summary of Costs for State Oversight of the Innovative Assessment Pilot

Category	Cost	Type
Technical Assistance	$250,000	Annual
Personnel	$781,888	Annual
Independent Technical Evaluation	$1,164,000 (estimated)	One-Time (FY23 or FY24)
Total for FY20	$1,031,888	Annual

Cobb County School District

The 2019-2020 budget for CTLS-Assess is presented below. The budget is comprised of the following components:

1. CTLS-Assess technology implementation, support and training
2. Assessment development, standard setting, and training
3. Software licensing fee
4. Data collection, psychometric analyses, and reporting
5. Leadership meetings
6. Public presentations

The costs associated with each of the main budgetary components are presented below with the total projected budget for CTLS-Assess in 2019-20 equal to $3,500,000.

Table B-4. Cobb County School District Budget for CTLS-Assess

Item	Description	Year 1 Start-Up Costs	Years 2–5 Recurring Costs
1	Assessment Development	$1,500,000	$250,000
2	Psychometrician	$100,000	$100,000
3	Assessment Platform		$400,000
4	Software Licensing Fee	$130,000	$130,000
5	Additional Assessment Personnel	$170,000	$170,000
6	Additional Assessment Trainers		$60,000
7	Technology Enhancements (Hardware)	$1,600,000	
		$3,500,000	$1,110,000

Georgia MAP Assessment Partnership

A price will be dependent on the deliverables expected by GMAP districts and the Georgia Department of Education. NWEA is willing to work with all entities to further define the needs of stakeholders to develop a price.

NWEA and GMAP collaborating districts have entered into contractual agreements to test with MAP Growth in Year 1 of the GMAP Pilot. It is the responsibility of each individual district to continue their contractual agreement with NWEA throughout the GMAP Pilot. Districts generally utilize their local and/or charter district funds for their partnership with NWEA.

NWEA will maintain ownership of all content and intellectual property developed under this program.

Putnam Consortium

The Putnam Consortium and Navvy Education, LLC are responsible for the development and implementation of its innovative assessment system during the IADA period.

Navvy Education, LLC will maintain ownership of all content and intellectual property developed under this program. The state will maintain ownership of the evidence the state will fund to be collected for purposes of the technical evaluation.

Supports for educators, students, and parents

The quality of the SEA or consortium's plan to provide supports that can be delivered consistently at scale to educators, students, and parents to enable successful implementation of the innovative assessment system and improve instruction and student outcomes. In determining the quality of supports, the Secretary considers –

1) **The extent to which the SEA or consortium has developed, provided, and will continue to provide training to LEA and school staff, including teachers, principals, and other school leaders, that will familiarize them with the innovative assessment system and develop teacher capacity to implement instruction that is informed by the innovative assessment system and its results;**

Cobb County School District

The robust menu of training opportunities developed and utilized in Cobb County School District for CTLS-Assess will be utilized to support CTLS-Assess training and support for leaders, teachers, and support staff (see Appendix B-1 for training CTLS Assess options). These trainings are designed to be delivered in 30-45-minute sessions which minimizes the need for substitute teacher utilization. Training topics include, Navigating the Dashboard, Sound Assessment Practices, Data Analysis for Teachers, Data Analysis for Administrative Teams, Item Builder, Assessment Builder, etc. Professional learning sessions for CTLS-Assess are available through face-to-face trainings as well as through a digital format.

Georgia MAP Assessment Partnership

The goal of NWEA professional learning is to make a positive impact on the entire teaching and learning experience, rather than focusing solely on administering assessments, interpreting data, and using reports. This is accomplished by building assessment literacy and strong classroom formative assessment practices to enable educators to make the best use of all types of evidence of learning, from MAP Growth and innovative through-year assessments as well as evidence from in-the-moment observation during instruction.

NWEA is committed to providing teachers with instructional support related to growth data as well as achievement and learning indicators based on student responses on through-year assessments as they are related to learning progressions. MAP Growth and through-year assessment data empowers teachers and students to move forward in their learning by identifying where students are in the learning; where they are going; and how they will get there.

NWEA has a large set of training and professional learning resources available to partner districts. In the first couple of years of the GMAP program, this learning will be tailored to district needs surrounding the existing MAP Growth assessments. Schools and districts that have been using the assessments will be able to continue professional learning that helps them develop deeper understandings of growth data, while districts that are new to giving MAP Growth assessments will be supported in learning about the system, assessments, and how to interpret and use Growth data at a more basic level.

NWEA requires start-up training to support the effective implementation of MAP Growth and through-year assessments. Implementation is designed to support improved student achievement by providing accurate assessment data, helping teachers use NWEA test results to find areas of student strength and weakness, and working alongside district/school leaders and educators to improve instruction in the classroom.

Educators are most successful at moving data into action when they first understand the purpose of each assessment and have a solid understanding of the information that they generate. With a focus on using assessment as a support for teaching and learning for over thirty years, NWEA professional learning experiences will help Georgia educators to make connections to past and present district initiatives and to achieve success in three vital areas:

- Preparing administrators and educators for implementing MAP Growth and through-year assessments
- Interpreting and utilizing student assessment results to inform and accelerate learning
- Connecting purposes and uses of various assessment types to impact student growth and district goals

The student engagement metrics included in NWEA assessment reports will provide educators and parents with actionable information about students' readiness to learn. The NWEA professional learning plan for Georgia will include strategies to enhance student engagement in assessment as a tool to empower their learning. Student involvement leads to a greater awareness of their own needs, which, in turn, increases motivation and ownership. Additionally, the plan will address how to inform parents regarding the purpose of student assessment and empower them to take a more active role in supporting student growth and achievement.

The NWEA professional learning model extends learning through a blended model enabling NWEA and its partners to:

- Support scaled learning across schools and districts
- Scope content for better retention and application
- Easily integrate learning into existing meeting structures and schedules
- Maximize face-to-face time for job-embedded application

NWEA professional learning options will support Georgia educators to address their primary concern: how to get the best results for Georgia students. Beginning summer 2021, NWEA plans to roll out training to GMAP educators in the new through-year assessment system, including on score reporting and test administration. By addressing key classroom applications of assessment literacy and formative classroom practice, and by providing guidance on the best instructional use of learning progressions and results from through-year assessments, NWEA will help to strengthen the capacity of all Georgia educators to use assessment for learning.

As through-year assessments are rolled out, NWEA will provide Georgia educators with a sound foundational understanding of the intended purposes and appropriate uses for all types of assessment results. NWEA assessment literacy professional learning will provide key research and best practice information, while developing assessment-literate practices for Georgia educators in both classroom and leadership roles.

Additionally, NWEA will support the through-year assessment model by providing guidance to teachers in matching student work to Georgia Achievement Level Descriptors, and by building training guides and next-step guides. Onsite and virtual professional learning and coaching sessions will be offered to support teachers in administering performance tasks and deepening their understanding of student thinking to better utilize learning progressions to inform instruction. As performance tasks are integrated in the through-year assessment system, teachers will learn to leverage information that measures student learning against grade-level expectations to create clear learning targets and instructional plans that maximize student growth.

Please see Table C-12 for recommended professional learning options. NWEA will work with GMAP and State stakeholders to add through-year assessment-focused professional learning to the offerings below.

Table C-12: Recommended Professional Learning

Topic	Modality	Audience & Content
Purpose and Value of MAP Growth	Onsite Foundational Learning	**State/District Admin Leadership** ▪ Onsite Learning - Key Terms and the Value of MAP Growth - Possibilities: Introduction to Instructional Reports ▪ Online Learning - Superintendent Success Case Study - Blog: Seven Crucial Criteria for a Great Growth Assessment
Purpose and Value of MAP Growth *Preparing Stakeholders*	Online Self-Paced Foundational Learning and Facilitated Virtual Session	**School/Teacher Leaders** ▪ Online Learning - MAP Growth Basics ▪ Facilitated Virtual Session (application) - Key Terms and the Value of MAP Growth - Preparing Stakeholders: Parent Guide to Growth - Elevator Speech - Preparing Stakeholders: Students - Playground Talk
Administering the Assessment *Proctoring*	Online Self-Paced Foundational Learning and Facilitated Virtual Support	**Proctors** ▪ Online Learning - Setting Up a Testing Session - Proctor Quick Start Guide - Best Practices for Testing Sessions - Creating/Managing Test Sessions ▪ Facilitated Virtual Office Hours - Q&A
Testing Administration	Online Self-Paced Foundational Learning	**School Technical Team** ▪ Setting up and supporting student testing
Applying Reports: Access and Interpret *Status Reports*	Online Self-Paced Foundational Learning	**State/District Administrators** ▪ Maximizing the Move to Application ▪ Big picture of view of what's happening in your district? **School /Teacher Leadership/Teachers** ▪ Identifying areas of strength and opportunity ▪ Identifying students for intervention ▪ Leveraging the Learning Continuum

Table C-12: Recommended Professional Learning

Topic	Modality	Audience & Content
Applying Reports *Status Reports Application*	Onsite	**State/District Administrators** ▪ Identifying trends ▪ Areas of strength and opportunity at district level ▪ Data-driven decisions **School/Teacher Leadership** ▪ Deeper dive into grade-level reports ▪ Implications of grade-level trends **Teachers** ▪ Understanding student readiness levels ▪ Forming flexible groups ▪ Planning for conferences
How's It Going? and Intro to Goal Setting	Facilitated Virtual Session	**School/Teacher Leadership and Teachers** ▪ Sustaining the learning momentum ▪ What do we need to know to set goals? ▪ Growth projections versus growth goals ▪ Common growth language
Applying Reports: Access and Interpret *Growth Reports*	Online Self-Paced Foundational Learning	**State/District Leaders** ▪ Moving to application ▪ Focusing on growth: How does the aggregated data by district support adjustments in materials and/or instruction? **School/Teacher Leaders** ▪ Moving to application ▪ Focusing on growth: How does the aggregated data by school support adjustments in materials and/or instruction? **Teachers** ▪ Focusing on growth: Building common understanding of growth terms to better analyze growth data to use to support adjustments in materials and/or instruction
Testing Administration	Online	**School Technical Team** ▪ Setting up and supporting student testing

Table C-12: Recommended Professional Learning

Topic	Modality	Audience & Content
Applying Reports *Growth Reports Application and Goal Setting*	Onsite	Engage in growth conversations using protocols and processes to move student learning forward. **State/District Leaders** ▪ Mid-year growth data conversation ▪ Using protocols and processes to move student learning forward **School/Teacher Leaders** ▪ Mid-year growth data conversation ▪ Using protocols and processes to move student learning forward **Teachers** ▪ Supporting goal setting ▪ Communication with parents and students
Eliciting Evidence **Clarifying Learning** **Activating Learners**	Onsite	**School/Teacher Leaders and Teachers** ▪ Cultivating questioning skills to elicit evidence of learning and adjust instruction ▪ Discover and practice strategies to make learning targets clear and understood ▪ Engaging and empowering learners as part of the classroom learning team
How's It Going?	Facilitated Virtual Session	**Teachers** ▪ Sustaining the momentum - Follow-up on goal setting: Successes and challenges ▪ Action planning
Assessing Growth	Onsite (After testing has been completed)	**State/District/Teacher Leaders** ▪ Investigate fall-to-spring growth data ▪ Collaborative inquiry process for dialogue about data ▪ Tools and resources for analysis ▪ Planning forward **Teachers** ▪ Investigate fall-to-spring growth data ▪ Collaborative inquiry process for dialogue about data ▪ Planning forward ▪ Reflection on classroom practice
Why Assessment Literacy Matters	Onsite	**All** ▪ Key research on assessment literate practices ▪ Foundations for application
Leveraging Learning Progressions	Onsite	**Teachers** ▪ Value of learning progressions ▪ How learning progressions inform instruction

Table C-12: Recommended Professional Learning

Topic	Modality	Audience & Content
Assessment as Learning: Performance Tasks	Virtual Facilitated Session	**Teachers** ▪ Value of performance tasks ▪ Designing and implementing effective performance tasks
Using Achievement Level Descriptors	Virtual Facilitated Session	**Teachers** ▪ Value of ALDs ▪ Linking ALDs to standards ▪ Leveraging ALDs in instructional planning

Putnam Consortium

As described throughout the application in various sections, educators will be provided with necessary supports to successfully implement the innovative assessment system. Putnam Consortium Innovative Assessment Executive Team and Navvy Education have provided training for implementing the Navvy in a large number of schools across the state as described under the 'Development and implementation experience' section. The Putnam Consoritum will also develop online modules to communicate directly with all teachers and school leaders who will be implementing Navvy who may not attend the in-person training provided. Also described in the and "Strategies for Scaling" section, professional development partners will provide training for school improvement leaders and professional development and training will be offered via quarterly summits.

2) The strategies the SEA or consortium has developed and will use to familiarize students and parents with the innovative assessment system;

Cobb County School District

Cobb County School District will develop additional supports and documents to familiarize students and parents with the innovative assessment system in collaboration with the CCSD communications department. The initial focus of this effort will be to convert the standards-level information available in CTLS into an easy-to-understand description of the subject/course proficiency consistent with the existing Milestones.

Georgia MAP Assessment Partnership

NWEA provides resources to familiarize students and parents with its assessments.

Reporting

Reporting is planned in a manner that goes beyond simple numbers on a page, but that provides teachers, parents, and students with information about the value of both growth and proficiency data to help paint a fuller picture of what a student knows and can do. Reporting will include narrative descriptions about next steps that are likely, and a more nuanced explanation of what the data says about student performance. Beyond this, additional resources are already available to help parents and students understand the assessments.

Practice Tests

To become familiar with NWEA assessments, students can take online practice tests to see sample items and try some accessibility features. The practice tests provide students with the type of items they will encounter during testing, with questions appropriate to the student's rostered grade. Please note, the practice tests are not designed to show a range of content or grade levels.

Parent Resources

Educators can share individual student reports with parents, and NWEA provides high-quality and culturally sensitive resources in multiple languages that describe MAP Growth assessments and explain the results of NWEA tests. NWEA plans to develop similar parent resources for the through-year assessment.

Parents can learn more about the vital role assessments play through the Parent's Guide to MAP Growth, which explains what NWEA assessments measure, how they measure it, and how teachers use the data. Available in English, Spanish, Arabic, Vietnamese, Chinese, Korean, Haitian Creole, and Brazilian Portuguese.

NWEA has written a sample letter in English and Spanish that teachers can send home to introduce parents to MAP Growth assessments before initial testing, as well as a letter in English and Spanish that can accompany and explain test results.

<u>Putnam Consortium</u>

Navvy reports are informed by research on how to clearly and accurately communicate diagnostic feedback (e.g., Feldberg & Bradshaw, 2018). Student reports pinpoint standards students have learned and ones they need additional help to learn to provide real-time, up-to-date communication with the student, as well as their parents and teachers, about what the specific learning needs the student has. Reports will be provided to the extent practicable, in a language parents can understand.

One of the benefits of the Navvy assessment system is that on the Navvy platform where students login to complete assessments, they are provided with a dashboard to keep track of which standards they are 'in progress' learning and of which ones they have demonstrated competence. Students within the platform are on a 'mission' to earn badges for each standard they are seeking to learn. On the easy-to-navigate dashboards, students can access definitions of the standards broken down by constituent parts and practice questions aligned to the standards. They can also view their results on any of the standards and attempts, including the overall competency diagnosis as well as feedback on items broken down by content components and by depth of knowledge. A key component of our theory of action is that equipping students with this tool to monitor their own learning will increase student agency or ownership of learning by having access to real-time results, to clear learning targets, and to practice assessments.

The inherent design and philosophy of the Navvy assessment system helps improve communication with parents about what their students are learning. Participating LEAs find it challenging at times to communicate what students understand and can do based on overall percentile rank results (e.g., Lily is in the 72nd percentile in math). Structuring parent-teacher conversations around Navvy results that detail which standards their children have learned and which ones they are working on learning is a

more productive conversation to have with parents because it is not comparing their child with other children, but instead pointing to places to celebrate their children's learning and to places where they need more support to learn. Through the Navvy platform, teachers and administrators have one-page reports specifically created for parent-teacher conferences. The reports summarize students' results and can be viewed on a screen or exported to pdf files.

Specific communication plans with parents are developed and led locally by participating LEAs and will be supported by the Putnam Consortium Innovative Assessment Leadership Team and by Navvy Education. The Leadership Team will work collaboratively with Navvy Education to support locally developed communication plans with parents by facilitating discussions around parent communication and by developing shared materials for communicating with parents, including short instructional videos that will introduce parents to the purpose and uses of the Navvy assessment system. Based on feedback from Leadership meetings, participating LEAs will seek to iteratively improve communication strategies with parents through the Demonstration Authority period to best support parent engagement and understanding.

3) **The strategies the SEA will use to ensure that all students and each subgroup of students under section 1111(c)(2) of the Act in participating schools receive the support, including appropriate accommodations consistent with 34 CFR part 200.6(b) and (f)(1)(i) and section 1111(b)(2)(B)(vii) of the Act, needed to meet the challenging State academic standards under section 1111(b)(1) of the Act; and**

<u>Cobb County School District</u>

The GaDOE ensures that all students have access to effective supports and appropriate accommodations consistent with relevant federal and state laws by using a common set of support and accommodation policies across the state for Georgia Milestones. The CTLS-Assess innovative assessment system is accessible for students with disabilities and English learners as it provides appropriate accommodations as specified in a student's Individualized Education Plan (IEP), Individual Accommodation Plan (IAP), or English Learner- Testing Participation Committee (EL-TPC) plan. Students with the most significant cognitive disabilities will continue to be assessed by an alternative assessment, currently, the Georgia Alternate Assessment 2.0 (GAA 2.0).

<u>Georgia MAP Assessment Partnership</u>

NWEA has worked with partners to develop a variety of accommodations, along with universal and designated supports, for special populations, including for students with disabilities, English learners, and other students with special needs or considerations. NWEA offers a flexible accommodations approach to allow students to use their own third-party assistive technology.

All NWEA items are written with the intent of reducing language demands so that the focus of the item is on the construct of interest. This includes: writing items in active voice; using present tense; avoiding complex sentence construction; and reducing vocabulary load.

Please see descriptions of supported accommodations, universal features, and designated features for MAP Growth throughout this application. The new through-year test designs and assessments will be built upon existing supported accommodations and features.

Accessibility Support for NWEA Assessments

NWEA prides itself on providing a high level of support to partners, and has created specific accessibility and accommodation materials within the assessment system and trained the Partner Support team to assist teachers and proctors with designated features and accommodations in NWEA assessments. The Partner Support team can field questions through regular support channels.

Putnam Consortium

As discussed under the "Element 5: Provide for participation of all students" section, all students will have access to effective supports and appropriate accommodations consistent with relevant federal and state laws by using a consistent set of support and accommodation policies across the statewide and the innovative assessment systems. In addition to providing the necessary supports for student with Individualized Education Plans, as discussed under the "Provides, reliable, valid, and comparable annual summative determinations", Navvy Education will gather empirical evidence on fairness by conducting differential item functioning analyses to ensure items do not systematically function differently for subgroups of students in a way that disadvantages one group of students over another. Further, the Putnam Consortium Innovative Assessment Leadership Team will work with Navvy Education to conduct analyses to monitor proficiency rates among students with disabilities to ensure the Navvy assessment system provide all students with an equitable opportunity to learn the state's academic standards and does not harm subgroups of students who are generally considered more at risk in terms of educational disparities. A summary of these findings will be included in annual technical reports to USED.

Students with the most significant cognitive disabilities will continue to be assessed by an alternative assessment, currently, the Georgia Alternate Assessment 2.0 (GAA 2.0).

4) **If the system includes assessment items that are locally developed or locally scored, the strategies and safeguards (e.g., test blueprints, item and task specifications, rubrics, scoring tools, documentation of quality control procedures, inter-rater reliability checks, audit plans) the SEA or consortium has developed, or plans to develop, to validly and reliably score such items, including how the strategies engage and support teachers and other staff in designing, developing, implementing, and validly and reliable scoring high-quality assessments; how the safeguards are sufficient to ensure unbiased, objective scoring of assessment items; and how the SEA will use effective professional development to aid in these efforts.**

Cobb County School District

CTLS-Assess assessments will be collaboratively developed by Cobb County School District teacher leaders at each grade level and content area. Prior to beginning the assessment development process, all staff involved in the development of assessments participate in professional learning designed to train staff in how to write quality, rigorous items for district assessments. This professional learning is provided by external partners.

Teacher teams will work alongside Cobb County School District Curriculum and Assessment Leaders and third-party assessment development experts throughout the development process (i.e. development of the assessment blueprint, development of items, and development of the assessment). Once

assessments are developed, they are vetted by Cobb County School District assessment and curriculum leaders for item quality and bias. Teachers can access the assessments tied to their specific course numbers once the assessments are 'released' by the Assessment Department. These assessments will be reviewed and revised as needed to ensure alignment with state standards.

Once the assessment is administered, results are immediately available for selected response and multi-select questions. Results are available by assessment at each of the following levels: by district, by school, by class, by standard, and by question. Teachers have real-time access to information regarding students who are not making progress toward Georgia's academic content standards.

Georgia MAP Assessment Partnership

NWEA has more than three decades of experience aligning assessments to specific state standards, using an evidence-based process. NWEA will work with Georgia stakeholders to conduct a thorough review of the Georgia Standards of Excellence and alignment criteria documents, which describe skills to be measured and expected performance. NWEA will have a team led by test developers with expertise in applying state standards to assessments with the State's view of the standards in mind. NWEA will collaborate with educators and the State about items and specifications to gain a deeper understanding of Georgia standards.

Each item will be reviewed by Content Specialists for alignment to Georgia standards, as well as the targeted depth of knowledge and cognitive demand. To verify that the depth and rigor of the Georgia standards are reflected in the NWEA item pool and test specifications, NWEA intends to select item reviewers from within GMAP and other Georgia districts.

As NWEA moves forward with the implementation of the through-year model, Content Specialists will work with the State to review and refine content alignment. NWEA intends to work with Georgia educators and assessment experts to continually refine test alignment to and expand item pool coverage of the GSE. Once completed, NWEA will produce a multi-year item development plan for the State to review for improved alignment as the contract progresses.

NWEA plans to develop performance tasks to confirm higher-order thinking skills and writing skills are part of the through-year assessment system. To that end, NWEA plans to phase in performance tasks, scoring protocols, and training over three years, starting in Year 3.

To align the performance tasks with the through-year assessment model, NWEA intends to collect sample responses to the performance tasks, guide teachers in matching student work to Georgia ALDs, and build training guides and next step guides. As a result, teachers can not only administer the tasks but will also have a framework for analyzing student thinking along learning progressions. Including performance tasks in the through-year assessment system will ultimately improve alignment of the testing system and the validity of the summative scores.

NWEA is proposing a new set of assessments for Georgia and will work to meet the requirements of an independent alignment study in order to support peer review. NWEA staff will prepare materials to support the contractor that the Georgia selects for this study. Once completed, NWEA will collaborate with the State in order to determine the outcomes of the alignment study and determine any needed changes to development plans. NWEA knows strong alignment is critical for quality assessments and looks forward to partnering with Georgia in these efforts.

Putnam Consortium

Student responses to Navvy assessment items are objectively scored as correct/incorrect via machine, automated scoring to allow for real-time feedback.

Evaluation and continuous improvement

The quality of the SEA's or consortium's plan to annually evaluate its implementation of innovative assessment demonstration authority. In determining the quality of the evaluation, the Secretary considers –

1) **The strength of the proposed evaluation of the innovative assessment system included in the application, including whether the evaluation will be conducted by an independent, experienced third party, and the likelihood that the evaluation will sufficiently determine the system's validity, reliability and comparability to the statewide assessment system consistent with the requirements of 34 CFR part 200.105(b)(4) and (9); and**

State of Georgia

The GaDOE's Program Manager will oversee annual implementation of the innovative assessment pilot, including the collection of data and information to inform an annual report and evaluation of the pilot.

A final independent evaluation of the technical quality of the three innovative assessments will be determined through a competitive bid process (via a Request for Proposals (RFP)). The awarded independent contractor will provide services for comparability studies with Georgia Milestones (inclusive of an evaluation of reliability and validity evidence that is consistent with nationally recognized professional and technical standards) at the end of the demonstration authority, or potentially earlier if the innovative assessment pilots are fully developed and ready for an evaluation.

In addition to federal requirements, Code Section 20-2-281 of the Official Code of Georgia Annotated (O.C.G.A. §20-2-281; as amended by Georgia Senate Bill 362 (SB 362) in 2018) stipulates the following regarding the evaluation of technical quality:

> "The State Board of Education and the Department of Education shall contract with an external, independent third party to evaluate comparability between the innovative assessments, including norm referenced assessments, and the state-wide assessments, including for subgroups of students, and shall identify strategies that may be used to scale the innovative assessment to all local school systems state-wide. The State Board of Education shall determine initial performance based baselines and accountability requirements for local school systems participating in the pilot program" (SB 362 § 2(f)(3), lines 134-140).

The final independent evaluation of technical quality will include a series of construct comparability (i.e., content alignment) studies including analyses of assessment framework documents (e.g., test blueprints and specifications for test items) and convening panels of educators (including Georgia teachers and external expert facilitators) to examine the alignment between items on the innovative assessments with the state academic content standards.

The evaluation will also include a series of score comparability studies including empirical analyses for linking procedures (to establish concordance tables), building reliability and validity evidence, classification accuracy analyses (for achievement level designations), analyses by subgroups of students, and performance differentiation by schools. Additional analyses will explore the comparability of administration procedures (including availability of accommodations), as well as scoring specifications (including protocols for scoring constructed response items) and inter-rater reliability statistics. Included within the scope of these studies will be analyses that explore the potential use of the concorded measures for each relevant grade-span and content area as indicators within the statewide accountability system (similar to the considerations specified in 34 CFR § 200.105(b)(9).

Similar studies by independent, third-party expert groups have been conducted before in Georgia when exploring the feasibility of implementing the nationally recognized high school academic assessment flexibility (ESSA § 1111(b)(2)(H)). This independent alignment study[24] and independent score comparability study[25] are publicly available on the Georgia Department of Education's testing website.

Prior to the independent evaluations, there are other pilot program aspects that will complement pilot development and implementation activities in support of technical quality. As such, Georgia legislation provides for an additional contract (separate from the independent evaluation contract mentioned previous paragraphs) that allows for technical assistance from an independent third party (SB 362 § 2(f)(1), lines 123-130), which will also organize and lead a series of special Technical Advisory Committee (TAC) meetings to support pilot program participants. This independent third party, as well as the associated TAC members, will be able to provide advice and feedback regarding reliability and validity evidence for the innovative assessments, including assessment designs that facilitate the comparability options specified in 34 CRF § 200.105(b)(4).

2) The SEA's or consortium's plan for continuous improvement of the innovative assessment system, including its process for –
   (i) Using data, feedback, evaluation results, and other information from participating LEAs and schools to make changes to improve the quality of the innovative assessment; and
   (ii) Evaluating and monitoring implementation of the innovative assessment system in participating LEAs and schools annually.

<u>State of Georgia</u>

Georgia will request funds from the General Assembly to support a Program Manager and Assessment Specialist, housed within the GaDOE's Office of Assessment and Accountability, that will manage activities and projects related to the innovative assessment pilot program. This program manager will monitor implementation of the innovative assessment system; manage and work with contractors; serve as the liaison in working with technical assistance groups; ensure the completeness of state and federal reporting requirements; communicate with districts and consortia; and ensure activities are on-

[24] http://www.gadoe.org/Curriculum-Instruction-and-Assessment/Assessment/Documents/General%20Presentations/Independent_Alignment_Study_ACT_SAT.pdf
[25] http://www.gadoe.org/Curriculum-Instruction-and-Assessment/Assessment/Documents/General%20Presentations/Independent_Score_Comparability_Study_ACT_SAT.pdf

schedule and meeting timeline requirements. The Program Manager will also develop and monitor an implementation plan for the state and each pilot to ensure that statutory requirements are being met. Additionally, the Program Manager will develop and carry out a plan to ensure all stakeholders are kept up-to-date on the innovative assessment pilot program and have multiple opportunities to provide feedback. The Program Manager will use this information, along with the work of the technical advisory committee and technical assistance provider (see next paragraph) to improve the quality of the innovative assessment pilot.

Georgia is seeking the assistance of external experts through a Request for Proposals (RFP) process to assist Georgia and its pilot districts in planning, developing, implementing, evaluating, and scaling Georgia's innovative assessment pilot program. The selected technical assistance provider will provide a set number of technical assistance hours to each assessment pilot to assist in the development and implementation of their assessment systems. Additionally, the provider will convene a technical advisory committee (TAC) twice each year to provide independent, objective technical assistance regarding the technical quality of the assessment systems. Finally, the provider will provide the state with an annual report summarizing the technical assistance needs addressed at TAC meetings and through technical assistance hours, lessons learned, and recommendations for future pilot program activities. Georgia will utilize this information to continually improve its technical supports and implementation of the innovative assessment pilot program.

The State Board of Education (SBOE) will work with each local school system participating in the pilot program to amend its performance contract (charter system contract or strategic waivers school system contract) to reflect the innovative alternate assessment and accountability system that will be utilized during the term of the pilot program. SBOE review of the annual reports submitted to the SBOE regarding school district compliance with individual performance contracts will identify any local school system in the pilot program that is not complying with the terms of its performance contract and may remove any such system from the pilot program and subject it to the existing state-wide assessment requirements and the accountability system. The SBOE will include in its consideration whether participating districts/consortia addressed annual benchmarks toward achieving high-quality and consistent implementation across participating schools that are, as a group, demographically similar to the State as a whole during the demonstration authority period, using the demographics of initially participating schools as a baseline.

Appendix A:
State of Georgia

Georgia's ESSA Plan Development Process

Background

The Georgia Department of Education (GaDOE) has been committed to a plan development process that is truly stakeholder driven. Over one-hundred and forty Georgians representing students, parents, educators, policymakers, and community members from across the state were actively involved in the development of Georgia's State Plan with thousands of Georgians expressing their feedback throughout the process. The Every Student Succeeds Act (ESSA) afforded Georgia the opportunity to reflect, reevaluate, and refine educational policies and programs ensuring they are classroom-centered and child-focused.

State Advisory Committee

The State Advisory Committee consists of over forty stakeholders representing state agencies, non-profit and civic organizations, education advocacy groups, policymakers, superintendents, parents, and students.

- Students
- *Parents:* Georgia Parent Teacher Association (GaPTA) and other parent representation
- *Educators:* Professional Association of Georgia Educators (PAGE), Georgia Association of Educators (GAE), and EducatorsFirst
- Georgia Association of Educational Leaders (GAEL) and Regional Education Service Agencies (RESAs)
- *Superintendents:* Georgia School Superintendents Association (GSSA) and other superintendent representation
- Georgia School Boards Association (GSBA)
- *Higher Education:* Technical College System of Georgia (TCSG) and University System of Georgia (USG)
- Non-profit: Southern Education Foundation and 100 Black Men of Atlanta
- *State agencies:* Governor's Office of Student Achievement (GOSA), Student Finance Commission (GSFC), Professional Standards Commission (GaPSC), Department of Juvenile Justice (DJJ), Department of Early Learning (DECAL), and Georgia Public Library Service (GPLS)
- *Charters:* Georgia Charter Schools Association and Georgia Charter Systems Foundation
- *Economic Development:* Georgia Partnership for Excellence in Education (GPEE), Georgia Hispanic Chamber of Commerce, and Georgia Association for Career Technical Education
- *Recognized Leaders:* 2017 Teacher of the Year and 2015 National Superintendent of the Year
- *Policymakers:* Governor's Office, Lt. Governor's Office, and lawmakers
- State School Superintendent and State Board of Education

Meetings were facilitated by the Carl Vinson Institute with members of the Advisory Committee developing focus areas and guiding principles for each of the sections of ESSA as well as reviewing stakeholder feedback and providing feedback themselves on the proposed plan.

What is ESSA?

The *Every Student Succeeds Act*, commonly referred to as ESSA, earned bi-partisan approval in 2015.

States were freed from their *No Child Left Behind* (NCLB) waiver agreements and given the responsibility to develop state plans to support education.

ESSA significantly scaled back the authority of the Secretary of Education and U.S. Department of Education. Though ESSA gave states additional authority and flexibility over their education system, wholesale flexibility was not granted and statutory requirements vary in specificity from issue-to-issue.

Georgia has sought out maximum flexibility while creating a cohesive and aligned plan that is responsive to stakeholder feedback and supports our vision of *offering a holistic education to each and every child in the state.*

To learn more about Georgia's plan development process visit:
GaDOE.org/ESSA

Working Groups

Each of Georgia's ESSA workgroups are made up of a cross-section of twenty individuals with five members representing different areas of GaDOE and fifteen members representing stakeholders. Each workgroup was chaired by a GaDOE leader and key stakeholder. There were six working groups organized in total:

1. **Accountability** — GaDOE.org/ESSA-Accountability
2. **Assessment** — GaDOE.org/ESSA-Assessment
3. **Federal Programs to Support School Improvement** — GaDOE.org/ESSA-Improvement
4. **Education of the Whole Child** — GaDOE.org/ESSA-WholeChild
5. **Educator and Leader Development** — GaDOE.org/ESSA-Development
6. **Communications** — Made up of communications staff from major groups and organizations, this working group was charged with soliciting feedback as well as communicating aspects of Georgia's Plan.

Note: Visit the links in order to view a 2-page overview for each of the groups.

GaDOE will keep these workgroups intact in order to provide on-going feedback on the implementation of Georgia's Plan.

How was initial feedback from Georgians gathered?

The Georgia Department of Education (GaDOE) held eight feedback sessions across the state. These were opportunities for parents, students, educators, business and industry, and community members to share their thoughts and concerns. Feedback was compiled, analyzed, and summarized by a third party so participants could engage in candid conversations.

Feedback sessions were also held with each of the State School Superintendent's advisory councils, representing middle and high school students, parents, teachers, and district superintendents. Business and industry, as well as civil rights organizations, were also engaged.

GaDOE utilized social media, a dedicated ESSA email address for comments, as well as public survey to gather feedback.

What did Georgians say?

Common themes that emerged can be found in the feedback summary report at: GaDOE.org/ESSAFeedback. This report was compiled through a third party evaluator.

Feedback themes, along with the response to each of those themes, are embedded within Georgia's State ESSA Plan.

Timeline

- **May 2016 — April 2017** — State Advisory Committee and working groups convene. GaDOE provides multiple opportunities for stakeholder feedback and to communicate ESSA developments
- **April 2017** – All decisions and items completed by working groups to finalize draft.
- **June 15 –** 30 day public review period of Georgia's State ESSA Plan. Visit: GaDOE.org/ESSA
- **June 15-July 14** – Co-chairs host public webinars to gain feedback during 30-day period.
- **July 14-July 24** – Feedback is compiled and presented to the working groups and advisory committee
- **July 24-Aug 4** – Working groups reconvene to discuss feedback and make revisions based on feedback.
- **Aug 4-Aug 11** – Finalize all aspects of plan to submit to the Governor.
- **Aug 11-Sept 10** – Governor's review period of final plan.
- **Sept 11-Sept 18** – Georgia's plan is finalized for revision.
- **Sept 18, 2017** – Georgia's State Plan is submitted.

Every Student Succeeds Act Feedback from Stakeholder Groups Across Georgia

January 2017

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Introduction

On August 18, 2016, the Georgia Department of Education (GaDOE) and state superintendent of education invited everyone in the state to attend one of eight public feedback sessions held across Georgia to learn about the Every Student Succeeds Act (ESSA) and offer feedback on the development of the state plan. ESSA is the replacement for the law known as No Child Left Behind. This new law allows greater decision making flexibility to states and local schools and districts in meeting the needs of their students.

The feedback sessions were facilitated by EducationFirst, the Southeast Comprehensive Center (SECC), and the Southern Education Foundation, which collected information from the participants, analyzed the responses, and produced reports documenting each event. The resulting reports were provided to GaDOE to be used by the various writing teams who are constructing the state's ESSA plan. Feedback during this period also could be emailed to GaDOE at essa@doe.k12.ga.us.

Each of eight sessions facilitated by EducationFirst were 2 hours in length and addressed topics that included Assessment, Accountability, Educator and Leader Development, Federal Programs to Support School Improvement, and Education of the Whole Child. The statewide sessions were as follows:

- August 24, 2016, Columbia County
- August 29, 2016, Habersham County
- September 14, 2016, Fulton County
- September 19, 2016, Muscogee County
- October 12, 2016, Laurens County
- October 17, 2016, Gordon County
- November 1, 2016, Dougherty County
- November 3, 2016, Chatham County

Between August 30 and October 11, 2016, SECC facilitated five sessions to solicit feedback from the members of Superintendent Richard Woods' Advisory Groups. The groups included the following:

Superintendents Advisory Council

The Superintendents Advisory Council is composed of local superintendents from all over Georgia. Each regional education service agency (RESA) is represented to ensure the voices from all areas of the state are heard. These council members have diverse backgrounds and experiences and represent rural, urban, and suburban school districts.

Student Advisory Councils

The Middle and High School Student Advisory Councils are made up of 108 middle and high school students from every corner of the state. These students meet with the state school

superintendent several times throughout the school year to discuss the impact of state policies in the classroom. They serve as the superintendent's ambassadors to their respective schools, and participate in service projects to benefit schools and students.

Teacher Advisory Council

The Teacher Advisory Council is composed of over 80 teachers from 30 elementary, 15 middle, and 30 high schools representing over 40 school districts across the state (rural, urban, and suburban), from first-year to veteran teachers. These teachers represent all content areas (social studies, English language arts, math, and science as well as fine arts, language, gifted and special education).

Parent Advisory Council

The Parent Advisory Council is a group of approximately 24 parents from across the state that provide input on new policies, projects, and materials that impact students and their families. Advisory Council members are particularly focused on how to increase parent and family engagement to ensure student academic success. Members serve as advisors and meet with the state school superintendent several times throughout their two-year term.

The five 2-hour sessions focused on the same areas of concern as those facilitated by EducationFirst: Assessment, Accountability, Educator and Leader Development, Federal Programs to Support School Improvement, and Education of the Whole Child. The sessions were conducted with approximately 160 participants from the above groups. SECC facilitators collected the feedback from each session, analyzed the responses by topic area, and identified predominate common themes from each individual session.

On October 3, 2016, the Southern Education Foundation convened representatives from their member organizations to discuss Superintendent Woods' request to provide ideas for improving education for Georgia students in the department's ESSA plan. Organizations represented at the feedback session included WonderRoot, Urban League of Greater Atlanta, ACLU Georgia, United Way of Greater Atlanta, Community Foundation of Greater Atlanta, Georgia State University School of Public Health, 100 Black Men of America, Georgia State Conference of NAACP, The Opportunity Institute, Georgia Division of Family and Children's Services, Parent to Parent of Georgia, Interfaith Children's Movement, Georgia Appleseed, Sheltering Arms, Center for Pan-Asian Community Services, Gwinnett StoPP, and Georgia Budget and Policy Institute. Topic areas mirrored those of the sessions conducted by EducationFirst and SECC.

At each of the multiple feedback opportunities, participants were encouraged to engage in a two-way communication process with GaDOE in a partnership to ensure that every student is ready to "learn, live, and lead." The summary documents from each of the regional sessions facilitated by EducationFirst and the superintendent's advisory groups facilitated by SECC can be found in the Appendix of this report.

This summary report is organized in the following sections:

- Common Themes Across All Sessions
- Common Themes from Sessions Hosted by EducationFirst
- Common Themes from Sessions Hosted by the Southeast Comprehensive Center
- Common Themes from the Sessions Hosted by the Southern Education Foundation

Common Themes Across All Sessions

Accountability

1. The current accountability system is not accurate, is difficult for parents and others to understand and the measures and scores do not necessarily correlate to what people are seeing at school.
2. The current accountability index has too many indicators and should be simplified to make more sense.
3. The current accountability index does not capture school growth and improvement well enough and the Georgia Department of education should design new measures of true student growth to use for accountability.
4. The current accountability index should include more measures of school culture.
5. While growth is important, integrate other factors in the system to get a more holistic view of performance.
6. Stakeholders believe that multiple measures should be used to determine a school's success or failure. We need more than one definition of success and failure.

Assessment

1. Assessments should be used as a data point to help inform instruction, and not as a punitive measure for teachers or students, nor for other high-stakes purposes. Stakeholders want assessment to be more diagnostic with specific information about student performance tied to standards. Modifications need to be made for special needs children.
2. Testing is important, but currently there is too much focus on testing outcomes for students. Assessment pressure incentivizes schools to cut PE, music, art and other areas essential to educating the whole child. Children need time to explore, learn hands-on, produce and create. Schools need funding to support that.
3. Need more local flexibility in decision-making regarding the use of assessments and the assessments that students take. Some suggestions included: reduce the length of state testing and break up tests into two or three sessions that provide more timely data.
4. Assessments need better questions that accurately reflect what students learn, should be age- and developmentally-appropriate, and there should be less bias in assessment items
5. There are more effective ways to assess/show student learning than standardized assessments
6. Stakeholders mentioned several concerns about the current assessments including: lack of consistency, difficulty in using the data, not enough formative assessments and lack of timely feedback from assessments to drive differentiation, instruction, etc.
7. It is powerful what we report. Words like success and failure have implications and how is that communicated in the public setting is important to think through.

Educator and Leader Development

1. Districts face significant barriers to ensuring that students have access to higher-level courses and highly effective and qualified teachers and leaders
2. Districts should offer teachers and leaders more significant professional development to address effectiveness, including opportunities to collaborate with other educators. Teachers should have additional promotion and career path opportunities.
3. Attendees identified a wide range of qualifications as important for teachers and principals beyond a degree, including knowledge of content and teaching strategies. Stakeholders identified intangible qualities as the most important for effective teachers and leaders – passion, drive, empathy.
4. Funding and teacher pay was identified as the primary barrier to students having equal access to effective teachers and principals. Districts need to offer teachers and leaders more resources and incentives to work in the areas they are needed most. State education leaders should address salary caps and inequities and provide incentives for educators and leaders working in struggling schools.
5. School and district culture was also identified as a significant barrier to attracting effective teachers.
6. Educators and leaders should have content knowledge, understand best practice and recent research, have an opportunity to co-teach and be mentored and get leadership training. For example, teachers in the IN4 program need a lot more support than those coming in through a traditional pathway.

Federal Programs to Support School Improvement

1. Align federal program planning and requirements to what's already required through SACS, GA accreditation, flexibility waivers, SWSS and charters.
2. Reconsider/better understand how funds are distributed to provide resources where they are needed most. For example, investing in media specialists/centers would support school improvement as a whole. State needs to clarify that this funding is allowable through ESSA.
3. Stakeholders like the benefit of current flexible learning program and Title I parent involvement resources. One size fits all hasn't worked. Stakeholders like that schools can develop their own improvement plans
4. The state should consider what interventions are most scalable to provide for the needs of all students and evaluate the use of funds to ensure that money is spent on programs/interventions with the best results.
5. Inconsistency in support for struggling schools (what the parameters are) makes it tough for schools to make a plan. Funding given during school improvement process and then taken away makes it difficult for schools to sustain improvement.
6. Stronger engagement with the community is important for school improvement.

Education of the Whole Child

1. Provide better social emotional learning support and programming for students, including: more opportunities for student peer-to-peer mentoring, interventions that use technology efficiently and provide students with a better understanding of technology, and provide students with opportunities to explore through field trips, hands-on learning, project-based learning and community connections.
2. Ensure basic student needs (e.g., health, shelter and safety) are met and provide the necessary mental, social and physical support. Students should have access to mental health services and experts. Teachers and parents need mental health training and continuous support, not a one-time event.
3. Leverage community partnerships to increase the level of services in schools and educational opportunities for students.
4. Ensure that programs are designed to differentiate/be individualized for a variety of student needs.
5. Title IV was usual source of funding for whole child programs. Now with ESSA, they are looking at all Titles for funding programs.
6. Schools are so focused on testing, even counseling/interventionist roles become focused on academics not mental health. Teachers and schools need resources to deal with behavior issues in a comprehensive way.

Common Themes from Sessions Hosted by EducationFirst

Accountability Common Themes

1. Figure out how to measure true student growth and use it for accountability.
2. Simplify the entire accountability system, including the CCRPI. It's not fair or clear.
3. While growth is important, integrate other factors in the system to get a more holistic view of performance.
4. Attendees do not think the current system accurately reflects their schools' performance.

Assessment Common Themes

1. Assessments should be primarily used to drive instruction, not for high-stakes purposes.
2. Use assessments that are age and developmentally appropriate.
3. Break up tests into two or three sessions that provide more timely data.
4. Reduce the length of state testing and use different ways to assess mastery.

Educator and Leader Development Common Themes

1. Attendees identified a wide range of qualifications as important for teachers and principals beyond a degree, including knowledge of content and teaching strategies.
2. Teachers should have additional promotion and career path opportunities.
3. Funding and teacher pay was identified as the primary barrier to students having equal access to effective teachers and principals.
4. Educators want to collaborate and see what other school systems are doing as part of their professional development.

Federal Programs to Support School Improvement Common Themes

1. One size fits all hasn't worked. Attendees like that schools can develop their own improvement plans.
2. Additional support personnel, such as counselors and special education instructors, are needed.
3. The community needs to get involved in school improvement.
4. Strong teacher and principal professional development should be a key part of improvement plans.

Education of the Whole Child Common Themes

1. Engage students earlier and create an academic plan that aligns with their passions and interests.
2. Provide more flexibility for course selection and graduation requirements to match the student.
3. Ensure basic student needs (e.g., health, shelter and safety) are met and provide the necessary mental, social and physical support.
4. Leverage community partnerships to increase the level of services in schools and educational opportunities for students.

Common Themes from Sessions Hosted by the Southeast Comprehensive Center

Accountability

1. The current measures of accountability do not measure the right things.
2. The current accountability index has too many indicators and should be simplified to make more sense.
3. The current accountability index does not capture school growth and improvement well enough.
4. The current accountability index should include more measures of school culture.

Assessment

1. Assessments should be used as a data point to help inform instruction, and not as a punitive measure for teachers or students.
2. Testing is important, but currently there is too much focus on testing outcomes for students.
3. Need more local flexibility in decision-making regarding the use of assessments and the assessments that students take.
4. Assessments need better questions that accurately reflect what students learn, and there should be less bias in assessment items.
5. There are more effective ways to assess/show student learning than standardized assessments.

Educator and Leader Development

1. Districts face significant barriers to ensuring that students have access to higher-level courses and highly effective and qualified teachers and leaders.
2. Districts should offer teachers and leaders more significant professional development to address effectiveness.
3. Districts need to offer teachers and leaders more resources and incentives to work in the areas they are needed most.
4. More intangible qualities are identified as the most important for effective teachers and leaders – passion, drive, empathy.
5. School and district culture is a significant barrier to attracting effective teachers.

Federal Programs to Support School Improvement

1. Reconsider/better understand how funds are distributed to provide resources where they are needed most.
2. Consider what interventions are most scalable to provide for the needs of all students.
3. Evaluate the use of funds to ensure that money is spent on programs/interventions with the best results.
4. Stronger engagement with the community.

Education of the Whole Child

1. Provide better social emotional learning support and programming for students.
2. Ensure that programs are designed to differentiate/be individualized for a variety of student needs.
3. Provide more opportunities for student peer-to-peer mentoring.
4. Provide interventions that use technology efficiently and provide students with a better understanding of technology.
5. Provide students with more opportunities to gain real-world knowledge.

Common Themes from Sessions Hosted by the Southern Education Foundation

Accountability

1. We publish a lot of data but need to think through how it is used. There should be a way to identify what schools are doing well and where they need to improve as opposed to saying they are failing or succeeding.
2. We need to better define what we mean by college and career ready, as well as how the information published can be used to help students. The notion of college and career, what does that mean? How can the information we publish be used more to help students and not the institution?
3. Assessment and accountability are forever linked. You cannot have one without the other.
4. School climate measures needs to separate attendance from discipline. It should also separate different types of suspensions, i.e. in school versus out of school or across teams within the school.
5. The current accountability rating system is just a score. There also needs to be thoughtful interpretation of the score.
6. Provide a simple dashboard with an overview of information and then allow the stakeholders to dig into more data if they wish.

Assessment

1. Make assessments more culturally appropriate and allow for a variety of assessment types including portfolios.
2. Assessments should be used to help teachers, students, and schools and not used as punishment if certain benchmarks are not met.
3. Less is more. There does not have to be so much focus on testing when teachers are making sure students are ready for college and career.
4. Assessment need to be related to where the students are going such as to the next level, college and career. Currently they are not as relevant and therefore students do not take them as seriously as they should.
5. Less is more. What data can we collect that is useful and not impact the schools, school day as we are doing with assessment right now.
6. It is powerful what we report. Words like success and failure have implications and how is that communicated in the public setting is important to think through.

Educator and Leader Development

1. Stakeholders discussed several barriers to providing all students with equal access to effective teachers and principals, including teacher assignments not based on strengths and weaknesses, lack of leadership support at the schools, need for more teacher leaders in schools, a lack of cultural understanding and community involvement, and a lack of funding and/or other resources to provide incentives to retain effective teachers.

2. Many districts face high teacher and leader turnover rates, especially as surrounding districts recruit effective teachers from struggling schools.
3. School climate needs to be a focus. Schools with a positive climate orient their teachers to the culture. One barrier to this is effective leadership or could have an impact on this issue. The leader could mean school board, superintendent need to also be educated.
4. Teachers need to be able to engage and given flexibility to meet their students' needs is important.

Federal Programs to Support School Improvement

1. No feedback provided.

Education of the Whole Child

1. Schools need to be the community center and ensure that children have a system of care from Pre-Kindergarten through Grade 12.
2. Teachers and schools can't respond to all children's needs. So there needs to be partnerships with health sectors, communities to help children succeed. School nurses and other members of the community need to be part of the approach.
3. Social emotional learning and should have students with challenges (mental health issues) are given more support. Children are also supported to pursue their passions and have help getting there.
4. Cultural competencies need to be developed to work with these students, provide more multiculturalism training for teachers.
5. Framing the idea of professional development and support around understanding of brain development. Helps to distinguish what is appropriate. Staff need to understand children experiencing trauma with poverty too.
6. Stakeholders provided several suggestions for ways the community can help, including a focus on restorative practices, providing bilingual services for English language learners, improving transportation services for students, providing school-based health centers, and better educating the community about the importance of school climate.

Appendix

EducationFirst – Common Themes from Each Regional Session

Chatham County

Accountability Common Themes

1. Stakeholders were critical of the CCRPI, noting that it needs to be stabilized and consistent, it should measure things that educators can control and only measure what is essential.
2. Stakeholders do want information about student performance, participation rates, growth and achievement.
3. The current accountability system is not accurate, is difficult for parents and others to understand and scores do not necessarily correlate to what people are seeing at school.

Assessment Common Themes

1. We are assessing the cognitive aspect of the child. Need to monitor the mental health, citizenship, contributions to the learning community. Bring in assessments for social emotional learning.
2. Stakeholders want assessment to be more diagnostic with specific information about student performance tied to standards. Modifications need to be made for special needs children.

Educator and Leader Development Common Themes

1. Educators and leaders should have content knowledge, understand best practice and recent research, have an opportunity to co-teach and be mentored and get leadership training.
2. Teachers in the IN4 program need a lot more support than those coming in through a traditional pathway.
3. State education leaders should address salary caps and inequities and provide incentives for educators and leaders working in struggling schools.

Federal Programs to Support School Improvement Common Themes

1. Inconsistency in support for struggling schools (what the parameters are) makes it tough for schools to make a plan.
2. Investing in media specialists/centers would support school improvement as a whole. State needs to clarify that this funding is allowable through ESSA.
3. Funding given during school improvement process and then taken away makes it difficult for schools to sustain improvement.

Education of the Whole Child Common Themes

1. Stakeholders want more technology but appropriate to student needs and the curriculum. Media specialists should be engaged to help students use technology to engage their passions and open up curiosity.
2. Students should have lots of opportunities to explore through field trips, hands-on learning, project-based learning and community connections.
3. Students should have access to mental health services and experts.

Columbia County

Accountability

1. Figure out how to measure true student growth and use it for accountability.
2. Simplify the CCRPI. It's not fair or clear.
3. While growth is important, include other factors in the system for a holistic view of performance.
4. Attendees do not think the current system accurately reflects their schools' performance.

Assessment

1. Use testing for formative purposes only.
2. Test students more aligned with the age and development.
3. Break up tests into two or three session that provide formative data.
4. Reduce the length of state testing and use computers for elementary grades.
5. Test results are not timely and are not designed to support instruction.

Educator and Leader Development

1. Attendees identified a wide range of qualifications as important for teachers and principals beyond a degree.
2. Teacher should have additional promotion and career path opportunities.
3. Funding and teacher pay was identified as the primary barrier to students having equal access to effective teachers and principals.
4. Educators want to collaborate and see what other school systems are doing as part of their professional development.

Federal Programs to Support School Improvement

1. One size fits all hasn't worked. Attendees like that schools can develop their own improvement plans.
2. Additional support personnel, such as counselors and special education instructors are needed.
3. The community needs to get involved in school improvement.

4. Strong teacher and principal professional development should be a key part of improvement plans.

Education of the Whole Child

1. Engage students earlier to develop their passions and interests.
2. Provide more flexibility for courses selection and graduation requirements to match the student.
3. Have more mental health and other social services with quicker response/meeting times.

Dougherty County

Accountability Common Themes

1. Accountability measures need to focus more on student growth.
2. The current accountability system is convoluted and has too many elements which are hard to communicate and understand.
3. Stakeholder believe that multiple measures should be used to determine a school's success or failure. We need more than one definition of success and failure.

Assessment Common Themes

1. Stakeholders mentioned several concerns about the current assessments including: lack of consistency, difficulty in using the data, not enough formative assessments and lack of timely feedback from assessments to drive differentiation, instruction, etc.

Federal Programs to Support School Improvement Common Themes

1. Stakeholders like the benefit of current flexible learning program and Title I parent involvement resources.
2. Align federal program planning and requirements to what's already required through SACS, GA accreditation, flexibility waivers, SWSS and charters.

Education of the Whole Child Common Themes

1. Assessment pressure incentivizes schools to cut PE, music, art and other areas essential to educating the whole child. Children need time to explore, learn hands-on, produce and create. Schools need funding to support that.
2. Schools are so focused on testing, even counseling/interventionist roles become focused on academics not mental health. Teachers and schools need resources to deal with behavior issues in a comprehensive way.
3. Teachers and parents need mental health training and continuous support, not a one-time event.

Fulton County

Accountability Common Themes

1. Stakeholders are interested in their schools' ability to grow students and offer opportunities in other subject areas and outside of the school.
2. CCRPI is too complex, yet it still does not capture the full picture of a school. CCRPI should be streamlined, simplified and focused on school improvement.
3. The state should rate schools based primarily on student growth, but also include school climate measures and how well the schools prepare students for life after graduation.

Assessment Common Themes

1. Assessment results should be shared with school and district administrations in a timely fashion so that improvements can be made at the classroom, school, and district levels.
2. The amount of time devoted to assessment should be reduced and the state should consider other changes to the structure of the assessments.
3. Parents want to know what their children have learned and areas they need to focus on.

Educator and Leader Development Common Themes

1. Stakeholders prioritized content knowledge, years of experience, leadership and skills such as communications, problem solving and cultural sensitivity as important qualifications for teachers and principals.
2. Barriers to equal access to effective teachers and principals include lack of training for teachers and principals, staffing issues and external factors such as poverty, family context, health and language or culture barriers.

Federal Programs to Support School Improvement Common Themes

1. Stakeholders commented on the current use of funds. They want clear guidance around Title I funds in particular and clearer parameters and flexibility around use of funds in general.
2. Title I funds have helped to address student needs and increased student achievement and participation in schooling.
3. Stakeholders noted the importance of partnering with community organizations, the business community and parents to support students both academically and socially and emotionally.

Education of the Whole Child Common Themes

1. All students should have access to all types of instruction, both rigorous academic instruction and electives that speak to their passions and interests.
2. Health, arts and technology should be fully integrated into the curriculum at all levels.
3. The system needs more resources for social workers/psychologists and other mental health care supports.

Gordon County

Accountability Common Themes

1. Stakeholders favored accountability measures that emphasize student growth and multiple measures. The accountability system should track school climate, college and career readiness and equity indicators.
2. Most stakeholders did not feel that current rating system accurately reflects the performance of their schools. Problems include inconsistency in grading, too many measures and not enough allowance for socioeconomic factors.
3. Recommendations for improvement include simplifying and streamlining the reporting and using multiple measures to create a rating.

Assessment Common Themes

1. Assessments should be formative and informational, reflecting students' ability and measuring growth. Assessments should be used to drive instruction and provide feedback to teachers, parents and students.
2. Assessments should be developmentally appropriate with less testing for elementary students, flexible and varied formats. Students should be assessed at different times and in less time.
3. Stakeholders want assessments that measure problem-solving and critical skills through authentic and portfolio-based assessments. Assessments should measure college- and career-readiness and real-life skills.

Educator and Leader Development Common Themes

1. Stakeholders mentioned several qualifications they felt were important for teachers and principals including: effective management and pedagogical skills, classroom experience, knowledge about child development and the curriculum.
2. There are significant barriers to providing all students with access to effective teachers and leaders including: socioeconomic factors, lack of effective training and support for teachers and administrators, teacher and administrator placement in rural and low-income areas and cultural and language barriers.
3. Stakeholders mentioned several partnerships that are working for Gordon County and recommend continued attention to building partnerships, providing more flexibility for teacher certification and continuing to improve professional development opportunities for teachers and principals.

Federal Programs to Support School Improvement Common Themes

1. Georgia has put into place several initiatives that stakeholders found helpful in continued school improvement such as Title I funding, instructional support for teachers and administrators and whole school accountability measures.
2. To build capacity to sustain improvements, stakeholders suggested collaboration and communication among programs, continued attention to support systems in schools for

all professionals, guidance on whole-school reforms that work and flexible funding that includes matched funding for mandates.

3. Stakeholders appreciated the opportunity to learn and ask questions and suggested that face to face feedback opportunities, especially in small regional groupings, should be continued through implementation of ESSA reforms. Timely feedback from all stakeholders before implementing various reforms is important.

Education of the Whole Child Common Themes

1. Schools and educators should make a concerted effort to provide students with opportunities to discover and engage in their passions and interests through electives, field trips, clubs, partnerships and internship opportunities.
2. Educators should ensure that all students have access to resources including technology, after school activities, field trips, mental health supports and regular physical education.
3. Stakeholders recommended several strategies for encouraging whole child education including: more hands-on and student-driven learning experiences, attention to school climate and social/emotional learning, access to highly qualified teachers and strong curriculum in all subject areas.

Habersham County

Accountability Common Themes

1. Stakeholders were most interested in knowing about school safety, student growth and achievement, teacher effectiveness and qualification and school climate.
2. There are mixed opinions on the current rating system. Some believe it is too complicated and rigorous while others believe it accurately represents some parts of school performance.
3. Stakeholder recommend a wide range of improvement for the system, primarily focused on making it simpler and less focused on CCRPI.

Assessment Common Themes

1. Assessments have many roles. They drive instruction, measure student progress and achievement, measure teacher effectiveness and the quality of schools and districts.
2. More training is required for teachers on the expectations of assessments, how to use the results of state assessments to change instruction and how assessments fit into the larger education system.
3. Increase the variety of question types and assessment methods on the state assessments and give schools more flexibility in administration.
4. Parents are interested in clear, simple results that let them know their child's progress against expectations and against their peers.

Educator and Leader Development Common Themes

1. Stakeholders listed a wide range of qualifications as important, including passion for teaching and children, effective use of technology and strong content and pedagogy knowledge.
2. Attendees noted teacher compensation, difficult workload and out-of-school factors as the largest barriers for improvement. The profession needs to be more appealing.
3. Attendees listed several partnerships within the school and between the school and an external organization like Woodrow Wilson, Piedmont Partnership and higher education collaboratives.
4. Stakeholders emphasized classroom experience during preparation, strong induction and individualized professional development (with opportunities for collaboration) as necessary for improvement.

Federal Programs to Support School Improvement Common Themes

1. One size fits all hasn't worked. Attendees like that schools can develop their own improvement plans.
2. Additional support personnel, such as counselors and special education instructors, are needed.
3. The community needs to get involved in school improvement.
4. Strong teacher and principal professional development should be a key part of improvement plans.

Education of the Whole Child Common Themes

1. Schools need to be community hubs for mental and physical health services.
2. Technology is a powerful tool to promote learning, but teachers need support to effectively engage students' passions with technology.
3. It's important to determine a student's interests and give teachers the flexibility to integrate those passions into instruction.
4. Students need vast experiences—life experiences and a wide range of content.
5. Include the physical along with social emotional and mental health aspects of the whole child.

Laurens County

Accountability Common Themes

1. The accountability data is difficult to understand in some cases. Stakeholders suggested simplifying the ratings or providing more help to parents and the public to understand the system.
2. Data collection can be daunting. Stakeholders asked for some way to simplify or streamline the process, perhaps through a checklist of tasks to help focus the work of data collection.
3. Stakeholders are not convinced that the rating system accurately reflects school performance. The system rates performance of some items that are out of the control of those being rated. Stakeholder don't think it's fair to be held accountable for things out of their control, such as attendance (parents and students).

Assessment Common Themes

1. There is stronger support for formative assessments that help teachers know where students are so they can adjust their instruction.
2. Stakeholder worry that not testing science and social studies sends a message that these subjects are not important.
3. Stakeholders are concerned that testing has become too political and is being used for political ends rather than to support students and teachers.

Educator and Leader Development Common Themes

1. Individual comments varied widely and there were no dominant themes. Stakeholders mentioned a range of important qualifications for teachers and principals including: content knowledge, instructional leadership and a passion for teaching and kids. Poverty, funding and equitable access present barriers to students' access to effective teachers and leaders.

Federal Programs to Support School Improvement Common Themes

1. Individual comments varied widely and there were no dominant themes. Comments covered the following areas: leadership, training, ongoing communication.

Education of the Whole Child Common Themes

1. Individual comments varied widely and there were no dominant themes. Comments covered the following areas: fostering relationships with the public, providing students with opportunities to explore their interests, assessing student interests, providing mental health services, needing after-school programs, and needing colleges to set up satellite classes in remote counties.

Muscogee County

Accountability Common Themes

1. Accountability metrics are confusing for parents and stakeholders wondered if there were too many metrics overall. They suggested that the state make an effort to simplify the reports and communicate the data more clearly.
2. Very few stakeholders felt the rating system accurately reflected school performance. They felt that the rating system does not take into account a wide array of variables that affect performance including curriculum changes, difficulties in tracking transient students and external factors such as poverty and family situation.

Assessment Common Themes

1. Stakeholders felt that the role of assessment should be to measure student understanding, drive instruction and determine quality of teaching and school. Assessments should provide individual feedback about each student and show student growth over time.
2. Computer tests raise some concern, particularly when applied to early grades who may not be familiar with them. Make sure the technology and infrastructure are in place and robust before testing.
3. Formative assessment approaches are attractive because they provide real-time feedback for students and teachers without the anxiety of high stakes summative testing.
4. Focus should be on learning—assessment should inform and not lead.

Educator and Leader Development Common Themes

1. Teachers and principals need strong content knowledge, pedagogical and leadership skills and dispositions that generate flexibility, openness and a passion for teaching and learning.
2. There are significant barriers to providing students with equal access to effective teachers and principals including economic and limited resources, communications, state oversight (or lack thereof) and systemic issues relating to teacher and student supports. These barriers have a strong effect on school culture and morale.
3. Partnerships have been an effective support for educator and leader development and should be expanded, particularly to teacher pre-service institutions and community organizations.

Federal Programs to Support School Improvement Common Themes

1. Invest in people not things—leadership development and instructional support should be prioritized over programs.
2. Partnerships have helped support continued development and school improvement but need to be more widespread and accessible.

3. Create multiple avenues/options for two-way communication between state, district, school and parents/students.

Education of the Whole Child Common Themes

1. Increase opportunities and funding for social, emotional and physical activity for all students.
2. Generate opportunities to fuel students' interests and passions through electives, art, inquiry-based learning and student-centered instruction.
3. There should be greater investment in mental health supports for students including more counselors, mental health screenings, family support and early identification of student needs.
4. Increase teacher training, more flexibility with class scheduling, and increase pathway exploration in elementary school (or in grades before high school).

SECC – Common Themes from Each Advisory Group

Superintendent Group

Accountability

1. The data collected for the CCRPI does not accurately represent school quality and cannot be used to compare schools.
2. The data collected for the CCRPI includes too many indicators and should be simplified to make it more understandable.

Assessment

1. Minimize the importance of testing as a summative, punitive measure. Instead, use data as a formative measure, to inform instruction.
2. Local leaders should have the ability to make decisions on the assessments offered and used to make decisions.

Educator and Leader Development

1. Need to ensure that all students have access to higher-level courses through innovative means. Use technology to strengthen the quality of instruction, especially in small, rural districts.
2. Need to figure out ways to help small, rural districts recruit highly qualified teachers and to incentivize applicants to work with the students who are most at-risk.

Federal Programs to Support School Improvement

1. Need to better understand how federal funds are and can be distributed across the state to fee up flexible funding for districts and schools that are most in need.
2. Need more options for models of school improvement and to increase capacity through expansion of government, non-profit, private, and business partnerships with local education systems.

Education of the Whole Child

1. Provide emotional and intellectual support for students to build social skills in conjunction with academic skills.
2. Implement project-based learning within the community.

Teacher Group

Accountability

1. Current rating system does not accurately reflect performance at the school level. CCRPI focuses too much on assessment data and does not provide schools with opportunities to show true growth, struggle and presence.
2. Data collected is not reliable. Rating system should focus on other measures that are more important for understanding a school, such as education of the whole child, school culture and environment, parent involvement, extracurricular activities offered, school vision and mission, and leadership capabilities.

Assessment

1. Assessments are not measuring the right things. For teachers, assessments should be used to measure mastery, effectiveness of teaching, and provide data on areas for goal setting and instructional improvement. For students, assessments should be used to measure critical thinking skills and making connections to the real world.
2. The process by which assessments are administrated should be improved. Some suggestions include timing of the assessment (i.e. not having them all on the same day), providing students with pretests, allowing modifications for students with special needs (i.e., allowing verbal responses).
3. Assessments should not be used for high-stakes decision making.

Educator and Leader Development

1. Schools and districts face significant barriers to ensuring that students have equal access to effective teachers and principals. To overcome these barriers, districts should consider incentives such as pay, more support and mentorship for teachers, providing teachers with a professional learning community, revising the structure for preparation programs and student teaching.
2. Teachers place value on more intangible qualities to define effective teachers and leaders—centering around passion, drive, and empathy.

Federal Programs to Support School Improvement

1. To ensure continued improvement, teachers named several supports that have worked in their schools, such as: bringing in business partnerships, performing needs assessments to identify areas for improvement, and providing more emotional and academic supports to students.
2. The state should consider ways to leverage available funds to help build capacity at the local level to sustain school improvements. For example, many teachers cited more funding for technology and the arts, as well as providing districts the opportunity to form cross-district partnerships.

Education of the Whole Child

1. Focus less on testing and assessments, and more on building relationships with teachers and their peers, as well as fostering enrichment beyond the school day.
2. Provide students with more access to technology in the classroom and leverage community partnerships to foster student connections between learning and real-world applications of knowledge.
3. Ensure that schools have all the necessary information about the student (i.e., IEP data) when they transfer.

Middle School Student Group

Accountability

1. Students could not answer the question on how their school's state report card reflects performance at their school. When asked to name the most important things for others to know about their school, students focused on areas related to: discipline and culture, resources and amenities, and academic needs.
2. Students offered varied suggestions on how to better measure school success and failures, focusing on methods that provide a global perspective on the school culture, such as surveys, examples of student work, measures of growth and progress, and school resources and amenities.

Assessment

1. Students named several types of assessments that are most useful to them, when receiving feedback on their learning, mostly focuses on tests that provide multiple data points, such as pre- and post-tests that show growth and improvement over time.
2. Students offered varied suggestions to improving statewide testing, including shortening the length of assessments, individualized based on learning needs, and providing questions that make connections to real-world knowledge.
3. Students also offered suggestions for other ways to show their learning beyond state assessments, including art, projects, classroom tasks, and one-on-one interactions with teachers.

Educator and Leader Development

1. Students place value on more intangible qualities to define effective teachers and leaders—centering around passion, drive, and empathy.
2. Students do not have equal access to effective teachers and principals, and they should. Districts should consider incentives improve this, including: better preparation for teachers, increasing teacher pay, and more principal involvement in the classroom.

Federal Programs to Support School Improvement

1. Provide students with more opportunities to engage in hands on activities and community-based learning.
2. Provide students with more opportunities to use technology in the classroom.

Education of the Whole Child

1. Students offered varied responses when asked about what makes them excited to learn, however many of the responses did focus on one of three main themes:
    a. Use of technology to learn
    b. Engage in learning with other students through hands on projects
    c. Making connections between learning and real-work applications of knowledge
2. Students would like to see more comprehensive services at their schools, including: health services, learning social skills, more support for social emotional needs, and opportunities to engage with local businesses and the community.

High School Student Group

Accountability

1. A little over half of the students could not answer the question on how their school's state report card reflects performance at their school. When asked to name the most important things for others to know about their school, students focused on areas related to discipline and culture, resources and amenities, and academic needs.
2. Students offered varied suggestions on how to better measure school success and failures, focusing on methods that provide a global perspective on the school culture, such as surveys, examples of student work, measures of growth and progress, and school resources and amenities.

Assessment

1. Students named several types of assessments that are most useful to them, when receiving feedback on their learning, mostly focuses on tests the ask more direct questions, provide opportunities for free response, and are individualized based on learning styles.
2. Students offered varied suggestions to improving statewide testing, including eliminating or reformatting end of course assessments, switching to paper assessments instead of electronic, and revising assessment questions to address what was learned versus what is supposed to be learned.
3. Students also offered suggestions for other ways to show their learning beyond state assessments, including art, projects, classroom tasks, and regular check-ins with teachers.

Educator and Leader Development

1. Students place value on more intangible qualities to define effective teachers and leaders—centering around passion, drive, and empathy.
2. Students do not have equal access to effective teachers and principals, and they should. Districts should consider incentives to improve this, including: better preparation for teachers, increasing teacher pay, and more principal involvement in the classroom.

Federal Programs to Support School Improvement

1. Students provided insight into the types of learning that helps them best. Some examples include individualized instruction based on learning styles, use of technology, high-quality textbooks, and projects-based learning.
2. Students offered several suggestions for ways in which the community can support their school improvement efforts, such as providing students with learning opportunities, volunteer at local schools, provide schools with sponsorships, and host career fairs for students.
3. The state should utilize multiple methods to collect useful feedback from stakeholders, including social media, surveys and focus groups, and more open communication.

Education of the Whole Child

1. Provide more programs that are designed to fit the unique needs of students.
2. Provide students with more opportunities for work-based learning that prepares them for the real world.
3. Provide students with more resources to address social and emotional needs.

Parent Group

Accountability

1. The current accountability index does not capture school growth and improvement well enough.
2. The current accountability index should include more measures of school culture.

Assessment

1. Assessments should provide more insight into what the students are actually learning, and what areas they need to focus on to improve.
2. Schools and districts should revise the format by which assessments are administered and the timing of assessments in the school year.
3. Schools/districts should provide parents with a more user-friendly way to access data.

Educator and Leader Development

1. More intangible qualities are identified as the most important for effective teachers and leaders—passion, drive, empathy.
2. School and district culture is a significant barrier to attracting effective teachers.
3. Districts need to offer teachers and leaders more resources and incentives to work in the areas they are needed most.

Federal Programs to Support School Improvement

1. Stronger engagement with parents and the community to provide services for school improvement.
2. Provide more education to parents on career paths for students.
3. Provide more support to teachers in understanding the context and culture of students —homelessness and poverty, for example.

Education of the Whole Child

1. Provide better social emotional learning support and programming for students.
2. Ensure that programs are designed to differentiate for diversity/be individualized for a variety of student needs.
3. Provide interventions that use technology efficiently and provide students with a better understanding of technology.

Assessment

Background

The Assessment working group reviews statewide assessment requirements and needs, examines ways to take a more innovative approach to assessing students, strengthen formative tools, and make assessment data more timely and useful. ESSA requires states to assess students in English Language Arts and math in grades 3-8, and once in high school. The law also requires states to assess students in science once in grades 3-5, 6-9, and 10-12 . Georgia will pursue maximum flexibility allowed through federal statute while ensuring validity, reliability, and comparability of state assessment options.

What was the make-up of this Workgroup?

The Georgia Department of Education (GaDOE) has been committed to a plan development process that was truly stakeholder driven. Each of Georgia's ESSA workgroups were made up of a cross-section of twenty individuals with five members representing different areas of GaDOE and fifteen members representing stakeholders. Each workgroup was chaired by a GaDOE leader and key stakeholder.

- *Chairs:* Deputy Superintendent of Assessment and Accountability, Georgia Department of Education; Superintendent of Coweta County Schools
- *Representatives* for superintendents, principals, teachers, school improvement, special education, higher education, and teaching and learning**.** *Organizations represented:* University System of Georgia and Regional Educational Services Agencies (RESAs)

GaDOE will keep these workgroups intact in order to provide on-going feedback on the implementation of Georgia's Plan.

How was feedback from Georgians gathered?

The Georgia Department of Education (GaDOE) held eight feedback sessions across the state. These were opportunities for parents, students, educators, business and industry, and community members to share their thoughts and concerns. Feedback was compiled, analyzed, and summarized by a third party so participants could engage in candid conversations.

What is ESSA?

The *Every Student Succeeds Act*, commonly referred to as ESSA, earned bi-partisan approval in 2015.

States were freed from their *No Child Left Behind* (NCLB) waiver agreements and given the responsibility to develop state plans to support education.

ESSA significantly scaled back the authority of the Secretary of Education and U.S. Department of Education. Though ESSA gave states additional authority and flexibility over their education system, wholesale flexibility was not granted and statutory requirements vary in specificity from issue-to-issue.

Georgia has sought out maximum flexibility while creating a cohesive and aligned plan that is responsive to stakeholder feedback and supports our vision of *offering a holistic education to each and every child in the state.*

To learn more about Georgia's plan development process visit: **GaDOE.org/ESSA**

How was feedback from Georgians gathered? (cont.)

Feedback sessions were also held with each of the State School Superintendent's advisory councils, representing middle and high school students, parents, teachers, and district superintendents. Business and industry, as well as civil rights organizations, were also engaged.

GaDOE utilized social media, a dedicated ESSA email address for comments, as well as public survey to gather feedback.

What did Georgians say?

Common themes that emerged around the work of Assessment were:

1. Tests should be used to inform, rather than drive instruction.
2. Testing is important, but currently there is too much focus on testing outcomes for students at the detriment of educating the whole child.
3. State assessments have limited uses due to their summative nature and the time of year they are administered.
4. Formative assessments, taken throughout the school year, are needed to provide teachers with more timely information to inform instruction.
5. Additional flexibility is needed regarding how assessments are administered.
6. It is powerful what we report. It is important to think through how success and failure are communicated.
7. Assessment reports need to be easier to understand and provided in a more timely manner.

The full feedback summary report can be found at: GaDOE.org/ESSAFeedback. This report was compiled through a third party evaluator.

Feedback themes, along with the response to each of those themes, are embedded within Georgia's State ESSA Plan.

Areas of Focus

- Simplify and reduce
- Formative assessments
- Innovation
- Flexibility
- Enhance communication
- Establish clear purpose and use
- Ensure relevancy and utility
- Mitigate unintended consequences
- Parent-friendly reporting

Our Progress

- **Clearly communicate the relevance and utility** of statewide assessments, especially for educators and students
- **Provide more interpretive guidance** so educators and parents can better understand and utilize assessment results
- **Enhance and increase access to sample items, student exemplars, and other assessment related resources** for parents and educators
- **Develop high-quality formative assessment tools**, including literacy and numeracy tools in grades 1 and 2
- **Explore assessment flexibility at the high school level** for districts as allowed by federal statute
- **Explore participation in the Innovative Assessment Pilot** that works with districts to develop and implement assessments that can be scaled up statewide
- **Strengthen technology-enhanced items** to increase student engagement and decrease the length of assessments

Senate Bill 211

By: Senators Tippins of the 37th, Stone of the 23rd, Wilkinson of the 50th, Sims of the 12th, Black of the 8th and others

AS PASSED

A BILL TO BE ENTITLED

AN ACT

To amend Code Section 20-2-281 of the Official Code of Georgia Annotated, relating to student assessments, so as to provide for consideration of local reading programs when establishing a research based formative assessment with a summative component for grades one and two; to pursue maximum flexibility under federal law for state and local assessments; to provide for a comparability study to determine and establish the concordance of nationally recognized academic assessments with content standards and assessments in grades nine through 12; to amend Code Section 20-2-161.3 of the Official Code of Georgia Annotated, relating to the "Move on When Ready Act" and dual credit courses, so as to prohibit local school systems from excluding students in dual credit courses from valedictorian or salutatorian determinations; to provide for related matters; to provide for an effective date; to repeal conflicting laws; and for other purposes.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF GEORGIA:

SECTION 1.

Code Section 20-2-281 of the Official Code of Georgia Annotated, relating to student assessments, is amended by revising subsection (a) and by adding a new subsection to read as follows:

"(a) The State Board of Education shall adopt a student assessment program consisting of instruments, procedures, and policies necessary to implement the program and shall fund all costs of providing and scoring such instruments, subject to appropriation by the General Assembly. The student assessment program shall include a comprehensive summative assessment program for grades three through 12. In addition, each local school system shall administer, with state funding, a research based formative assessment with a summative component that is tied to performance indicators in English~~,~~ language arts/reading~~,~~ and mathematics in grades one and two, subject to available appropriations. <u>Such research based assessment shall be selected, after consultation with local school systems. Such research based assessment shall provide for real-time data analysis for</u>

students, teachers, school leaders, and parents; allow flexible grouping of students based on skill level; and measure student progress toward grade level expectations throughout the school year. Each local school system may elect to administer, with state funding, nationally norm-referenced instruments in reading, mathematics, science, or social studies in grade three, four, or five and in grade six, seven, or eight, subject to available appropriations, with assistance to such school systems by the State Board of Education with regard to administration guidance, scoring, and reporting of such instruments. Further, the State Board of Education shall adopt a school readiness assessment for students entering first grade and shall administer such assessment pursuant to paragraph (2) of subsection (b) of Code Section 20-2-151. Each local school system is strongly encouraged to develop and implement a program of multiple formative assessments in reading and mathematics for kindergarten through fifth grade to ensure that students entering sixth grade are on track to meet grade-level expectations, including mastery in reading by the end of third grade to prepare for the infusion of literacy in subsequent grades and mastery in basic mathematics skills by the end of fifth grade and in accordance with the local school system's five-year strategic plan, performance indicators, and, if applicable, flexibility contract or other agreement with the State Board of Education for local school systems that are not under a flexibility contract. The State Board of Education shall periodically review, revise, and upgrade the content standards. Following the adoption of such content standards, the State Board of Education shall contract for development of end-of-grade assessments to measure the content standards. As part of the comprehensive summative assessment program, end-of-grade assessments in English~~,~~ language arts/reading~~,~~ and mathematics shall be administered annually to students in grades three through eight, and such tests in science and social studies shall be administered annually to students in grades five and eight. These tests shall contain features that allow for comparability to other states with whom establishing such comparison would be statistically sound; provided, however, that no such comparison shall be conducted which would relinquish any measure of control over assessments to any individual or entity outside the state. Further, as part of the comprehensive summative assessment program, the State Board of Education shall adopt and administer, through the Department of Education, end-of-course assessments for students in grades nine through 12 for all core subjects, as determined by the state board. Writing performance shall be assessed, at a minimum, for students in grades three, five, eight, and 11 and may be assessed for students in additional grade levels as designated by the State Board of Education. Such required writing performance assessment may be embedded within the assessments included in the comprehensive summative assessment program. Writing performance results shall be provided to students and their parents. If authorized ~~by federal law~~ to establish and operate

an innovative assessment system pursuant to 34 C.F.R. Section 200.104, the Department of Education may establish a pilot program for local school systems that have an existing program of multiple formative assessments during the course of the academic year that result in a single summative score that is valid and reliable in measuring individual student achievement or growth and assessing individual student needs or deficiencies, to utilize such local assessments in place of end-of-grade or end-of-course assessments, if provided for in the terms of the local school system's flexibility contract. As used in this subsection, the term 'flexibility contract' means a charter for a charter system or a charter school or a contract entered into with the State Board of Education for a strategic waivers school system."

"(t)(1) The State Board of Education shall direct the existing assessment workgroup to pursue maximum flexibility for state and local assessments under federal law. Such maximum flexibility shall include, but not be limited to, utilization of nationally recognized college and career ready high school assessments, provided that comparability can be established pursuant to paragraph (2) of this subsection, as well as application for innovative assessment demonstration authority, as provided for in 34 C.F.R. Section 200.104. The state board shall provide a report regarding such no later than September 1, 2017, to the State School Superintendent, Governor, Lieutenant Governor, Speaker of the House of Representatives, and the chairpersons of the Senate Education and Youth Committee and the House Committee on Education and shall post such report on the Department of Education website no later than September 1, 2017.

(2) The State Board of Education shall conduct a comparability study to determine and establish the concordance of nationally recognized academic assessments, including, but not limited to, the SAT, ACT, and ACCUPLACER with alignment to state content standards in grades nine through 12. Such comparability study shall also determine whether the nationally recognized high school academic assessment provides data that are comparable to current end-of-course assessments and valid and reliable for all subgroups and whether the assessment provides differentiation between schools' performances as required by the state accountability plan. The state board shall initiate such study no later than July 1, 2017, and shall post such study on the Department of Education website and provide the study to the State School Superintendent, Governor, Lieutenant Governor, Speaker of the House of Representatives, and the chairpersons of the Senate Education and Youth Committee and the House Committee on Education upon completion of the federal review process."

SECTION 2.

Code Section 20-2-161.3 of the Official Code of Georgia Annotated, relating to the "Move on When Ready Act" and dual credit courses, is amended by adding a new paragraph to subsection (f) to read as follows:

"(4) No local school system that receives funding under this article shall exclude eligible high school students taking one or more dual credit courses pursuant to this Code section from eligibility determinations for valedictorian and salutatorian of a participating eligible high school; provided, however, that this shall not apply to a high school student who moves into the local school system after his or her sophomore year and has not taken any courses on site at the participating eligible high school."

SECTION 3.

This Act shall become effective upon its approval by the Governor or upon its becoming law without such approval.

SECTION 4.

All laws and parts of laws in conflict with this Act are repealed.

ASSESSMENT FLEXIBILITY REPORT

PURSUANT TO GEORGIA SENATE BILL 211 AND THE EVERY STUDENT SUCCEEDS ACT

Georgia Department of Education

Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

INTRODUCTION

The purpose of this document is to provide the Georgia Department of Education's plans to pursue assessment flexibility as permitted in both federal and state legislation. Under the Every Student Succeeds Act (ESSA), State Education Agencies (SEAs), in collaboration with Local Education Agencies (LEAs), may potentially implement assessment options that provide flexible and/or innovative assessment formats that are student-centered and personalized for student learning as long as the assessments are statewide and are available for all students. This introduction contains a summary of federal law, state law, and information about the work completed and recommendations made by Georgia's ESSA Assessment Working Committee (see Appendix A for a list of committee members). This material is intended to provide background information for later sections.

Every Student Succeeds Act

The Every Student Succeeds Act of 2015 (PL 114-95 § 114 Stat. 1177) is the most recent reauthorization of the Elementary and Secondary Education Act (ESEA) and takes effect starting in the 2017-2018 school year. Statewide assessment requirements for administering the same academic assessments in reading/language arts, mathematics, and science to all public elementary school and secondary school students in select grades in a state on an annual basis remain (see ESSA § 1111(b)(2)(B)(i) and ESSA § 1111(b)(2)(B)(v)). Against this background, ESSA introduced three areas of flexibility for states, at their discretion, to consider:

(1) seven states may seek a demonstration period (of no more than 5 years) for an innovative assessment approach that is technically sound, results in an annual summative determination, and can be scaled statewide (see ESSA § 1204);
(2) either a single summative assessment or multiple statewide interim assessments that result in a single summative score (see ESSA § 1111(b)(2)(B)(viii) and ESSA § 1204); and
(3) local districts may petition the state to administer a nationally recognized high school academic assessment to all students in the district in lieu of the state's high school assessment; comparability[1] and technical quality must be established prior to its use, including federal peer review (see ESSA § 1111(b)(2)(H)).

The US Department of Education (US ED) currently has not issued detailed guidance or timelines for the three areas of flexibility mentioned above. However, a memorandum from US ED containing information about locally selected, nationally recognized high school academic assessments is included in Appendix B to provide more in-depth context for interested readers.

[1] Scores from multiple assessments are often claimed to be comparable if they meet conditions that allow them to be used interchangeably, generally after a concordance/linking relationship has been applied to the scores. Comparability is more formally defined as when multiple assessments: "(a) measure the same set of knowledge and skills at the same level of content-related complexity (i.e., constructs); (b) produce scores at the desired level of specificity that reflect the same degree of achievement on those constructs; and (c) have similar technical properties (e.g., reliability, decision consistency, subscore relationships) in relation to the level of score reported" (Winter, 2010, p. 3).

The Code of Federal Regulations (C.F.R., 2016), which is part of the Federal Register, is a systematic organization/codification of federal rules and regulations. The C.F.R. accompanies ESSA and provides clarification. Specific sections of the C.F.R. detail the general education mandates which fall upon SEAs and LEAs. As it relates to assessment flexibility, the C.F.R. provides details for SEAs and LEAs regarding the innovative assessment demonstration authority (34 C.F.R. §§ 200.104 - 200.108), multiple statewide interim assessments (34 C.F.R. § 200.2), as well as the implementation of locally selected, nationally recognized high school academic assessments (34 C.F.R. § 200.3). It is important to note that while the Accountability Regulations were rescinded by Congress, no action has been taken on the Assessment Regulations. President Trump, however, did issue an executive order calling for the review of all regulations and guidance pertaining to ESSA. This work is currently in progress.

It should be noted that the federal statute includes specific requirements for each area of flexibility that are technical. The specificity in the law is meant to ensure comparability within a state's accountability system; that is, claims made about student outcomes in districts and schools across the state are comparable and provide a mechanism for meaningful differentiation. What is already a complex matter becomes even more complicated when different assessments are utilized. ESSA places the burden on states to ensure any implemented flexibility results in unbiased, rational, and consistent differentiation among schools in the state.

Georgia Senate Bill 211

Code Section 20-2-281 of the Official Code of Georgia Annotated (O.C.G.A. § 20-2-281; as amended by Georgia Senate Bill 211 (SB 211) in 2017) directs Georgia's existing ESSA Assessment Working Committee to pursue maximum flexibility for state and local assessments under federal law, including applying for the innovative assessment demonstration authority and the use of locally selected, nationally recognized high school assessments.

Specifically, SB 211 requires that a comparability study be conducted to determine and establish comparability between nationally recognized assessments and the state content standards and Georgia Milestones end-of-course assessments in grades 9 through 12 (see SB 211 § 1(a)(t)(2)). SB 211 articulates that the purpose of the comparability study is to "determine and establish the concordance of nationally recognized academic assessments with content standards and assessments in grades nine through 12" (p. 1, 2017). The bill further stipulates that such study shall be initiated no later than July 1, 2017. Senate Bill 211 reflects the requirements within ESSA and reflects the recommendations of the ESSA Assessment Working Committee.

Assessment Working Committee

To support the implementation of ESSA in Georgia, six working committees, which includes the Assessment Working Committee, were established to deliberate and provide input on Georgia's draft ESSA state plan. The purpose of the Assessment Working Committee was to develop questions for stakeholders for feedback sessions held across the state; discuss stakeholder input; consider US ED's regulation/guidance for committee-assigned portions of ESSA; consider areas of focus identified by the State Advisory Committee; and coordinate with other working committees to inform the development of Georgia's state plan.

The Assessment Working Committee (Appendix A) included five district superintendents or assistant superintendents; four district administrators (representing Assessment, Research/Accountability and Special Education); two principals; two teachers; one Regional Educational Service Agency (RESA) representative; one Alliance of Education Agency Heads representative; and five GaDOE staff members focusing on assessment and accountability, curriculum and instruction, special education, teacher and leader effectiveness, and policy. In particular, the Assessment Working Committee considered feedback from a wide array of stakeholders from across the state of Georgia.

The Assessment Working Committee, which met seven times over the course of twelve months (July 2016 – July 2017), was charged with providing recommendations regarding assessment flexibility. The committee grounded its discussion and deliberations on the federal law.

In considering the flexibility offered under ESSA, the Assessment Working Committee clearly recognized and supported the interest of various stakeholders to pursue assessment flexibility. Both the strengths and limitations of the current state assessment system (i.e., Georgia Milestones) were discussed during the Committee deliberations. Given the complexity of educational assessment and accountability systems and their uses, the final recommendations issued by the Committee serve as a starting point for the further work necessary to position Georgia for the successful implementation of any pursued area of assessment flexibility.

For the three areas of assessment flexibility allowed under ESSA and state law, the recommendations of the Committee are summarized as follows:

- districts be allowed to present innovative assessment solutions for consideration to be scaled statewide;
- additional study and analysis is needed regarding the implementation of multiple statewide interim assessments; and
- districts be allowed to pursue a locally selected, nationally recognized high school assessment and present evidence that the requirements outlined in law are met.

In light of these three recommendations and to move the work forward, the Assessment Working Committee also recommended that GaDOE establish an Assessment Task Force specifically to vet assessment flexibility options and to make recommendations to the State School Superintendent and the State Board of Education for implementation.

As the Assessment Working Committee concluded its work with the review of public comments resulting from the posting of Georgia's Draft State ESSA Plan, the Committee stressed the need for a clear and complete communication strategy surrounding assessment flexibility, as well as the Georgia's plan to pursue such flexibility. To that end, and in response to public comments, the GaDOE added an appendix to the state ESSA plan addressing the areas of flexibility along with the Committee's recommendations.

As articulated in Georgia's Draft State ESSA Plan Appendix, the Assessment Working Committee recommended that:

- districts interested in the innovative assessment flexibility establish the technical veracity of their solution, including comparability with Georgia Milestones (the assessment system used for federal and state accountability purposes);
- districts interested in implementing a particular nationally recognized high school academic assessment should begin the conversation with GaDOE; and
- the state establish a task force to vet assessment flexibility options and make recommendations to the State School Superintendent, Richard Woods, and the State Board of Education for implementation.

To elaborate in more detail on each of the three flexibility options, the remainder of this report has been organized by each flexibility option and includes the specific recommendation(s) made by the Assessment Working Committee along with the steps taken by the GaDOE toward fulfilling the requirements of SB 211.

INNOVATIVE ASSESSMENT DEMONSTRATION AUTHORITY

As defined by ESSA, an innovative assessment system may include "competency-based assessments, instructionally embedded assessments, interim assessments, cumulative year-end assessments, or performance-based assessments that combine into an annual summative determination for a student, which may be administered through computer adaptive assessments" (see ESSA § 1204(a)(1)). Furthermore, the assessments are required to "validate when students are ready to demonstrate mastery or proficiency and allow for differentiated student support based on individual learning needs" (see ESSA § 1204(a)(2)).

ESSA allows a state to submit an application for participation in the Innovative Assessment Demonstration Authority Pilot. The law stipulates that US ED may award this flexibility to a maximum of seven states. The statute requires that, in applying for the pilot, the state must provide evidence that demonstrates the technical soundness of the proposed innovative assessment, as well as evidence that the assessment results in an annual summative determination that can be used for statewide accountability purposes. As part of the application process, which US ED has yet to release, the SEA must demonstrate that the innovative assessment solution meets several requisites (see ESSA § 1204(e)(2)(A) for a more detailed description):

(1) meet the requirements for assessments under Title I Part A (except clauses (i) and (v) of § 1111(b)(2)(B));
(2) be aligned with state academic content standards;
(3) have results consistent with the state's current achievement level designations;
(4) have results that are valid, reliable, and comparable for all students and subgroups;
(5) be developed in collaboration with a variety of stakeholder groups;
(6) incorporate principles of universal design;
(7) provide stakeholders with timely data that inform instruction and are disaggregated by subgroup;
(8) identify students who may need instructional support and targeted interventions;
(9) have participation rates at least as high as the current assessment system;
(10) provide a single summative achievement determination for every student; and
(11) permit data aggregation for accountability purposes that is both reliable and valid.

During a five-year timeframe (referred to as the Demonstration Period), the SEA is required to pilot the approved innovative assessment in an increasing number of districts throughout the state in the effort to scale the innovative assessment statewide. Time spent developing an innovative assessment prior to submitting an application is not counted toward the Demonstration Period. After SEAs submit an application to US ED, a peer review panel selected by US ED will determine readiness to successfully implement and scale the innovative approach statewide.

It is important to note that the demonstration period is not intended to be used for development of an innovative approach, nor were federal funds allotted for this effort; rather, the period is to scale that approach across a state. Further, prior to awarding this flexibility, a state must demonstrate comparability with the existing statewide assessment system so that accountability

claims made about LEAs and schools that participate in the innovative assessment practice are analogous to those who participate in the state assessment. That is, innovation is not allowed to compromise comparability, a foundational tenet of educational accountability systems.
The C.F.R. provides additional clarification regarding the innovative assessment demonstration authority (see 34 C.F.R. §§ 200.104 - 200.108). The US ED selected peer review panel is responsible for verifying that the SEA's application meets or will meet each of the requirements under 34 C.F.R. § 200.105 and sufficiently addresses each of the selection criteria under 34 C.F.R. § 200.106. It is permissible that the pilot begin only in a subset of districts, can be entirely performance-based (including instructionally embedded assessment), and can be administered to students who may be ready to perform at the next level. During the pilot stage, the state is still required to administer its current statewide assessments to all non-pilot schools and in all grades/subject areas/courses that are not covered by the innovative assessment.

SB 211, as mentioned in the introduction, directs the existing Assessment Working Committee to pursue flexibility for the innovative assessment demonstration authority. In considering the requirements for this area of flexibility, the Committee heard from two districts (Gwinnett County and Henry County) who have been working actively to develop assessment protocols and instruments in recent years. Other districts, such as Putnam County, have also been working actively and have expressed interest in pursuing this area of flexibility, while Savannah-Chatham County requested to engage in the statewide conversation about assessment innovation.

As a result of the Assessment Working Committee's deliberations, the specific recommendation for this area of flexibility was as follows:

Assessment Working Committee Recommendation

Innovative Assessment Demonstration Authority
Recognizing that new federal ESSA law provides an opportunity through a competitive application process for states to innovate new approaches to assessment that may be more valid, more varied and richer, that may reflect a greater understanding of student skills, that may be reported in a timelier manner, and that may produce more useful data that are aligned with student-centered models of learning and instruction; AND recognizing that this innovative effort may be piloted in a subset of districts prior to scaling statewide, must meet federal peer review criteria, must result in comparable data, require accountability provision analysis and timeline requirements, this committee invites interested districts to present detailed, evidence-based innovative assessments for consideration by the state.

Implementation Plan

The Assessment Working Committee recommended that Georgia establish an Assessment Task Force to thoroughly and thoughtfully engage in deliberations surrounding the implementation of assessment flexibility. Such a task force should focus on vetting specific innovative assessment solutions interested districts have developed, engage in statewide discussions around the best solution for Georgia, and culminate in a recommendation to the State School Superintendent, State Board of Education, and elected officials. The Assessment Task Force will inform

Georgia's application for the Innovative Assessment Demonstration Authority Pilot once US ED has issued said application.

It is recommended that the Assessment Task Force be facilitated by an independent third party identified by the State School Superintendent and State Board of Education, with input from the Senate and House Education Committee Chairs. Additionally, the specific charge for the Assessment Task Force should be informed by these entities.

MULTIPLE STATEWIDE INTERIM ASSESSMENTS

Interim assessments differ from formative assessments in purpose and scope. Formative assessments are used by both teachers and students during instruction to provide feedback for teaching and learning. Interim assessments occur after a given instructional period and are used to evaluate student learning with respect to a specific set of academic goals. As such, interim assessments typically report student learning at a broader level than formative assessments. Both stand in contrast to a summative assessment, which occurs after an entire period of instruction and measures student achievement for ascertaining mastery of material and potentially assigning grades or certifying learning. State summative assessments are used for accountability purposes and generally take place at the end of the school year. These distinctions provide the rationale for ESSA's requirement that the statewide interim assessments must ultimately provide a single summative assessment score.

Federal law allows for an SEA to administer its statewide academic assessments in ELA, mathematics, and science in either of two ways: (1) through a single summative assessment, or (2) through multiple statewide interim assessments administered throughout the academic year that result in a single summative score (see ESSA § 1111(b)(2)(B)(viii)). If an SEA were to use multiple statewide interim assessments, the resulting summative measure must provide valid, reliable, and transparent information on student achievement and growth that can be used for federal accountability. As described in the previous section of this document, interim assessments are included within the definition for innovative assessment systems as well. However, multiple statewide interim assessments do not necessarily have to be considered under the innovative assessment demonstration authority.

The C.F.R. clarifies that the use of multiple statewide interim assessments must meet two specific criteria (see 34 C.F.R. § 200.2(b)(4)):

(1) be valid, reliable, and fair for the purposes for which the assessments are used; and
(2) be consistent with relevant, nationally recognized professional and technical testing standards.

The first requirement calls for evidence to be collected that supports the uses of assessment results mandated in both federal and state law. The second requirement is referring in great part to the Standards for Educational and Psychological Testing (AERA, APA, & NCME, 2014), though other national and international industry-wide standards should be considered as well.

The Assessment Working Committee discussed the option of multiple statewide interim assessments. Benefits include more timely results that can be used to inform instruction and the possibility of reducing the testing burden at the local level if the interim assessments could replace some of the existing benchmark assessments used by districts. Such an approach could be viewed as encroaching on instructional time because multiple statewide assessment windows would be necessary, along with uniform test administration procedures to ensure the integrity (i.e., test security) of the administrations. Another unintended consequence may be that administration of multiple statewide interim assessments throughout the school year could

become a de facto mandate for a uniform curricular sequence, which would be at odds with a traditional local district function.

As a result of the Assessment Working Committee's deliberations and emphasis on local control in Georgia, the specific recommendation for this area of flexibility was as follows:

Assessment Working Committee Recommendation

Multiple Statewide Interim Assessments
Recognizing that the Every Student Succeeds Act (ESSA) allows states to consider using interim assessments statewide; AND recognizing that the interim assessments must meet federal peer review criteria, must result in summative claims regarding student achievement, and must meet all required administrative conditions statewide, including test security, this committee recommends that further study and analysis occur before this assessment opportunity is considered for statewide implementation.

The Committee did discuss that this type of approach may have a place as part of, or within, an innovative assessment solution.

Implementation Plan
The Assessment Task Force will consider this area of flexibility in its deliberations.

NATIONALLY RECOGNIZED HIGH SCHOOL ACADEMIC ASSESSMENTS

As part of ESSA and at the discretion of each state, school districts may administer a nationally recognized assessment in lieu of the corresponding state-administered assessments in grades 9 - 12 if approved by an SEA. Federal law requires that the state establish technical criteria for considering such requests. More specifically, ESSA requires that locally selected, nationally recognized high school academic assessments (see ESSA § 1111(b)(2)(H)(v)):

(1) be aligned with state academic content standards, and address the depth and breadth of the standards while maintaining a similar level of rigor;
(2) provide comparable, valid, and reliable data on academic achievement for all students and subgroups;
(3) meet the requirements of technical quality prescribed by the law; and
(4) provide unbiased, rational, and consistent differentiation among schools in the state for accountability purposes.

The C.F.R. details the general responsibilities of the SEA and LEA in implementing locally-selected, nationally recognized high school academic assessments (34 C.F.R. § 200.3; 2016). LEAs may submit applications to use a nationally recognized assessment to their respective SEA. The state has the authority to grant approval after determining whether the required and established technical criteria are met.

The C.F.R. explains that the technical criteria established and used by a state must include evaluations of the requested assessment on criteria such as alignment with content standards (including depth and breadth) and at least equivalent rigor in measurement quality when compared with the state-mandated assessment. Additionally, reliability and validity evidence are expected to be comparable to the state-mandated assessment for all students including various subgroups of students, while simultaneously ensuring that appropriate test administration accommodations (e.g., extended time, large print materials) are permitted for students who may require them (students with disabilities and/or English learners), so as not to deny any student of the opportunity to participate. No test administration accommodation may deny the benefits from participation that are afforded to students without disabilities or who are not English learners.

Furthermore, LEAs share some responsibility with the state. Prior to approval for use, LEAs are required to notify parents/guardians of all high school students and consult with public charter schools. LEAs must also ensure that the same locally selected, nationally recognized academic assessment is administered to *all* high school students within an LEA (not including those students with the most significant cognitive disabilities who participate in the alternate assessment based on alternate achievement standards). Annual approval by the state is required for an LEA to continue using the same assessment in future years.

It is important to clarify what types of high school academic assessments qualify as being nationally recognized. Federal regulations provide the definition of a nationally recognized high school academic assessment as “an assessment of high school students' knowledge and skills that is administered in multiple States and is recognized by institutions of higher education in those or other States for the purposes of entrance or placement into courses in postsecondary education

or training programs" (34 C.F.R. § 200.3(d)). SB 211 further clarifies that such assessments include, but are not limited to, the SAT, ACT, and ACCUPLACER.

On May 15, 2017, US ED issued guidance to states regarding this area of flexibility in the form of a memorandum (see Appendix B). The memorandum provides details in the following areas: (a) definition of what constitutes a nationally recognized high school academic assessment; (b) requirements for state approval of such assessments; (c) requirements for LEAs requesting to use such an assessment; and (d) procedures for submitting evidence to US ED. The memorandum clarifies that an LEA may select *only one* nationally recognized high school assessment and must administer the selected assessment to *all* enrolled high school students. Furthermore, the memorandum outlines the requirement that states submit evidence that the locally selected, nationally recognized high school assessment meets technical requirements similar to those outlined in federal peer review guidance. Specifically, the memorandum requires that "prior to any LEA use of nationally recognized assessments in lieu of state-mandated assessments, States much submit evidence to the US ED demonstrating that any such assessment meets the peer review requirements under section 1111(a)(4) of the ESEA and receive feedback that the nationally recognized assessment meets or substantially meets the requirements in the statute and regulations."

SB 211 requires that the State Board of Education "conduct a comparability study to determine and establish the concordance of nationally recognized academic assessments, including but not limited to SAT, ACT, and ACCUPLACER with alignment to state content standards in grades nine through 12. Such comparability studies shall also determine whether the nationally recognized high school academic assessment provides data that are comparable to current end-of-course assessments and valid and reliable for all subgroups and whether the assessment provides differentiation between schools' performances as required by the state accountability plan." The law further requires that the study begin no later than July 1, 2017, and the results be shared with key state officials and posted publicly "upon completion of the federal review process."

At its June 2017 Technical Advisory Committee[2] (TAC) meeting, GaDOE discussed the requirements of SB 211 along with the requirements outlined in ESSA for use of a locally selected, nationally recognized high school academic assessment. The types of studies required to establish comparability, as required in both SB 211 and ESSA, were discussed. TAC provided guidance regarding documentation, methodology, and interpretation. TAC members recommended that documentation for the score comparability study include data cleaning procedures (e.g., highest versus most recent scores on ACT/SAT) as well as a cross-reference table that addresses the correspondence between the similarities/differences in the development of the Georgia Milestones End of Course (EOC) assessments and the nationally recognized assessments.

[2] Georgia's TAC is comprised of six nationally recognized educational measurement experts who are charged with providing impartial advice to GaDOE regarding the technical quality of the State's assessment programs. Virtually all state assessment programs have such an advisory body.

Additionally, recommendations for methodology outlined assumptions that need to be checked in the analyses (e.g., similarity in the shape of score distributions across assessments), as well as suggestions for analyses that account for the precision of results across the score continuum. Furthermore, TAC underscored the importance of interpreting the results in light of existing guidelines (e.g., college and career ready cuts on nationally recognized assessments) and the intended purposes and uses of the assessments, and subsequent interpretation specific to the content areas.

At the July 2017 State Board of Education meeting, the GaDOE sought approval for a contract with the National Center for the Improvement of Educational Assessment (NCIEA) to conduct a series of comparability studies with SAT and ACT. The technical report stemming from the studies will contain the following, as required by ESSA: score and achievement level correspondence, review of score precision, audit of administration and scoring procedures, implications for school level reporting, recommendations, and limitations. Appendix C contains a memorandum from NCIEA, entitled *Investigating Comparability in Response to Georgia Senate Bill 211*.

In addition to establishing the technical relationship between the State's assessment system (i.e., specific Georgia Milestones EOCs) and other nationally recognized measures such as the SAT or ACT, an independent alignment evaluation must be conducted according to federal regulations. Such a study will evaluate the alignment of the state content standards in grades 9 through 12 with the standards measured on the nationally recognized high school assessments. The GaDOE is in the process of outlining the specifications, based on federal requirements, for the work to be conducted.

As a result of the Assessment Working Committee's deliberations, the specific recommendation for this area of flexibility was as follows:

Assessment Working Committee Recommendation

Locally selected Nationally recognized High School Academic Assessment
Recognizing that the new Every Student Succeeds Act (ESSA) allows a local education agency (LEA) to use a "locally selected, nationally recognized high school academic assessment" in lieu of the state high school assessment; AND recognizing that the nationally recognized high school assessment must be fully aligned to state content standards, produce valid and reliable data that are comparable to state assessment data, have appropriate accommodations, meet federal peer review requirements, and apply to all high school students in the LEA, this committee suggests that interested districts specify their intent to the state and be prepared to show evidence of all required criteria as specified above and in ESSA to include operational procedures and funding.

Implementation Plan

GaDOE has entered into a contract with the National Center for the Improvement of Educational Assessment (NCIEA) to empirically investigate the score comparability between specific

Georgia Milestones EOC measures and the ACT and SAT. Table 1 contains recent data on Georgia student participation in nationally recognized assessments for the 2015 and 2016 graduating class. It should be noted that the data included in Table 1 represent what is called a convenience[3] sample. While both measures are administered to a substantial portion of a graduating class, not all students graduating from a Georgia public high school take the SAT and/or ACT. Thus, the representativeness of the students taking the SAT and ACT must be investigated and established; it is highly likely that a representative sample may need to be selected by NCIEA from within the convenience sample.

Table 1. Student participation in Georgia in nationally recognized assessments by graduating class.

Class of	N	SAT	ACT
2014-2015	106,674	61,933	47,949
2015-2016	103,580	62,568	50,610

It is also important to note that the SAT was redesigned in recent years, and as such, most scores from the 2016 SAT data cannot be compared with previous years (College Board, 2016). Thus, only revised SAT information and data can be used in the comparability study and this constraint will likely require data from the 2016-2017 school year (which is not currently available) to ensure a robust and representative dataset.

NCIEA will conduct a series of studies examining score comparability. The scope of the studies includes empirical analyses for linking procedures (to establish concordance tables), documenting reliability and validity evidence, classification accuracy analyses (for achievement level designations), analyses by subgroups of students, and performance differentiation by schools. Additional analyses will explore the comparability of administration procedures (including availability of accommodations), as well as scoring specifications (including protocols for scoring constructed response items) and inter-rater reliability statistics. The final deliverables will be an executive summary and technical report that detail the results of the above analyses. The technical report will contain sections related to the following: score and achievement level correspondence, review of score precision, audit of administration and scoring procedures, implications for district and school level reporting, and recommendations and limitations.

Administration procedures also can impact the relationship between test questions and curricular requirements. For example, accessibility features and allowable accommodations can impact students' ability to access the tested content in a manner that allows them to demonstrate their knowledge and skill. In addition to construct comparability, there are implications for score comparability that are related to corresponding standardized testing conditions.

This work is currently underway and analyses are expected to be completed by December 31, 2017.

[3] Convenience sampling (also known as availability sampling) is a specific type of non-probability sampling method that relies on data collection from population members who are available.

Construct comparability will be evaluated through a research-based methodology known as an alignment study. Industry-wide standards in assessment, namely the AERA/APA/NCME Standards (2014), describe alignment as "the degree to which the content and cognitive demands of test questions match targeted content and cognitive demands described in the test specifications." The alignment study will examine the extent to which test content from the identified nationally recognized assessments match the content and cognitive demands of the Georgia Milestones Assessment System in measuring the Georgia content standards.

The GaDOE will contract for an independent alignment study. Requirements for the study are currently under development and are being informed by similar alignment studies conducted in other states.

A concordance study has been conducted by GaDOE, in collaboration with the Technical College System of Georgia (TCSG), to determine the relationship between ACCUPLACER and specific Georgia Milestones EOC English language arts (ELA) and mathematic assessments. The study used EOC scores to predict the subject-specific cut scores set by TCSG as a criterion of college readiness for ELA. The results of this study supported the use of a scale score of 525 on the Georgia Milestones ELA EOCs for placement in TCSG credit-bearing diploma level and associate's degree level courses. In other words, students who achieve a scale score of 525 (the threshold level for the Proficient Learner classification) were highly likely to achieve the college-ready cut scores on ACCUPLACER established by TCSG. Additional data are needed to further study mathematics: the robustness of the student sample for mathematics was impacted by the 2015-2016 implementation of a traditional course sequence (Algebra I/Geometry) in addition to the established integrated sequence (Coordinate Algebra/Analytic Geometry). Additional study is underway and will be expanded upon by GaDOE to fulfill the requirements of Senate Bill 211.

REFERENCES

American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). Standards for Educational and Psychological Testing. Washington, DC: American Educational Research Association.

ESSA. (2015). Every Student Succeeds Act of 2015, Pub. L. No. 114-95 § 114 Stat. 1177 (2015-2016).

Georgia Legislative Assembly - Regular Session 2017-2018. (2017). *Senate Bill 211 to amend Code Sections 20-2-281 and 20-2-161.3 of the Official Code of Georgia Annotated.*

Innovative assessment demonstration authority. (2016). Title 34 of the Code of Federal Regulations, Subtitle B, Chapter II, Part 200, Sections 104 - 108. Retrieved from: https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=9de04a3aeaf170f93530ff25a30f783f&mc=true&n=pt34.1.200&r=PART&ty=HTML#sg34.1.200_1103.sg10.

Locally selected, nationally recognized high school academic assessments. (2016). Title 34 of the Code of Federal Regulations, Subtitle B, Chapter II, Part 200, Section 3. Retrieved from: https://www.ecfr.gov/cgi-bin/text-idx?SID=9de04a3aeaf170f93530ff25a30f783f&mc=true&node=se34.1.200_13&rgn=div8.

State responsibilities for assessment. (2016). Title 34 of the Code of Federal Regulations, Subtitle B, Chapter II, Part 200, Section 2. Retrieved from: https://www.ecfr.gov/cgi-bin/text-idx?SID=9de04a3aeaf170f93530ff25a30f783f&mc=true&node=se34.1.200_12&rgn=div8.

The College Board. (2016). Important Notes on the Data. In *SAT Suite Program Results: 2016*. Retrieved from https://reports.collegeboard.org/sat-suite-program-results/important-notes-data.

U.S. Department of Education. (2015). *Non-Regulatory Guidance for States for Meeting Requirements of the Elementary and Secondary Education Act of 1965, as amended.* Washington, DC: Office of Elementary and Secondary Education.

Winter, P. (2010). Comparability and test variations. In P. Winter (Ed.), Evaluating the comparability of scores from achievement test variations (pp. 1-11). Washington, DC: Council of Chief State School Officers. Retrieved from: http://www.ccsso.org/Documents/2010/Evaluating_the_Comparability_of_Scores_2010.pdf

Assessment Working Committee

Georgia's State Plan: Every Student Succeeds Act (ESSA)

Member	Position	Agency/District
Melissa Fincher *Chair*	Deputy Superintendent Assessment & Accountability	Georgia Department of Education
Steve Barker *Co-Chair*	Superintendent	Coweta County Schools
Terri DeLoach	Superintendent	Pierce County Schools
Steve Flynt	Associate Superintendent for School Improvement & Operations	Gwinnett County Schools
Rodney Green	Assistant Superintendent Teaching & Learning	Lowndes County
Claire Miller	Chief Academic Officer	Oconee County Schools
Jennifer Rippner	Executive Director of Education Policy & Partnership	University System of Georgia
Allison Oxford	Director of Special Education	Murray County Schools
Frank Williams	Assessment Director	Bryan County Schools
Beth Kieffer	Assessment Director	Forsyth County Schools
Michael Lamont	Acting Executive Director Research, Planning, & Accountability	Atlanta Public Schools
Cecelia McLoon	High School Principal	Jeff Davis County Schools
Rochelle Lofstrand	Middle School Principal	Decatur City Schools
Anthony Pack	School Improvement Director	Middle Georgia RESA
Rustin Howard	High School Teacher	Toombs County Schools
Katesa Walker	Elementary School Teacher	Dougherty County Schools
Lynn Holland	Special Education	Georgia Department of Education
Juan-Carlos Aguilar	Science Program Manager/Curriculum and Instruction	Georgia Department of Education
Michelle Purvis	Program Manager/Teacher & Leader Effectiveness	Georgia Department of Education
Allan Meyer	Assistant Director of Policy	Georgia Department of Education

APPENDIX B

UNITED STATES DEPARTMENT OF EDUCATION

TO: State Assessment Directors
State Title I Directors

FROM: Patrick Rooney
Deputy Director, Office of State Support
Office of Elementary and Secondary Education

DATE: May 15, 2017

SUBJECT: Information about locally selected, nationally recognized high school assessments

This memorandum provides information to States about the implementation of a new provision in Title I of the Elementary and Secondary Education Act of 1965 (ESEA), as amended by the Every Student Succeeds Act (ESSA)[1], regarding the provisions in section 1111(b)(2)(H) authorizing locally selected, nationally recognized high school academic assessments. On December 8, 2016, the U.S. Department of Education (the Department) published final regulations implementing this new provision.[2] These provisions take effect beginning in the 2017–2018 school year.

A. Definition of a Nationally Recognized High School Academic Assessment

ESEA section 1111(h) provides the flexibility for a State to permit a local educational agency (LEA) to administer a nationally recognized high school assessment, provided it meets certain requirements, in place of the State's high school assessment. Under 34 CFR 200.3(d), a "nationally recognized high school assessment" is a "an assessment of high school students' knowledge and skills that is administered in multiple States and is recognized by institutions of higher education in those or other States for the purposes of entrance or placement into courses in postsecondary education or training programs."

B. Requirements for State Approval of Locally Selected, Nationally Recognized High School Academic Assessments

ESEA section 1111(b)(2)(H) and 34 CFR 200.3 also outline the State's requirements before it may permit an LEA to select a nationally recognized high school academic assessment in each required subject (reading/language arts, mathematics, or science) in lieu of the respective Statewide test. In accordance with section 200.3(a), a State has discretion as to whether it will offer its LEAs this

[1] See www2.ed.gov/documents/essa-act-of-1965.pdf
[2] These regulations took effect on January 9, 2017.

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flexibility. States that wish to permit an LEA this flexibility must first establish and use technical criteria[3] to determine if the nationally recognized high school assessment:

- Is aligned with the challenging State academic standards;
- Addresses the depth and breadth of those standards;
- Is equivalent to or more rigorous than the statewide assessment it is replacing in terms of the following:
  - The coverage of academic content;
  - The difficulty of the assessment;
  - The overall quality of the assessment; and
  - Any other aspects of the assessment that the State may establish in its technical criteria;
- Meets all general requirements for State assessments under section 200.2(b) of the final regulations and those involving test administration (section 200.5(a)) and inclusion (section 200.6); and
- Produces valid and reliable data on student academic achievement with respect to all high school students and each subgroup of high school students in the LEA that:
  - Are comparable to student academic achievement data for all high school students and each subgroup of high school students produced by the Statewide assessment at each academic achievement level;
  - Are expressed in terms consistent with the State's academic achievement standards; and
  - Provide unbiased, rational, and consistent differentiation among schools within the State for the purpose of the State-determined accountability system, including calculating the Academic Achievement indicator under section 1111(c)(4)(B)(i) of the Act and annually meaningfully differentiating between schools.[4]

Before a State may approve a nationally recognized high school academic assessment for use by an LEA, the State must also:

- Ensure that the use of appropriate accommodations by a student with disabilities or an English learner does not deny the opportunity of any student to participate in the assessment or deny any of the benefits from participation in the assessment that are afforded to students without disabilities or who are not English learners[5]; and
- Submit evidence to the Department that demonstrates that each locally selected, nationally recognized assessment meets the requirements of the Department's State assessment peer review guidance.[6]

A State should also be prepared to monitor the LEA parental notification requirements for each LEA that applies for this assessment flexibility (outlined in section C below). A State may: 1) approve an LEA's request to use a nationally recognized high school academic assessment that meets the requirements of the statute and regulations; 2) disapprove an LEA's request if it does not meet those requirements; or 3) revoke approval for good cause.[7]

[3] 34 CFR 200.3 (b) (1)
[4] 34 CFR 200.3(b)(1)(v)
[5] 34 CFR 200.3(b)(2)(i)
[6] 34 CFR 200.3(b)(2)(ii).
[7] 34 CFR 200.3(b)(3)

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C. Requirements for LEAs Requesting to Use Locally Selected, National Recognized High School Assessments

Once a State has met the requirements in the statute and regulations for permitting a particular nationally recognized high school assessment in lieu of the State's high school assessment, any LEA may select to administer that nationally recognized high school assessment. An LEA may only select one nationally recognized high school assessment[8] and that assessment needs to be administered to all high school students (i.e., the LEA may not use more than one nationally recognized assessment, nor may it have some students take the nationally recognized assessment and some take the State assessment), except for the small number of students with the most significant cognitive disabilities who take the State's alternate assessment aligned with alternate academic achievement standards. The statute and regulations also establish certain requirements for LEAs that wish to utilize this flexibility. Before an LEA requests approval from the State to use a locally selected, nationally recognized high school academic assessment, the LEA must:

- Notify all parents of high school students it serves--
  - That the LEA intends to request approval from the State to use a locally selected, nationally recognized high school academic assessment in place of the statewide academic assessment used to meet Federal requirements;
  - How parents and, as appropriate, students, may provide meaningful input regarding the LEA's request; and
  - Of any effect of such request on the instructional program in the LEA; and
- Provide an opportunity for meaningful consultation to all public charter schools whose students would be included in such assessments.

In addition, LEAs requesting approval to use a locally selected, nationally recognized high school academic assessment must[8]:

- Update their LEA plan under section 1112 or section 8305 of the Act, including to describe how the request was developed consistent with all requirements for consultation under sections 1112 and 8538 of the Act; and
- If the LEA is a charter school under State law, provide an assurance that the use of the assessment is consistent with State charter school law and it has consulted with the authorized public chartering agency.

An LEA that receives State approval to use a locally selected, nationally recognized test must notify all parents of high school students it serves that it will use such locally selected, nationally recognized high school academic assessment instead of the Statewide academic assessment. In each subsequent year following approval in which the LEA elects to administer a locally selected, nationally recognized high school academic assessment, the LEA must notify both the State educational agency and parents within the LEA as follows[9]:

- The State must be notified of the LEA's intention to continue administering such assessment; and

[8] 34 CFR 200.3(c)(1)
[8] 34 CFR 200.3(c)(2)
[9] 34 CFR 200.3(c)(3)

- Parents must be notified of which assessment the LEA will administer to students in order to meet the Federal requirements at the beginning of the school year, and provide that notification in an accessible format for parents who are individuals with a disability as defined by the Americans with Disabilities Act (ADA), as amended, if such accessible formats are requested.

An LEA that chooses to request this flexibility should document all notification and consultation activities that are listed above.

D. Procedures for Submitting Evidence to the Department

States that choose to permit LEAs to use locally selected, nationally recognized high school assessments should carefully review all State and LEA requirements presented in the previous two sections (B and C).

The State must establish the criteria and undertake its review of the nationally recognized high school assessment before it may offer the opportunity for an LEA to select that assessment. This includes conducting a review that includes the above criteria in section B. Prior to any LEA use of nationally recognized assessments in lieu of Statewide assessments, States must submit evidence to the Department demonstrating that any such assessment meets the peer review requirements under section 1111(a)(4) of the ESEA and receive feedback that the nationally recognized assessment meets or substantially meets the requirements in the statute and regulations. For more information about the Department's assessment peer review, please see the letter[10] sent to chief State school officers on October 6, 2016. The Department will update the *Assessment Peer Review Guidance*[11] in the near future to reflect the requirements for locally selected, nationally recognized high school tests outlined in this letter.

A complete submission for each locally selected, nationally recognized high school academic assessment should include the following:

- Evidence of an assurance that the selection criteria and process used by the State that addresses all the requirements found in 34 CFR 200.3(b) and outlined in section B of this letter.
- Evidence that of an assurance that the State has monitored that each LEA that requests the use of locally selected, nationally recognized high school tests in lieu of the State assessment has met all of the requirements found in 34 CFR 200.3(c) of the assessment regulations and outlined in section C of this letter.
- A complete submission of evidence for the nationally recognized high school test in accordance with the current assessment peer review guidance.

The Department recognizes that we may have conducted a peer review of a nationally recognized high school test prior to a State selecting that test for this flexibility. In such a case, a State may be able to leverage the prior peer review for submission of the nationally recognized high school test. However, a prior peer review of a particular nationally recognized assessment that resulted in a determination that such assessment met or substantially met peer review requirements relative to a State's challenging academic standards may not mean that assessment would meet the requirements for

[10] See www2.ed.gov/admins/lead/account/saa/dcletterassepeerreview1072016ltr.pdf
[11] See www2.ed.gov/policy/elsec/guid/assessguid15.pdf

another State. For example, if two States have different challenging academic standards, a single assessment may not adequately address both sets of standards.

We encourage you, if you are interested in pursuing permitting LEAs to select a nationally recognized high school academic assessment, to contact the Office of State Support at: OSS.[State]@ed.gov (e.g., OSS.Nebraska@ed.gov) to discuss your plan and to plan for the Department's peer review.

Thank you for your continued commitment to improving educational outcomes for all students.

Memorandum

To:	Georgia Department of Education, Office of Assessment and Accountability
From:	The National Center for the Improvement of Educational Assessment, Inc.
Date:	August 25th, 2017
Subject:	Investigating Comparability in Response to Georgia Senate Bill 211

The Every Student Succeeds Act (ESSA, 2015) provides new flexibility for states regarding their academic assessments used for educational accountability. Notably, ESSA allows Local Educational Agencies (LEAs) to administer a "locally selected, nationally-recognized high school academic assessment" in place of a state's current high school academic assessment, *if* that nationally-recognized high school academic assessment has been approved for use by the state[4]. In response to this flexibility, the Georgia legislature passed Senate Bill (SB) 211, calling for a study of the comparability of Georgia's End-of-Course assessments (EOCs) and select nationally-recognized high school academic assessments, including the SAT, ACT, and ACCUPLACER[5]. As a result, the State Board of Education approved a contract with The National Center for the Improvement of Educational Assessment, Inc. (referred to as "The Center") to conduct a series of comparability analyses in partial fulfillment of the requirements of ESSA. The purpose of this memorandum is to (a) detail the requirements of ESSA regarding nationally-recognized high school academic assessments[6]; (b) outline The Center's planned comparability study in response to SB 211; and, (c) consider the implications of using nationally-recognized high school academic assessments within Georgia's system of educational accountability.

ESSA Requirements

The nationally-recognized high school academic assessment provision of ESSA allows LEAs to submit a request to use a nationally-recognized high school assessment to the state, who may approve or disapprove of the request. If approved, *any* LEA would then be able to use that approved assessment in place of the current state assessment. According to the ESSA assessment regulations[7], all students within schools under the participating LEA's jurisdiction are required to take that nationally-recognized high school assessment, excluding students who are not eligible for the general assessment, such as those with the most severe cognitive disabilities. The regulations[8] also define a nationally-recognized high school academic assessment as an assessment that is "administered in multiple States and is recognized by institutions of higher education in those or other States for the purposes of entrance or placement into courses in postsecondary education or training programs." In addition, the use of a

[4] ESSA §1111(b)(2)(H).
[5] See §1(a)(t)(2).
[6] For additional, in-depth considerations of the ESSA requirements on locally selected, nationally-recognized high school academic assessments, refer to: http://www.nciea.org/articles/high-school-assessment.
[7] While the Congressional Review Act was used to repeal the ESSA regulations on accountability, the regulations related to Title I assessments were preserved.
[8] See CFR 200.3(d).

nationally-recognized high school assessment is restricted to reading/English language arts, mathematics, or science by the regulations.

ESSA and its regulations do not specify the process by which a state may approve a nationally-recognized high school assessment for use under the locally selected provision, nor do they lay out specific, fine-grained criteria by which a state should evaluate an assessment for approval. Instead, ESSA emphasizes that the evaluation of an assessment is at the state's discretion. In addition, the law defines the broad requirements[9] that must be met for a nationally-recognized high school assessment to be approved for use by a state. Concisely, these requirements dictate that an assessment must:

a) be aligned to and address the breadth and depth of the state's content standards;
b) be equivalent to the statewide assessments in its content coverage, difficulty, and quality;
c) provide valid and reliable data on student achievement for all students and subgroups as compared to the statewide assessments;
d) meet the criteria for technical quality that all statewide assessments must meet (i.e., meet the requirements of federal peer review); and,
e) provide unbiased, rational, and consistent differentiation among schools within a state's ESSA compliant accountability system.

These requirements are reflected in the specifications of the comparability study called for by SB 211. Determining whether a specific assessment meets these requirements involves a substantial investment of resources on the part of a state as well as the requesting LEA. Specifically, doing so entails conducting a series of empirical analyses involving determining whether the scores from the current state assessment and the nationally-recognized high school assessment can be treated as comparable. As detailed in the next section, the Center will conduct a range of analyses that address requirements (c) to (e). To fulfill the requirements of (a) and (b), it is the Center's understanding that the Georgia Department of Education will be commissioning an independent alignment study that will examine the alignment between the content measured by the ACT and SAT assessments and the state academic content standards.

Planned Comparability Study

Meeting the requirements above ensures that the results from a nationally-recognized high school assessment are comparable to those of the current state assessment. SB 211 explicitly calls for consideration of requirements (a) to (e) above within a comparability study. SB 211 also specifies that the comparability study examine the tenability of *one* type of psychometric linkage across assessments - concordance - between the current state assessment and nationally-recognized high school assessments.

[9] See ESSA §1111(b)(2)(H)(v).

The Center has been charged with conducting a series of analyses aimed at determining whether the scores from specific Georgia EOC assessments are comparable to those from the corresponding ACT and SAT[10] assessment. These analyses encompass requirements (c) to (e) above.

The series of analyses to be conducted by the Center include examinations of:

- the administration conditions of each assessment, with an emphasis on accommodations, based on an audit of available manuals, documented procedures and policies, and if possible, documentation of fidelity to administrative procedures.
- matched student scores to determine what type of relationship can be established between each EOC and the corresponding ACT or SAT assessment, including concordance and prediction relationships, and the implications of such a relationship for student achievement levels (on the percent of students identified as proficient),
- the precision of scores on each assessment for subgroups, and
- aggregated school scores to determine whether schools can be meaningfully differentiated from one another and what impact, if any, using linked ACT and SAT scores in place of EOC scores has on school performance.

In sum, the planned analyses will provide a strong base of evidence about the comparability of scores between the EOC assessments and the ACT and SAT assessments.

Implications and Caveats

Evidence of comparability alone does not ensure that Georgia LEAs, or LEAs in any other state, can successfully implement the locally selected, nationally-recognized provision of ESSA. Doing so requires careful consideration of a number of logistical and policy issues. Logistical issues include those related to the state approval process, assessment procurement, administration and monitoring, and reporting. Assessment administration, for example, requires development and implementation of monitoring processes (e.g., protocols for accommodations or procedures for handling irregularities) to ensure that the integrity of the assessment results are safeguarded.

Policy issues relate to the multiple ways in which the EOC assessments are currently used – i.e., for student grading, educator evaluation, and school accountability. Even if a concordance can be established between the assessments, judgments about students, educators and schools may differ across assessments. For example, estimates of academic growth – a part of both educator evaluation and school accountability– may differ enough across assessments that judgments about educators or schools are not independent of the assessments students take. Similarly, there may be unintended consequences to replacing course specific assessments with a more general academic assessment such as the SAT or ACT. The content of each EOC assessment is aligned to the state content standards, which

[10] The comparability of the ACCUPLACER has already been examined by the Georgia Department of Education in a separate study, and is not considered here.

is meant to signal what is important in instruction, whereas it is uncertain if the SAT or ACT will function in the same manner.

Although the Center's investigation cannot fully address the wide range of logistical and policy issues Georgia will need to consider, it will provide a strong body of evidence on the comparability of the EOC assessments to the SAT and ACT. This evidence will be key in moving Georgia's examination of the locally selected, nationally-recognized high school academic assessment option forward.

Senate Bill 362

By: Senators Tippins of the 37th, Wilkinson of the 50th, Sims of the 12th, Millar of the 40th, Stone of the 23rd and others

AS PASSED

A BILL TO BE ENTITLED

AN ACT

To amend Title 20 of the Official Code of Georgia Annotated, relating to education, so as to provide for the establishment of an innovative assessment pilot program; to provide for participating local school systems; to provide exemptions from certain state-wide assessment requirements; to provide for an annual report; to provide for revised accountability requirements; to provide for related matters; to repeal conflicting laws; and for other purposes.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF GEORGIA:

SECTION 1.

Title 20 of the Official Code of Georgia Annotated, relating to education, is amended in Code Section 20-2-281, relating to student assessments in elementary and secondary education, by revising subsection (a) as follows:

"(a) The State Board of Education shall adopt a student assessment program consisting of instruments, procedures, and policies necessary to implement the program and shall fund all costs of providing and scoring such instruments, subject to appropriation by the General Assembly. The student assessment program shall include a comprehensive summative assessment program for grades three through 12. In addition, each local school system shall administer, with state funding, a research based formative assessment with a summative component that is tied to performance indicators in English language arts/reading and mathematics in grades one and two, subject to available appropriations. Such research based assessment shall be selected~~,~~ after consultation with local school systems. Such research based assessment shall provide for real-time data analysis for students, teachers, school leaders, and parents; allow flexible grouping of students based on skill level; and measure student progress toward ~~grade level~~ grade-level expectations throughout the school year. Each local school system may elect to administer, with state funding, nationally ~~norm-referenced~~ norm referenced instruments in reading, mathematics, science, or social studies in grade three, four, or five and in grade six, seven, or eight,

subject to available appropriations, with assistance to such local school systems by the State Board of Education with regard to administration guidance, scoring, and reporting of such instruments. Further, the State Board of Education shall adopt a school readiness assessment for students entering first grade and shall administer such assessment pursuant to paragraph (2) of subsection (b) of Code Section 20-2-151. Each local school system is strongly encouraged to develop and implement a program of multiple formative assessments in reading and mathematics for kindergarten through fifth grade to ensure that students entering sixth grade are on track to meet grade-level expectations, including mastery in reading by the end of third grade to prepare for the infusion of literacy in subsequent grades and mastery in basic mathematics skills by the end of fifth grade and in accordance with the local school system's five-year strategic plan, performance indicators, and, if applicable, flexibility contract or other agreement with the State Board of Education for local school systems that are not under a flexibility contract. The State Board of Education shall periodically review, revise, and upgrade the content standards. Following the adoption of such content standards, the State Board of Education shall contract for development of end-of-grade assessments to measure the content standards. As part of the comprehensive summative assessment program, end-of-grade assessments in English language arts/reading and mathematics shall be administered annually to students in grades three through eight, and such tests in science and social studies shall be administered annually to students in grades five and eight; provided, however, that each local school system participating in the innovative assessment pilot program established pursuant to Code Section 20-2-286 shall be required to administer only such end-of-grade assessments as specified in the local school system's flexibility contract, as amended for participation in the innovative assessment pilot program. These tests shall contain features that allow for comparability to other states with ~~whom~~ which establishing such comparison would be statistically sound; provided, however, that no such comparison shall be conducted which would relinquish any measure of control over assessments to any individual or entity outside the state. Further, as part of the comprehensive summative assessment program, the State Board of Education shall adopt and administer, through the Department of Education, end-of-course assessments for students in grades nine through 12 for all core subjects, as determined by the state board; provided, however, that each local school system participating in the innovative assessment pilot program established pursuant to Code Section 20-2-286 shall be required to administer only such end-of-course assessments as specified in the local school system's flexibility contract, as amended for participation in the innovative assessment pilot program. Writing performance shall be assessed, at a minimum, for students in grades three, five, eight, and 11 and may be assessed for students in additional grade levels as designated by the State Board of Education. Such required

writing performance assessment may be embedded within the assessments included in the comprehensive summative assessment program. Writing performance results shall be provided to students and their parents. If authorized to establish and operate an innovative assessment system pursuant to 34 C.F.R. Section 200.104, the Department of Education may establish a pilot program for local school systems that have an existing program of multiple formative assessments during the course of the academic year that result in a single summative score that is valid and reliable in measuring individual student achievement or growth and assessing individual student needs or deficiencies, to utilize such local assessments in place of end-of-grade or end-of-course assessments, if provided for in the terms of the local school system's flexibility contract. As used in this subsection, the term 'flexibility contract' means a charter for a charter system or a charter school or a contract entered into with the State Board of Education for a strategic waivers school system.″

SECTION 2.

Said title is further amended in Part 12 of Article 6 of Chapter 2, relating to effectiveness of educational programs in elementary and secondary education, by adding a new Code section to read as follows:

″20-2-286.

(a) Beginning with the 2018-2019 school year, the State Board of Education shall establish an innovative assessment pilot program to examine one or more alternate assessment and accountability systems aligned with state academic content standards. The pilot program shall span from three to five years in duration, as determined by the state board and may include up to ten local school system participants. A consortium of local school systems implementing the same innovative alternate assessment may participate in the pilot program and shall be counted as one of the ten pilot program participants. The participating local school systems shall be selected by the state board in a competitive process and based on criteria established by the state board, including current compliance with the terms of their charter system contract or strategic waivers school system contract.

(b) The local school systems participating in the pilot program shall be authorized to design and implement an innovative alternate assessment and accountability program which may include, but shall not be limited to, cumulative year-end assessments, competency based assessments, instructionally embedded assessments, interim assessments, performance based assessments, or other innovated assessment designs approved by the State Board of Education. In order to allow the time and resources for the participating local school systems to implement an innovative alternate assessment and accountability program, the state board shall be authorized to reduce the state-wide testing

requirements for such local school systems for the duration of the pilot program for end-of-grade and end-of-course assessments as contained in Code Section 20-2-281.

(c) Notwithstanding Code Sections 20-2-82, 20-2-244, and 20-2-2065, the State Board of Education shall be authorized to waive, for the duration of the pilot program, all or a portion of the requirements of Part 3 of Article 2 of Chapter 14 of this title for local school systems participating in the pilot program, but may replace any such accountability requirements with alternate requirements as specified in the local school system's charter system contract or strategic waivers school system contract.

(d) Each local school system participating in the pilot program shall amend its charter system contract or strategic waivers school system contract to reflect the innovative alternate assessment and accountability system that will be utilized during the term of the pilot program. Any local school system in the pilot program that is not complying with the terms of its charter system contract or strategic waivers school system contract may be removed from the pilot program at the sole discretion of the state board and shall be subject to the state-wide assessment requirements contained in Code Section 20-2-281 and the accountability system provided for in Part 3 of Article 2 of Chapter 14 of this title.

(e) The State Board of Education shall take all reasonable steps to obtain any necessary waivers or approvals and maximum flexibility from the U.S. Department of Education to facilitate the implementation of the innovative assessment pilot program within the confines of federal law, including any appropriate changes to the state-wide accountability system established in the state plan for Georgia pursuant to the federal Every Student Succeeds Act that are necessary for the local school systems participating in the pilot program.

(f)(1) The State Board of Education may contract with an external, independent third party with expertise in innovative and flexible approaches to assessment systems to assist in the development and implementation of one or more innovative alternate assessment and accountability systems. Such independent third party shall have access to and expertise from external technical experts, including technical experts in states that have pursued innovative and flexible approaches, in state assessment and accountability systems as well as knowledge and experience in the federal Every Student Succeeds Act and its implementing regulations.

(2) The State Board of Education shall consult with and provide coordination with the Office of Student Achievement in the development and implementation of the pilot program established pursuant to this Code section.

(3) The State Board of Education and the Department of Education shall contract with an external, independent third party to evaluate comparability between the innovative assessments, including norm referenced assessments, and the state-wide assessments,

including for subgroups of students, and shall identify strategies that may be used to scale the innovative assessment to all local school systems state-wide. The State Board of Education shall determine initial performance based baselines and accountability requirements for local school systems participating in the pilot program.

(4) Local school systems participating in the pilot program shall be encouraged to collaborate amongst each other during the course of the pilot program.

(g) No later than December 31, 2019, and annually thereafter for the duration of the pilot program, the Department of Education shall submit a detailed written report, approved by the State Board of Education, on the implementation and effectiveness of the innovative assessment pilot program to the Governor, the Speaker of the House of Representatives, and the President of the Senate. The final report shall also include recommendations as to expansion of the pilot program state-wide and estimated costs of implementation."

SECTION 3.

Said title is further amended by revising Code Section 20-14-31, relating to establishing standard for satisfactory performance under the education accountability assessment, as follows:

"20-14-31.

Except as otherwise provided in this article, the office shall establish the levels of performance on each assessment instrument administered under Code Section 20-2-281 by establishing the standard that should be achieved by students in each subject area at each grade level. Data and information regarding the establishment of the standard shall be included in the annual report provided for in paragraph (2) of subsection (a) of Code Section 20-14-27; provided, however, that local school systems participating in the innovative assessment pilot program established pursuant to Code Section 20-2-286 shall only be measured on the reduced specific end-of-grade and end-of-course assessments as specified in the local school system's flexibility contract, as amended for participation in the innovative assessment pilot program."

SECTION 4.

All laws and parts of laws in conflict with this Act are repealed.

INNOVATIVE ASSESSMENT PILOT PROGRAM APPLICATION ANNOUNCEMENT

To: School districts that wish to apply to participate in Georgia's Innovative Assessment Pilot Program

From: State Board of Education

Date: December 17, 2018

Re: Innovative Assessment Pilot Program Application - **DEADLINE August 1 or September 1, 2018**

The State of Georgia established an Innovative Assessment Pilot Program that allows up to 10 school districts or groups of districts to develop alternate assessment and accountability systems aligned with state academic content standards beginning in 2018 (see SB 362 summary below).

The State Board of Education (SBOE) will conduct several competitions for school districts that wish to apply to be included as one of the 10 pilot program participants. The first competition is for districts wishing to participate in the pilot program during the 2018-19 school year. The two application deadlines for the first competition are as follows:

- If you wish to be considered by the SBOE at their August 22-23 meetings, then you must submit your application by August 1.
- If you wish to be considered by the SBOE at their September 26-27 meetings, then you must submit your application by September 1.

The second competition is for districts wishing to participate in the pilot program during the 2019-20 school year. It will be held in the first half of 2019.

To apply by either the August 1 or September 1, 2018 deadline, please complete and submit the attached Innovative Assessment Pilot Application to Debbie Caputo at dcaputo@doe.k12.ga.us.

If you have any questions about the application or the application process, please send them via email to Debbie at dcaputo@doe.k12.ga.us. She will get back to you with answers as soon as possible.

NOTE: If your district is approved by the SBOE in August or September to participate in the pilot program during 2018-19, you will need an amendment to your SWSS or Charter System contract to modify the accountability section of your contract. Templates for these follow-up documents will be sent to you upon SBOE approval of your application:

1. Petition to Amend SWSS or Charter System Contract
2. Contract Amendment
3. Replacement Accountability contract section (Exhibit C for SWSS or Appendix A for Charter System)
4. SBOE-approved Innovative Assessment Pilot Application

Thank you.

SB 362 - Innovative Assessment Pilot Program – Summary

Senate Bill 362 was passed during the 2018 legislative session, signed by Governor Deal, and went into effect on July 1, 2018. It added a new section in the Official Code of Georgia, O.C.G.A. § 20-2-286, which states:

> (a) Beginning with the 2018-2019 school year, the State Board of Education shall establish an innovative assessment pilot program to examine one or more alternate assessment and accountability systems aligned with state academic content standards. The pilot program shall span from three to five years in duration, as determined by the state board and may include up to ten local school system participants. A consortium of local school systems implementing the same innovative alternate assessment may participate in the pilot program and shall be counted as one of the ten pilot program participants. The participating local school systems shall be selected by the state board in a competitive process and based on criteria established by the state board, including current compliance with the terms of their charter system contract or strategic waivers school system contract.
>
> (b) The local school systems participating in the pilot program shall be authorized to design and implement an innovative alternate assessment and accountability program which may include, but shall not be limited to, cumulative year-end assessments, competency based assessments, instructionally embedded assessments, interim assessments, performance based assessments, or other innovated assessment designs approved by the State Board of Education. In order to allow the time and resources for the participating local school systems to implement an innovative alternate assessment and accountability program, the state board shall be authorized to reduce the state-wide testing requirements for such local school systems for the duration of the pilot program for end-of-grade and end-of-course assessments as contained in Code Section 20-2-281.
> (c) Notwithstanding Code Sections 20-2-82, 20-2-244, and 20-2-2065, the State Board of Education shall be authorized to waive, for the duration of the pilot program, all or a portion of the requirements of Part 3 of Article 2 of Chapter 14 of this title for local school systems participating in the pilot program, but may replace any such accountability requirements with alternate requirements as specified in the local school system's charter system contract or strategic waivers school system contract.
>
> (d) Each local school system participating in the pilot program shall amend its charter system contract or strategic waivers school system contract to reflect the innovative alternate assessment and accountability system that will be utilized during the term of the pilot program. Any local school system in the pilot program that is not complying with the terms of its charter system contract or strategic waivers school system contract may be removed from the pilot program at the sole discretion of the state board and shall be subject to the state-wide assessment requirements contained in Code Section 20-2-281 and the accountability system provided for in Part 3 of Article 2 of Chapter 14 of this title.
>
> (e) The State Board of Education shall take all reasonable steps to obtain any necessary waivers or approvals and maximum flexibility from the U.S. Department of Education to facilitate the implementation of the innovative assessment pilot program within the confines of federal law, including any appropriate changes to the state-wide accountability system established in the state

plan for Georgia pursuant to the federal Every Student Succeeds Act that are necessary for the local school systems participating in the pilot program.

SB 362 also amended § 20-14-31 as follows:

Except as otherwise provided in this article, the office shall establish the levels of performance on each assessment instrument administered under Code Section 20-2-281 by establishing the standard that should be achieved by students in each subject area at each grade level. Data and information regarding the establishment of the standard shall be included in the annual report provided for in paragraph (2) of subsection (a) of Code Section 20-14-27; provided, however, that local school systems participating in the innovative assessment pilot program established pursuant to Code Section 20-2-286 shall only be measured on the reduced specific end-of-grade and end-of-course assessments as specified in the local school system's flexibility contract, as amended for participation in the innovative assessment pilot program.

Cohorts. *In recognizing the tight timeframe and amount of work to complete the application for the first cohort of applicants, there is a commitment to provide multiple opportunities in the future for LEAs to apply for the Innovative Assessment Pilot.*

*Cohort 1**

- *Application Due: August 1, 2018*
- *Review/Approval by the State Board of Education: August 22-23, 2018*

*Cohort 2**

- *Application Due: September 1, 2018*
- *Review/Approval by the State Board of Education: September 26-27, 2018*

**Additional cohorts will be added.*

Process. *If approved by the State Board of Education, the Georgia Department of Education will work with participating LEAs to initiate the performance contract amendment process. Per SB 362, the LEA must utilize the performance contract as the means for participating in the pilot.*

Submission. *Please submit the completed application along with labeled supporting documents to Debbie Caputo (dcaputo@doe.k12.ga.us).*

Description of Assessment Pilot

___ LEA ***____ Consortium of LEAs***

FILL OUT ONLY IF APPLYING AS A CONSORTIUM. Describe the proposed participants in the consortium, how the consortium will be managed and operated, and how all participants will comply with the Innovative Assessment Pilot Program Assurances.
Narrative:

Describe the proposed assessment system, including: *1. a description of the system,* *2. the type of assessment (i.e., single summative assessment, series of interim assessments, computer adaptive, etc.)* *3. administration mode (i.e., technology-based, paper/pencil, etc.),* *4. grades and content areas and/or courses to be included,* *5. purpose of the assessments, and* *6. intended interpretations and uses of the results.*
Narrative:

Describe the innovative nature of the piloted assessments and need for participation in this pilot, including anticipated benefits for the LEA, schools, and for student learning.
Narrative:

Describe the duration of your Innovative Assessment Pilot Program (up to 5 years). Note: The State Board of Education will renew your contract amendment on a yearly basis based on progress and effectiveness of your program.
Narrative:

Assurance: *LEA/Consortium has met its performance contract goals for the last year.*

Superintendent's Initials: _____

Narrative:

Self-Assessment

Description of Rating Categories. *For each category below, provide a rating for each element based on where the LEA/consortium is on the fidelity continuum. Provide a narrative describing what efforts support your ratings. Provide labeled artifacts of documentation as evidence for your ratings as attachments.*

Not Yet Addressed	*LEA/consortium has not begun to address this issue.*
Planning	*LEA/consortium is researching and developing this issue with key stakeholders and technical experts. The LEA/consortium has some evidence of planning (agendas, meeting notes, etc.).*
Implementing	*LEA/consortium is piloting this issue and anticipates revisions based on the pilot process with input from stakeholders and technical experts. The LEA/consortium has ample evidence of planning and some evidence of implementation.*
Operational	*LEA/consortium has implemented this issue in some but not all applicable schools and does not anticipate major revisions. The LEA/consortium has ample evidence of planning and implementation with stakeholders and technical experts.*
Scaled	*This issue is fully operational in all applicable schools and does not anticipate major revisions. The LEA/consortium has ample evidence of planning and successful implementation with stakeholders and technical experts.*

Assurance: *The LEA/Consortium has read USED's New Peer Review Guidance (https://www2.ed.gov/admins/lead/account/saa.html#Standards_and_Assessments_Peer_Review) and Application for the Innovative Demonstration Authority (https://www2.ed.gov/admins/lead/account/iada/index.html) understanding that its efforts to the best of its ability be in alignment with a peer review and/or demonstration authority submission.*

Superintendent's Initials: _____

A. Alignment & Comparability

Assurance: *The LEA/Consortium will assess students as necessary to establish comparability per ESSA statute and USED regulations.*

Superintendent's Initials: _____

Per Senate Bill 362, the State Board of Education and Georgia Department of Education will pursue maximum flexibility from USED via waiver requests and/or participation in the Innovative Demonstration Authority to reduce double testing to the fullest extent possible while establishing comparability between the innovative assessments and state Georgia Milestones assessments. The LEA acknowledges that the Georgia Department of Education will communicate progress on the status of the federal waiver requests. The LEA further acknowledges that flexibility from state laws and regulations ***shall not be construed as a waiver*** *of federal laws and regulations unless notified by the Georgia Department of Education.*

The state will contract with an external, independent third-party evaluator to evaluate comparability.

	Not Yet Addressed	***Planning***	***Implementing***	***Operational***	***Scaled***
1. Aligns with Georgia's academic content standards (breadth and depth of those standards for all grade-levels and content areas or courses assessed)					
2. Identifies which students are not making progress toward Georgia's academic content standards					
3. Produces results that are comparable to the Georgia Milestones assessments (include methods in the narrative or as attached evidence)					
Narrative:					
Evidence *(please provide labeled attachments)*					

B. Technical Quality

	Not Yet Addressed	***Planning***	***Implementing***	***Operational***	***Scaled***
1.Works with expert(s) (external partner or in-house) to ensure technical quality, validity, reliability, and psychometric soundness of the innovative assessment					
2. Establishes validity and reliability evidence consistent with nationally recognized testing standards					
3. Assesses student achievement based on state academic content standards in terms of content and cognitive processes, including higher-order thinking skills, and adequately measures student performance across the full performance continuum					
4. Produces individual and aggregate reports that allow parents, educators, and school leaders to understand and address the specific needs of students					
5. Provides reports in an easily understandable and timely manner to students, parents, educators, and school leaders					
6.Developed, to the extent practicable, consistent with the principles of universal design for learning					
Narrative:					
Evidence *(please provide labeled attachments)*					

C. Accessibility and Accommodations

Assurance: *The LEA/Consortium agrees to complete and comply with the provisions of the annual GAA Survey provided by GaDOE.*

Superintendent's Initials: _____

While students with the most significant cognitive disabilities can continue to participate in the GAA as opposed to the local assessment, all other students with disabilities (and English Learners) must be able to participate in the local assessment, with accommodations as needed and appropriate.

Assurance: *All students (except those with the most significant cognitive disabilities) in any grade and subject for which the innovative assessment is given in a participating school will be given access to the innovative assessment.*

Superintendent's Initials: _____

	Not Yet Addressed	***Planning***	***Implementing***	***Operational***	***Scaled***
1.Appropriate accommodations will be provided for students with disabilities as defined via their IEP or IAP (provide list of available accommodations as an attachment)					
2.Appropriate accommodations will be provided for English Learners as defined via their EL/TPC (provide list of available accommodations as an attachment)					
Narrative:					
Evidence *(please provide labeled attachments)*					

D. Test Administration and Security

Assurance: *LEA/Consortium will deliver the innovative assessment in line with the state adopted guidelines for test security and integrity. LEA/Consortium agrees to allow the Governor's Office of Student Achievement (GOSA) to monitor test administration and will provide GOSA with data needed for audits to ensure test security and integrity.*

Superintendent's Initials: _____

	Not Yet Addressed	***Planning***	***Implementing***	***Operational***	***Scaled***
1.Develops and implements policies and procedures to ensure standardized test administration (i.e., test coordinator manuals, test administration manuals, accommodations manuals, test preparation materials for students and parents, and/or other key documents provided to schools and teachers that					

address standardized test administration and any accessibility tools and features available for the assessments)					
2. Delivers training for educators and school leaders to ensure a standardized test administration					
3. Develops and implements a monitoring process to ensure standardized test administration					
4. Develops and implements policies and procedures to prevent test irregularities and ensure the integrity of test results					
5. Develops and implements policies and procedures to protect the integrity and confidentiality of test materials, test-related data, and personally identifiable information					
Narrative:					
Evidence *(please provide labeled attachments)*					

E. Stakeholder Engagement

	Not Yet Addressed	***Planning***	***Implementing***	***Operational***	***Scaled***
1.Develops assessment in collaboration with stakeholders representing the interests of students with disabilities, English learners, and other vulnerable populations; teachers, principals, and other school leaders; parents; and civil rights organizations					
2. Develops capacity for educators and school and district leaders to implement the assessment, interpret results and communicate with stakeholders					
Narrative:					

Evidence *(please provide labeled attachments)*

F. Accountability

Assurance. *LEA/Consortium ensures that the percentage of all students (and the percentage of students in each subgroup) assessed is at least as high as the percentage assessed using the Georgia Milestones assessments in the year previous to the start of the pilot.*

Superintendent's Initials: _____

	Not Yet Addressed	***Planning***	***Implementing***	***Operational***	***Scaled***
1.Produces a single, summative score for every student					
2. Produces a comparable growth measurement that can be used for the Progress CCRPI component					
3. Produces a comparable achievement measurement that can be used for the Content Mastery and Closing Gaps CCRPI components (alignment to Beginning, Developing, Proficient, and Distinguished Learner achievement levels)					
4. Produces a comparable literacy (Lexile) measurement that can be used for the Readiness CCRPI component					
5. Produces subgroup results consistent with federal accountability and reporting requirements (e.g., race/ethnicity, gender, English Learners, students with disabilities, migrant, homeless, foster, parent on active military duty)					
Narrative:					
Evidence *(please provide labeled attachments)*					

Per Senate Bill 362, negative consequences for participating innovative LEAs/consortiums that are in the purview of the State

Board of Education, Georgia Department of Education, and Governor's Office of Student Achievement will not be pursued or enforced (ex: turnaround school selection, traditional SWSS/charter system accountability, etc.) as long as the LEA/consortium adheres to its amended performance contract. Federal law and requirements (ex: Comprehensive Support and Improvement and Targeted Support and Improvement identification and services, etc.) will be enforced unless granted flexibility from USED. The Georgia Department of Education will communicate progress on federal waivers to districts as needed.

G. Conflict of Interest

Assurance: *There is no conflict of interest (financial or otherwise) for the interested parties in participating in the pilot program. All activities that are related to this pilot shall abide by local procurement requirements.*

Superintendent's Initials: _____

Goals & Deliverables (2018-2019 School Year)

Narrative:

GaDOE Position Descriptions

Program Manager, Innovative Assessment Pilot

Description of Duties:

Under limited supervision, applies professional expertise to manage activities and projects related to the Georgia innovative assessment pilot program, as described by Senate Bill 362 (2018). Duties include, but are not limited to:

- developing and monitoring an implementation plan for each participating consortium and the state to ensure timelines and statutory requirements are being met;
- developing and carrying out a stakeholder engagement plan to collect stakeholder feedback on the innovative assessment pilot and each assessment system throughout the pilot period;
- overseeing the collection of evidence to inform the state's technical evaluation of the assessments included in the innovative assessment pilot;
- managing and working with contractors to coordinate multiple Technical Advisory Committee meetings each year;
- serving as the liaison in working with technical assistance groups to evaluate construct and score comparability;
- ensuring the accuracy and completeness of statutory requirements for annual written reports;
- communicating regularly with districts and consortia regarding pilot program updates;
- developing, managing, and analyzing large data sets using applications such as R, SQL, SPSS, and Excel;
- preparing reports and conducting presentations, including those that support assessment literacy for a variety of stakeholder groups;
- providing strong leadership and fostering a collaborative environment; and
- working with multiple stakeholders and divisions across the Georgia Department of Education.

Minimum Qualifications:

- Master's degree in education, policy, psychology, research/measurement, statistics, or a related field <u>and</u> five (5) years professional work experience (including project management experience) in accountability systems, large-scale assessment, educational research/statistics, or a related field. Must have excellent verbal and written communication skills and strong computer skills (proficiency in Microsoft Office applications and statistical packages); and
- Note: Doctorate-level coursework in educational measurement/research, statistics, or a related field may be substituted for the experience requirement on a year-for-year basis.

Preferred Qualifications:

- Ph.D. in education, policy, psychology, research/measurement, statistics, or a related field;
- understanding of state assessment and accountability initiatives;
- ability to communicate technical information to a broad audience;
- ability to manage multiple, overlapping high priority tasks in a fast-paced environment;
- knowledge of state and federal assessment and accountability laws, regulations, and guidance, including the Every Student Succeeds Act (ESSA);
- K-12 educational experience at the district or state level;

- highly effective verbal and written communication skills; and
- strong work ethic, self-directed, and self-motivated.

Assessment Specialist, Innovative Assessment Pilot

Description of Duties:

Under limited supervision, applies professional expertise to support the Program Manager to manage activities and projects related to the Georgia innovative assessment pilot program, as described by Senate Bill 362 (2018). Duties include, but are not limited to:

- collecting information related to the implementation plan for each participating consortium and the state to ensure timelines and statutory requirements are being met;
- supporting a stakeholder engagement plan to collect stakeholder feedback on the innovative assessment pilot and each assessment system throughout the pilot period;
- supporting the collection of evidence to inform the state's technical evaluation of the assessments included in the innovative assessment pilot;
- supporting multiple Technical Advisory Committee meetings each year;
- supporting technical assistance groups to evaluate construct and score comparability;
- ensuring the accuracy and completeness of statutory requirements for annual written reports;
- monitoring schedules and timeline requirements;
- developing, managing, and analyzing large data sets using applications such as R, SQL, SPSS, and Excel;
- preparing reports and conducting presentations, including those that support assessment literacy for a variety of stakeholder groups; and
- working with multiple stakeholders and divisions across the Georgia Department of Education.

Minimum Qualifications:

- Master's degree in education, policy, psychology, research/measurement, statistics, or a related field and three (3) years professional work experience in accountability systems, large-scale assessment, educational research/statistics, or a related field. Must have excellent verbal and written communication skills and strong computer skills (proficiency in Microsoft Office applications and statistical packages); and
- Note: Doctorate-level coursework in educational measurement/research, statistics, or a related field may be substituted for the experience requirement on a year-for-year basis.

Preferred Qualifications:

- Ph.D. in education, policy, psychology, research/measurement, statistics, or a related field;
- understanding of state assessment and accountability initiatives;
- ability to communicate technical information to a broad audience;
- ability to manage multiple, overlapping high priority tasks in a fast-paced environment;
- knowledge of state and federal assessment and accountability laws, regulations, and guidance, including the Every Student Succeeds Act (ESSA);
- K-12 educational experience at the district or state level;
- highly effective verbal and written communication skills; and
- strong work ethic, self-directed, and self-motivated.

Accountability Specialist, Innovative Assessment Pilot

Description of Duties:

Under limited supervision, applies professional expertise to produce and support Georgia's College and Career Ready Performance Index (CCRPI) for schools and LEAs in Georgia's innovative assessment pilot program. Duties include, but are not limited to:

- developing and coordinating a plan for producing a CCRPI report with pilot assessment data instead of Georgia Milestones;
- preparing a process and timeline for receipt and utilization of assessment data from pilot LEAs;
- working with IT to develop a format for data from LEAs and business rules for utilizing the data;
- communicating the plan details to and supporting schools, LEAs with implementation of the plan;
- ensuring the accuracy of data calculations for CCRPI reports for schools and LEAs in the pilot program;
- supporting schools, LEAs, and other stakeholders in the pilot program in understanding and interpreting CCRPI reports, data, and calculations;
- developing and maintaining accountability documentation (such as business requirements, user guides, and calculation guides) for CCRPI for pilot program LEAs;
- conducting presentations for LEAs in the pilot program; and
- collaborating with multiple stakeholders and divisions within and outside of the Georgia Department of Education regarding CCRPI for participants in the innovative assessment pilot program.

Minimum Qualifications:

- Master's degree in education, policy, psychology, research/measurement, statistics, or a related field and at least three (3) years of professional experience in K-12 education or a related field (such as accountability or assessment, curriculum and instruction, educational research, education program evaluation). Must have excellent verbal and written communication skills and strong computer skills (proficiency in Microsoft Office applications, including Word, Excel, and PowerPoint.

Preferred Qualifications:

- understanding of state assessment and accountability initiatives, including the College and Career Ready Performance Index;
- understanding of the innovative assessment pilot program;
- knowledge of state and federal accountability laws, regulations, and guidance, including the Every Student Succeeds Act (ESSA);
- experience with district- or state-level accountability, test administration, evaluation, or research and data analysis;
- K-12 educational experience at the district or state level;
- proficiency in SPSS, SQL, and/or other statistical software; and
- highly effective verbal and written communication skills.

DataBase Developer, Innovative Assessment Pilot

Description of Duties:

Under limited supervision, applies professional expertise to collaborate with the Assessment and Accountability team to produce and support Georgia's College and Career Ready Performance Index (CCRPI) for schools and LEAs in Georgia's innovative assessment pilot program. Duties include, but are not limited to:

- collaborating with the Assessment and Accountability team to develop a process, plan, and timeline for integration of pilot assessment data into the current College and Career Ready Performance Index (CCRPI) and into all related reporting;
- helping in the design, development and implementation of new and existing applications related to the innovative assessment pilot;
- developing stored Functions, Procedures, Packages and, triggers using SQL and Scripts as part of our application needs related to the innovative assessment pilot;
- consulting with the data architect and tech lead and participating in Application design and development related to the innovative assessment pilot;
- performing code reviews and unit testing and preparing the build bundle scripts for CCRPI reports for schools and LEAs in the innovative assessment pilot;
- working with the team on the development of projects in full lifecycle; and
- supporting the applications with 24/7 availability and Large Volume Handling of Data, in Large scale Oracle and SQL Enterprise servers in a multiple environments.

Minimum Qualifications:

- undergraduate in Computer Science or related area of study;
- minimum 5+ years of professional development experience with Oracle databases and 2+ year on SQL Server;
- in-depth knowledge and understanding of RDBMS concepts and be experienced in writing SQL and PL/SQL;
- extensive background in the development and testing of complex queries in Oracle SQL and PL/SQL, MOD PL/SQL as well as on T-SQL;
- highly proficient in SQL, PLSQL, and TSQL Programming;
- proficient with DDL, DML operations and working with it;
- practical experience of developing a data warehouse using dimensional modeling techniques;
- proficient with developing methods of loading large volumes of data automatically into a database;
- capable of working independently or with minimal guidance;
- experience with Agile development practices and Scrum methodology;
- excellent oral and written communication skills; and
- willingness to do Application Support and ad-hoc business owners support requests.

Preferred Qualifications:

- experience with dimensional database design, online analytical processing, and business Intelligence tools and/or technologies such as Business Objects, Brio etc.; and
- familiarity with data modeling design (CASE) tools (Erwin, Toad Schema Modeler, etc);
- experience in designing, deploying and managing SSIS and SSRS packages; and

- experience with source control and change control and be able to generate creation, upgrade, and maintain scripts

Web Application Developer, Innovative Assessment Pilot

Description of Duties:

Under limited supervision, applies professional expertise to collaborate with the Assessment and Accountability team to design and develop .NET applications and web services related to the innovative assessment pilot program. Duties include, but are not limited to:

- working with the team to analyze, design, develop, deploy, and support web applications to meet business and technical requirements;
- existing development base on C#, ASP.Net, .Net core, MVC, Angular 2/4/5, JQuery/JQueryUI, Web API, Web services, LINQ and Entity Framework, HTML5/CSS, OOD & Design Patterns, Unit Testing Frameworks, SQL Server, and Oracle;
- performing code reviews and unit testing; and
- maintaining existing applications.

Minimum Qualifications:

- undergraduate degree in computer science or related area of study;
- at least 7 years of experience developing applications in .NET environment with at least 2 years in Angular;
- technical skills including C#, ASP.Net, .Net core, MVC, Angular 2/4/5, JQuery/JQueryUI, Web API, Web services, LINQ and Entity Framework, HTML5/CSS, OOD & Design Patterns, Unit Testing Frameworks, SQL Server, and Oracle;
- experience with Agile development practices and Scrum methodology;
- good oral and written communication skills;
- experience in the design, development, and unit testing of .NET applications and web services;
- experience with MVC and Angular 2/4/5 is a must experience in the design, development, and unit testing of .NET applications and web services;
- experience with MVC and Angular 2/4/5;
- knowledge of database modeling and data structure principles, techniques and best practices;
- ability to work independently with minimal consultation from Architect/Lead;
- working experience with Source Control Management tools such as Team Foundation Server (TFS);
- experience with Agile development practices and Scrum methodology;
- in-depth knowledge and understanding of RDBMS concepts; and
- experience in writing SQL and PL/SQL.

Preferred Qualifications:

- experience building portal;
- working Experience in Data Visualization tools such as Power BI; and
- MCP certification in .NET framework.

RESOLUTION

GEORGIA STATE BOARD OF EDUCATION

RESOLUTION IN SUPPORT OF GEORGIA'S APPLICATION TO PARTICIPATE IN THE FEDERAL INNOVATIVE ASSESSMENT DEMONSTRATION AUTHORITY

WHEREAS the Office of Elementary and Secondary Education of the U.S. Department of Education has issued a notice inviting application for new authorities for fiscal year (FY) 2019 under the Innovative Assessment Demonstration Authority, and

WHEREAS the U.S. Secretary of Education provides State Education Agencies (SEAs) with the authority to establish and operate an innovative assessment system in their public schools under the Innovative Assessment Demonstration Authority in section 1204 of the Elementary and Secondary Education Act of 1965, as amended by the Every Student Succeeds Act, and

WHEREAS the Secretary can select no more than six additional SEA authorities to participate in the assessment demonstration,

THEREFORE BE IT RESOLVED that the Georgia State Board of Education Fully Supports the State of Georgia Department of Education submission of documentation of intent to apply for the Innovative Assessment Demonstration Authority by October 17, 2018 and the Department's submission of an application for the Innovative Assessment Demonstration Authority by December 17, 2018.

IN WITNESS WHEREOF, we have set our hands and caused the Georgia State Board of Education Seal to be affixed this 27th day of September 2018.

C. Scott Johnson

Curtis Scott Johnson, Chairman
State Board of Education

DESTINATION: U.S. Department of Education, School Board

RESOLUTION

GEORGIA STATE BOARD OF EDUCATION

RESOLUTION IN SUPPORT OF GEORGIA'S APPLICATION TO PARTICIPATE IN THE FEDERAL INNOVATIVE ASSESSMENT DEMONSTRATION AUTHORITY

WHEREAS the Office of Elementary and Secondary Education of the U.S. Department of Education has issued a notice inviting application for new authorities for fiscal year (FY) 2019 under the Innovative Assessment Demonstration Authority, and

WHEREAS the U.S. Secretary of Education provides State Education Agencies (SEAs) with the authority to establish and operate an innovative assessment system in their public schools under the Innovative Assessment Demonstration Authority in section 1204 of the Elementary and Secondary Education Act of 1965, as amended by the Every Student Succeeds Act, and

WHEREAS the Secretary can select no more than five additional SEA authorities to participate in the assessment demonstration,

THEREFORE BE IT RESOLVED that the Chair of the Georgia State Board of Education (SBOE) is authorized to sign the State of Georgia Department of Education's Innovative Assessment Demonstration Authority application to the US Department of Education (US ED) that complies with SB 362 requiring the SBOE to seek maximum flexibility and includes all consortia/districts approved by the SBOE for inclusion in the state Innovative Assessment Pilot Program, and fully supports increasing the Department's budget as needed to implement the programs included in Georgia's Innovative Assessment Demonstration Authority application.

IN WITNESS WHEREOF, we have set our hands and caused the Georgia State Board of Education Seal to be affixed this 13th day of December 2018.

C. Scott Johnson

Curtis Scott Johnson, Chairman
State Board of Education

DESTINATION: U.S. Department of Education, School Board

Appendix B:
Cobb County School District

ASSESSMENT & PERSONALIZED LEARNING

Assessment & Personalized Learning Menu of CTLS Assess Trainings

Trainings/Topics	Purpose	Suggested Time
CTLS Assess Overview for Administrative Teams	Administrators will be provided an overview of CTLS Assess and will work with Assessment team to schedule requested training and/or work sessions.	45 minutes
CTLS Assess Overview for Teachers	Assessment team will communicate the purpose and provide teachers with an overview of CTLS Assess.	45 minutes
CTLS Assess Small Group Sessions	Assessment team will facilitate small Group Q&A sessions to further explain the purpose and overview of CTLS Assess.	30 minutes
Sound assessment Practices- (Selected Response)	Teachers will learn how to write quality selected response items tied to standards.	45 minutes
Sound assessment Practices- (Constructed Response and Collaborative Scoring)	Teachers will learn how to write quality constructed response items tied to standards and how to collaboratively score constructed response prompts.	45 minutes
Sound assessment Practices- (Feedback)	Teachers will learn how to incorporate effective feedback on assessments.	45 minutes
Utilizing CTLS Assess to Capture, Analyze and Collaborate	Assessment team will work with teachers to answer the PLC guiding questions by utilizing the data teaming process.	45 minutes

**Contact the Office of Assessment at (770) 426-3409 to schedule a training*

ASSESSMENT & PERSONALIZED LEARNING
ASSESS. COLLABORATE. PERSONALIZE.

Instructional Technology Menu of CTLS Assess Trainings

Trainings/Topics	Purpose	Suggested Time
iRespond Training for Remote/Web Application	How to use iRespond (remotes and Web App) to administer assessments.	45 minutes
CTLS Assess Dashboard Overview & Enhancements	Teachers will walk through the CTLS Assess Dashboard look and learn about new enhancements to CTLS Assess.	30 minutes
Professional Learning Community (PLC)-**Data Analysis for Teachers**	Teachers will explore the Results widget in PLCs and look at how to disaggregate the data, and use the results to drive their classroom instruction.	45 minutes
Data Analysis for Administrative Team	The Administrative team will explore various reports in CTLS Assess to support PLCs.	45 minutes
Assessment Builder (Selected Response)	Teachers will learn how to use Touchstone Blueprints, test bank items, and other resources, to develop teacher created assessments.	45 minutes
Teacher Created Tests using **Assessment Builder** (Work Session)	TTIS will guide and support teachers as they create assessments using the Assessment Builder widget.	45 minutes
Item Builder (Selected Response)	Teacher will learn how to input selected response items into the CTLS Assess Item Bank for their subject area.	45 minutes
Item Builder (Work Session)	TTIS will support teachers as they create items in Item Builder.	45 minutes
Item Builder (Constructed Response)	Teachers will learn how to input their own constructed response prompts.	45 minutes
Assessment Builder (Constructed Response)	Teachers will create an assessment using a constructed response item with a defined rubric.	45 minutes
Score Input (Constructed Response)	Teachers will input constructed response scores and feedback for an assessment that has already been administered with students.	45 minutes

**Contact your TTIS to schedule a training. Instructional Technology staff list can be found at www.cobbk12.org/centraloffice/InstructionalTechnology*

TechnologyServices

Prepared July 16, 2018

STATISTICS THROUGH END OF SCHOOL YEAR

CHART 1. Individual student test administrations

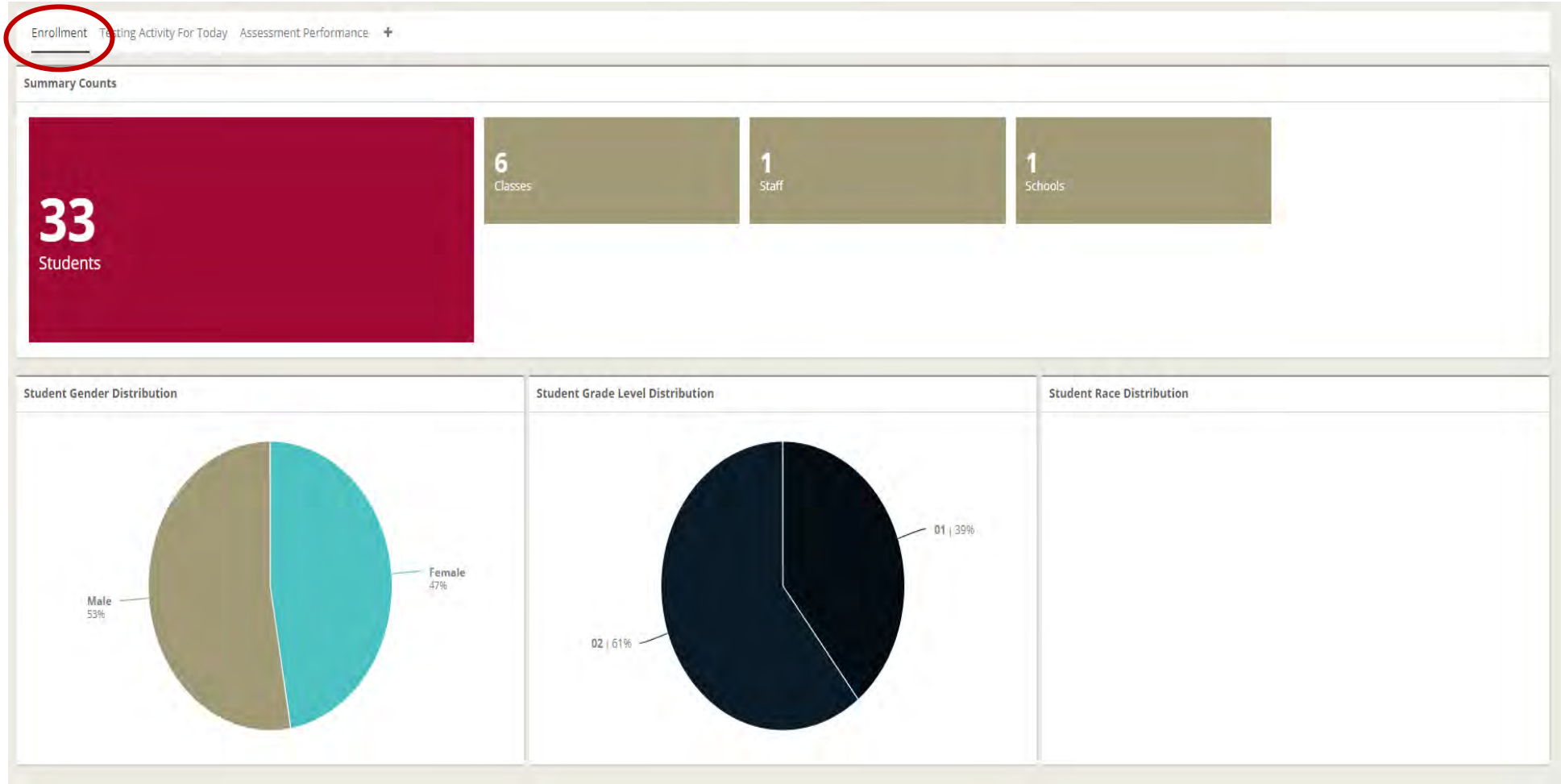
Type	2017-2018	2016-2017	2015-2016
SLO / Student Growth Measures	170,769	136,526	337,100
District Touchstones	891,071	674,291	151,943
School / Class Common	968,084	676,902	290,323
TOTAL	**2,029,924**	**1,487,719**	**779,366**

CHART 2. Teacher test administrations

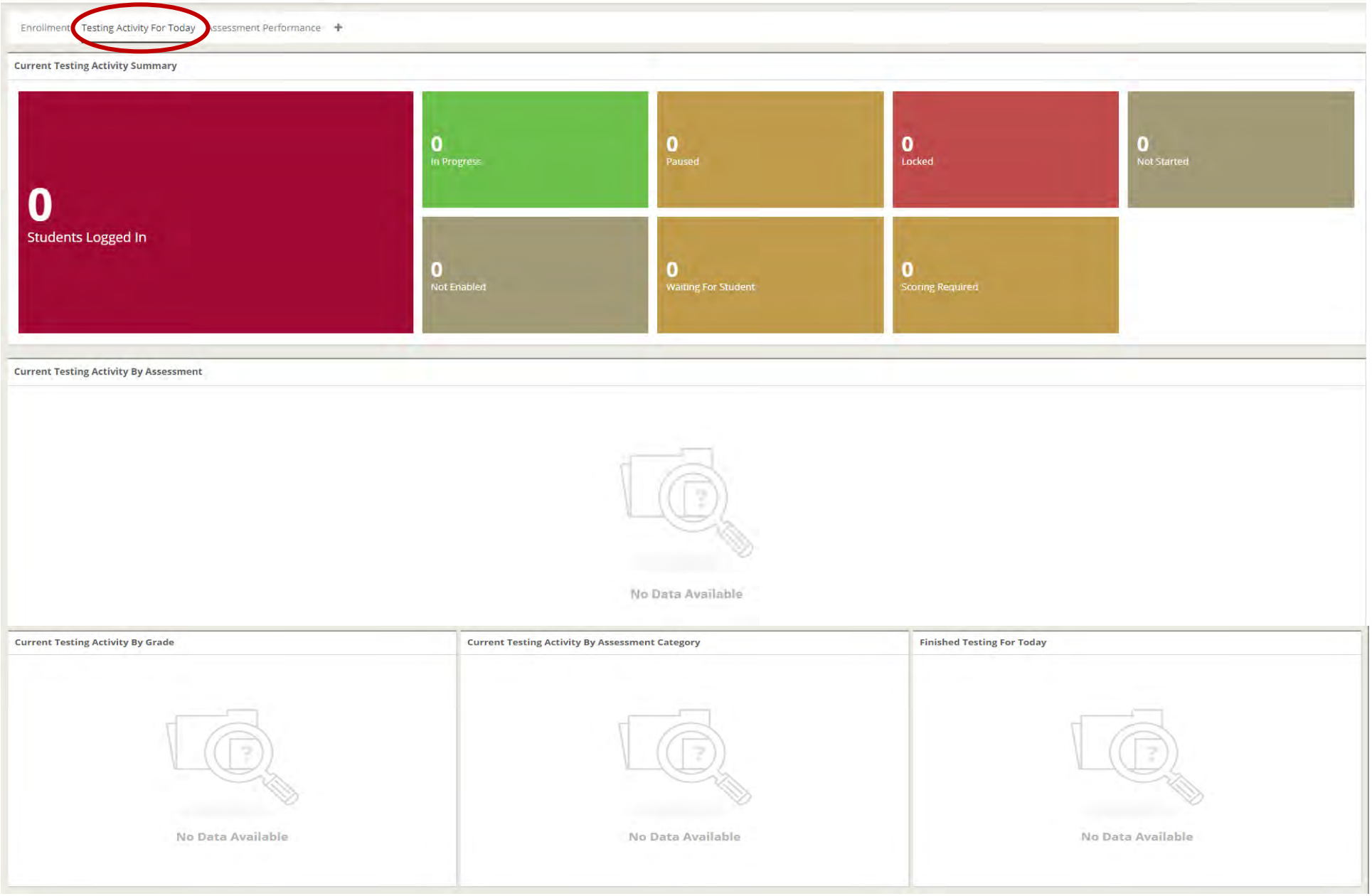
Type	2017-2018	2016-2017	2015-2016
Elementary School	50,979	45,493	26,787
Middle School	49,926	36,325	13,420
High School	22.932	12,641	15,499
TOTAL	**123,837**	**94,459**	**55,706**

Teacher Dashboard

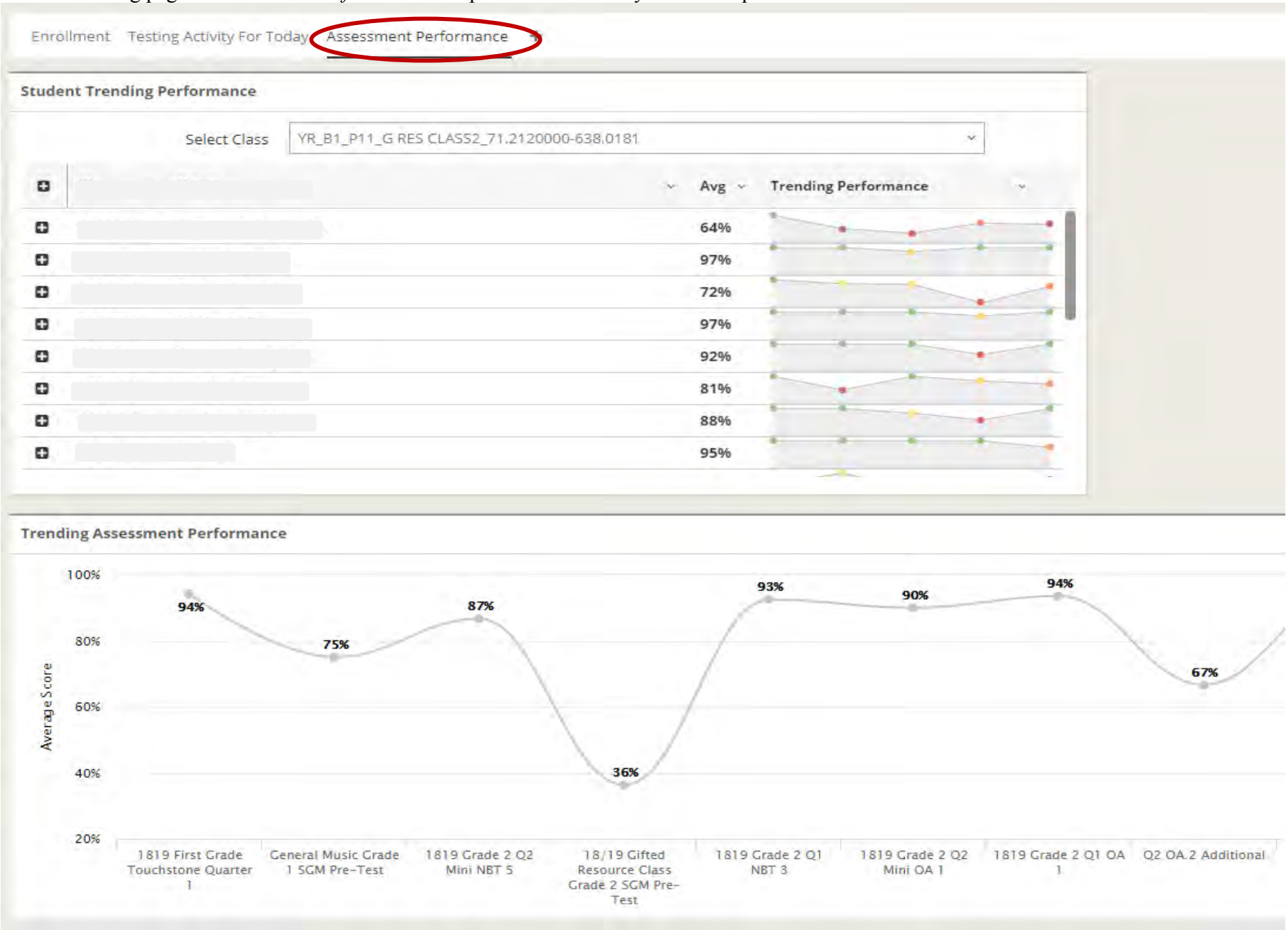
Teacher landing page (the page a teacher sees when he/she logs in – this page is fully customizable by the teacher) – *Enrollment* tab: provides a summary of the student composition assigned to the teachers' classes



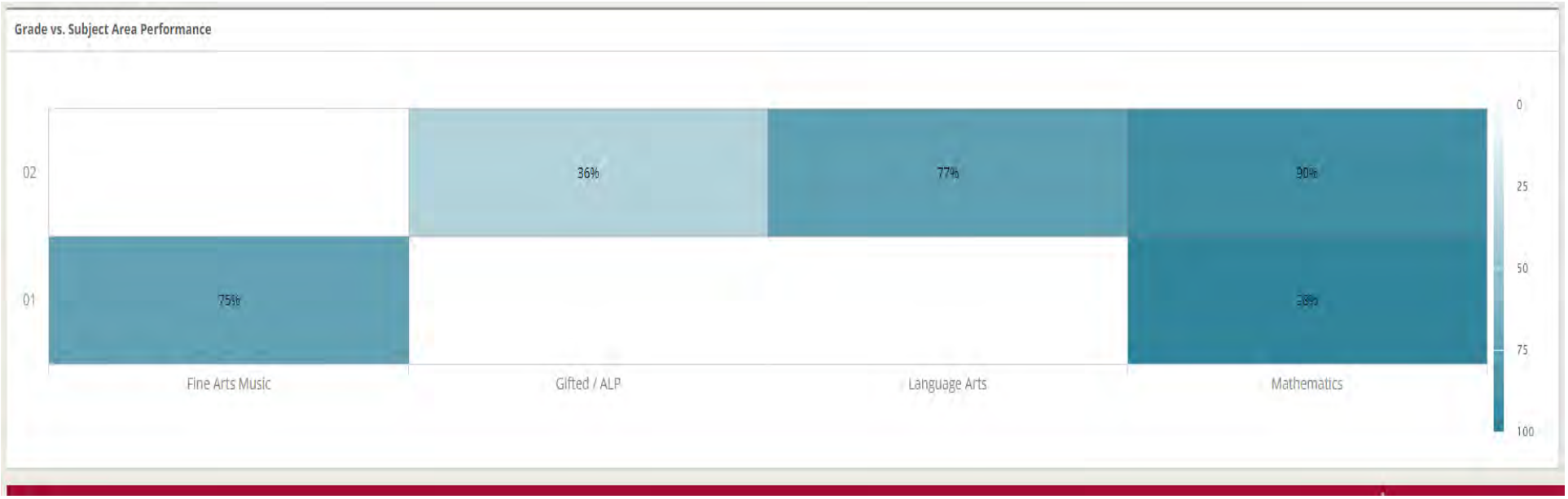
Teacher landing page – *Testing Activity For Today* tab: provides the teacher with a summary of testing activity in his/her classes for the current date



Teacher landing page – *Assessment Performance* tab: provides a summary of student performance on selected assessments

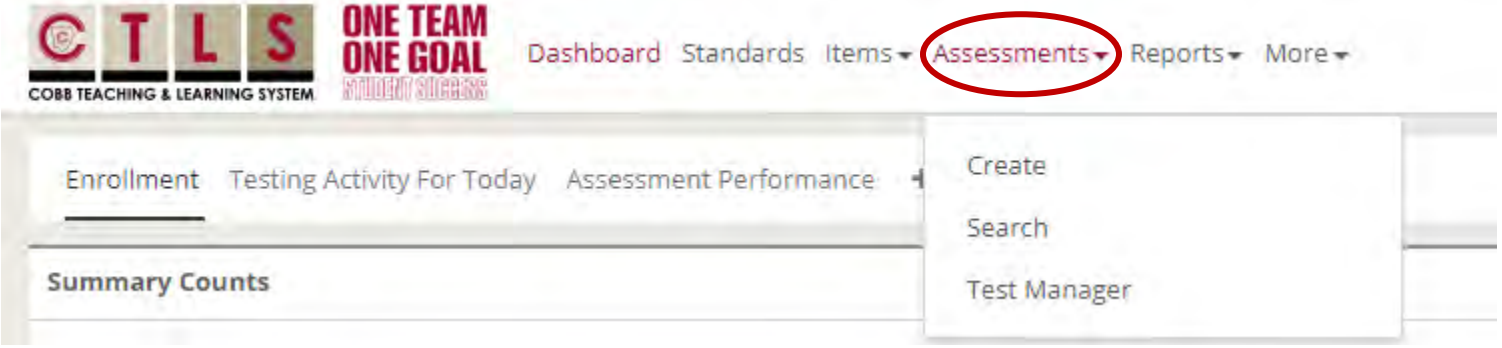


Grade vs. Subject Area Performance: provides summary performance data regarding each class/grade a teacher is assigned to, along with content area breakdown

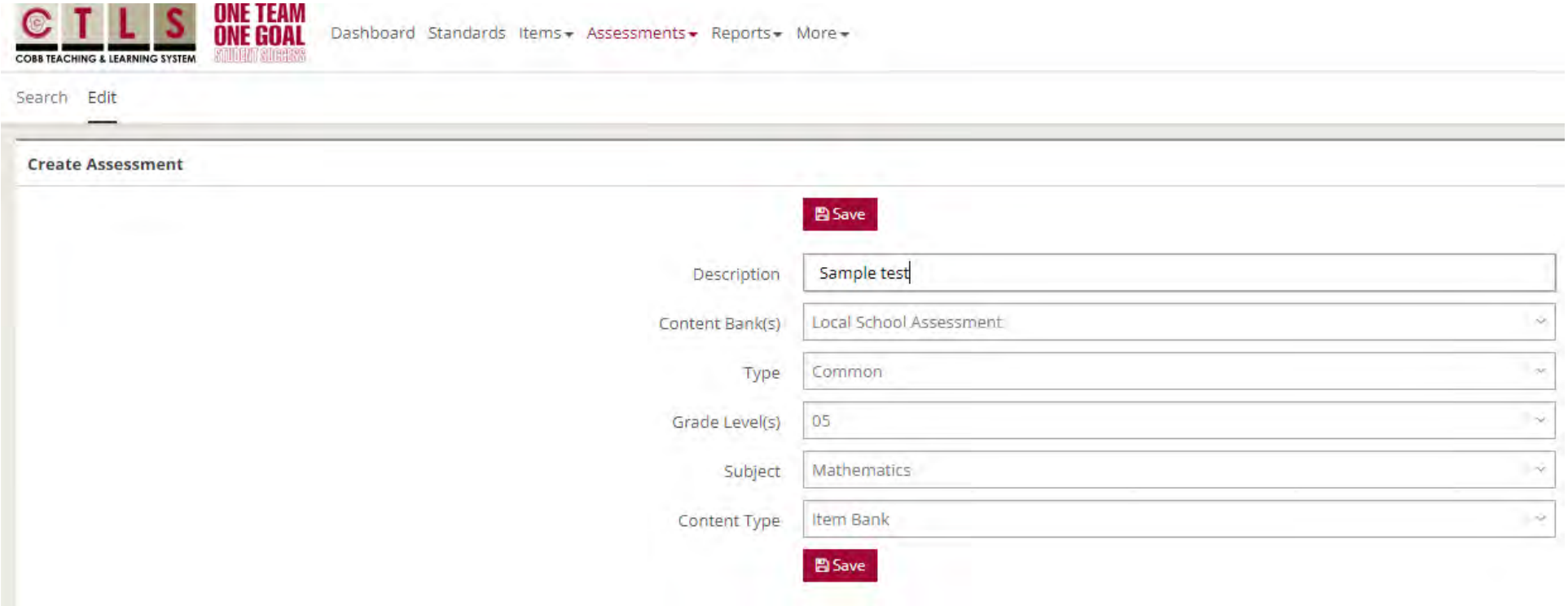


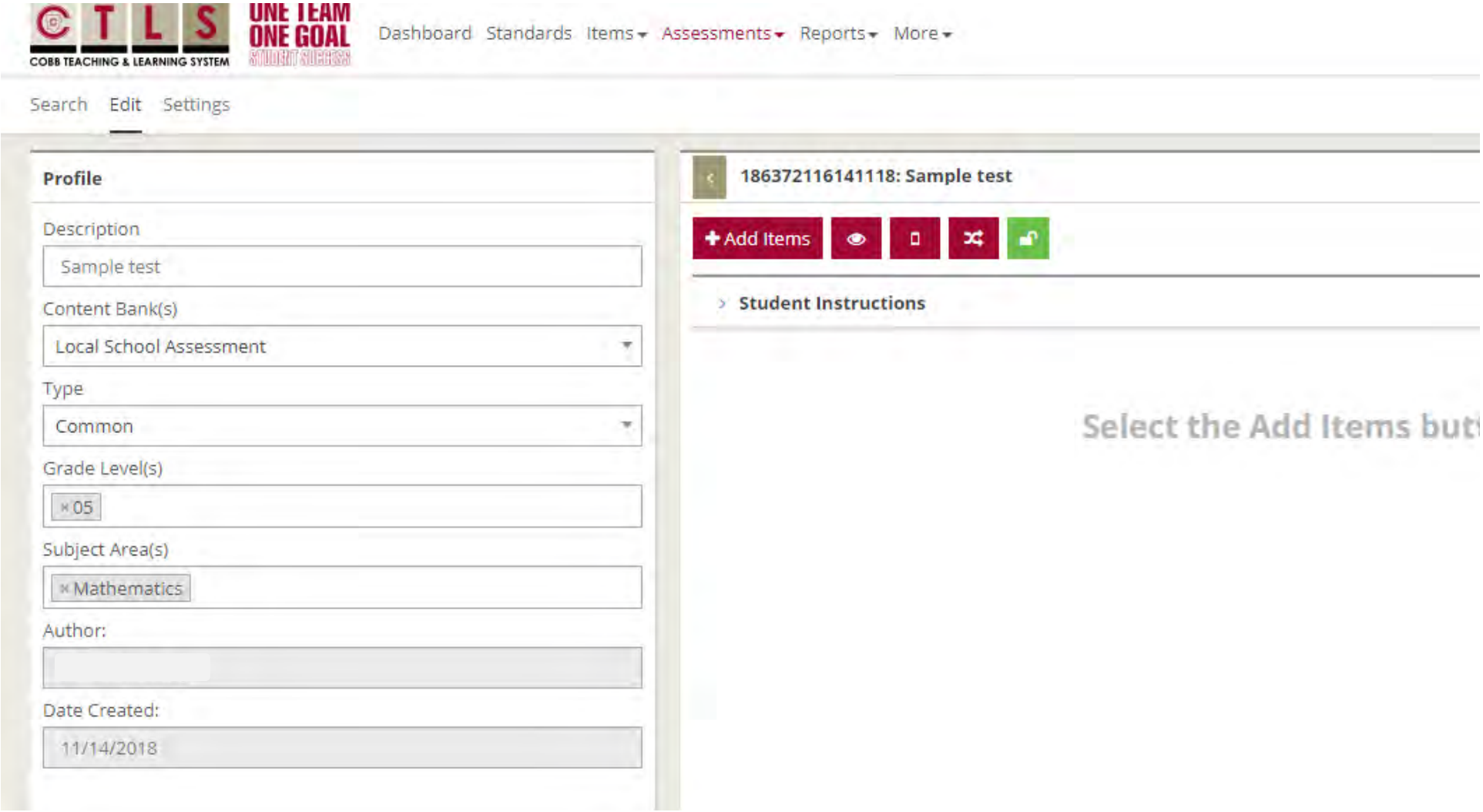
<u>Assessment Development</u>

Assessments can be developed with a minimal number of clicks (click *Assessments* and then *Create*).

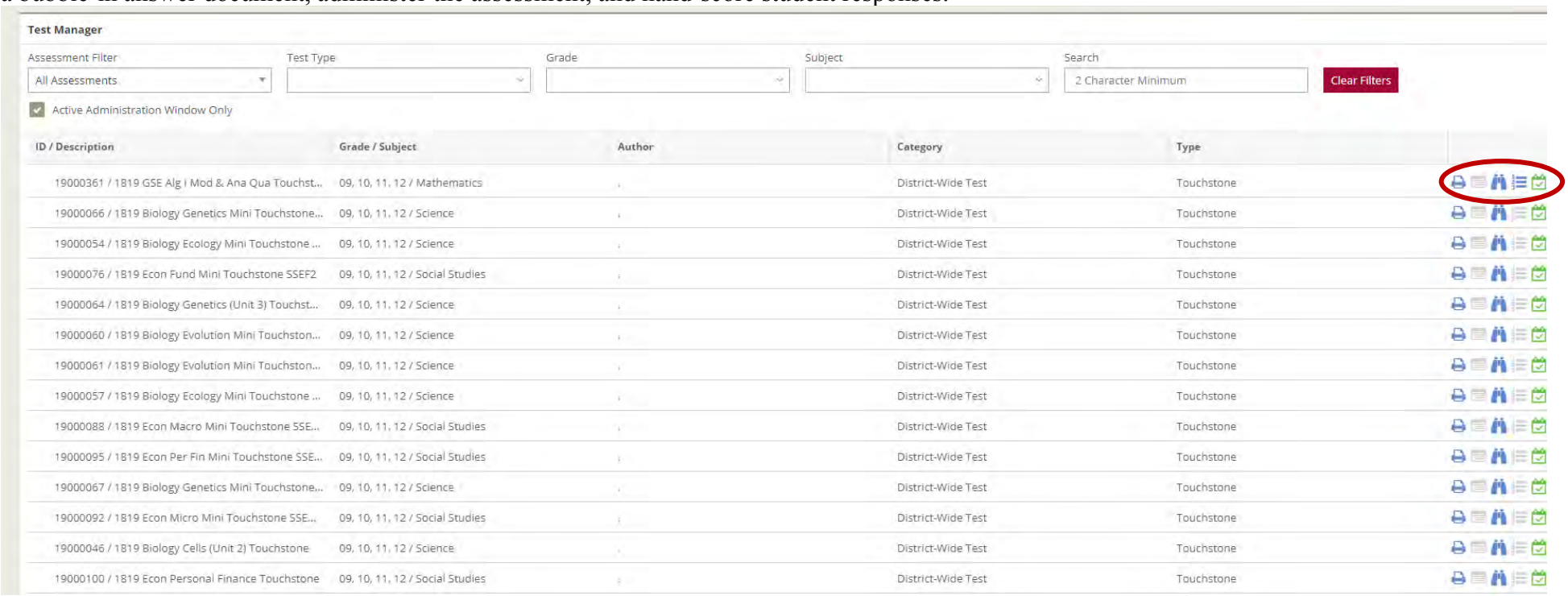


Teachers create a custom description for their test; one or multiple content banks can be accessed from which items are selected by the teacher.

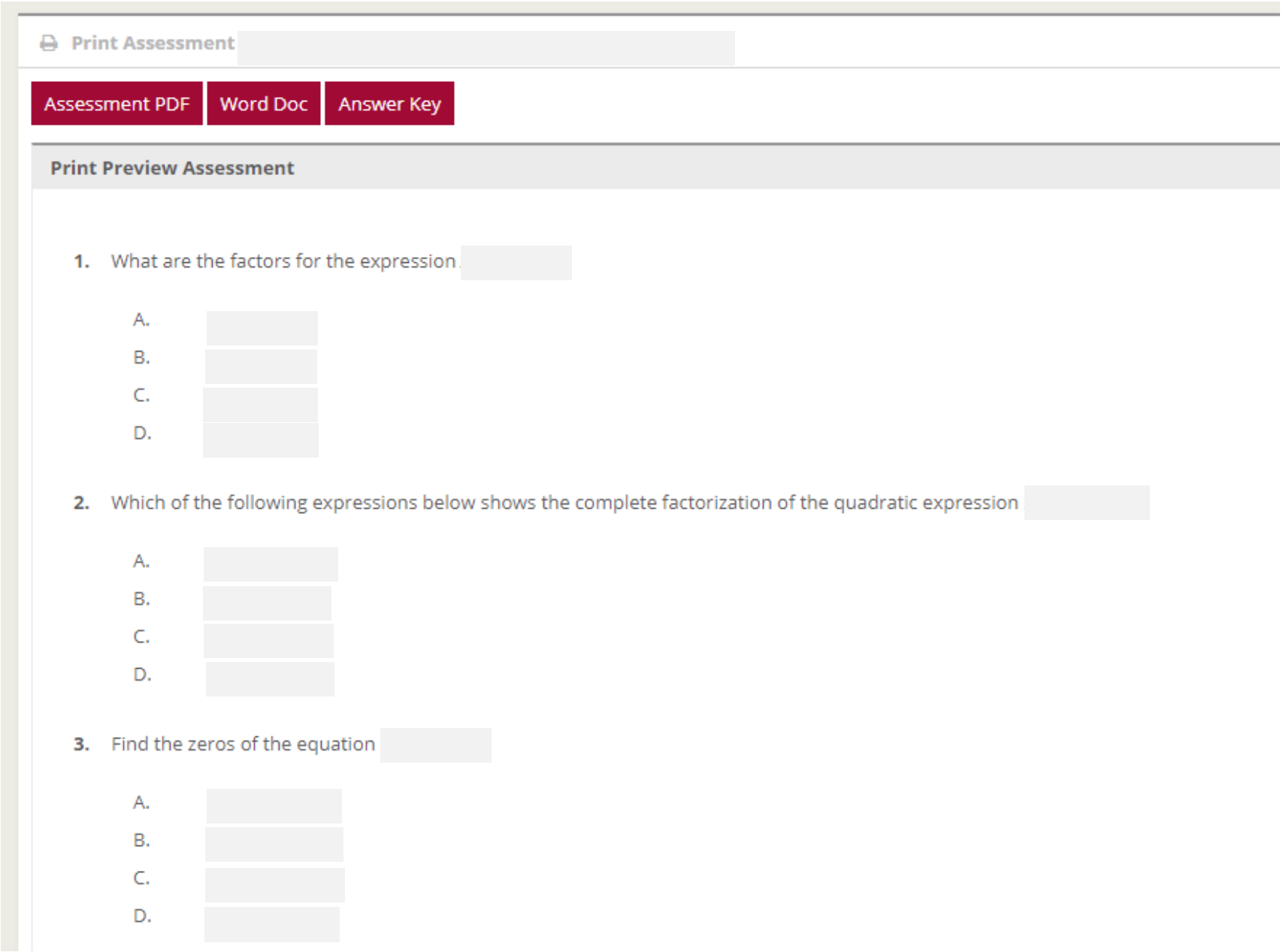



CTLS
COBB TEACHING & LEARNING SYSTEM
ONE TEAM
ONE GOAL
STUDENT SUCCESS
Dashboard
Standards
Items
Assessments
Reports
More
Search
Edit
Settings
Profile
Description
Sample test
Content Bank(s)
Local School Assessment
Type
Common
Grade Level(s)
× 05
Subject Area(s)
× Mathematics
Author:
Date Created:
11/14/2018
186372116141118: Sample test
Add Items
Student Instructions
Select the Add Items but

Once an assessment has been finalized, teachers may preview and print the assessment, schedule the assessment administration window, print a bubble-in answer document, administer the assessment, and hand-score student responses.



The assessment print option allows the assessment to be previewed, printed as a PDF or Word document, and access to the answer key.



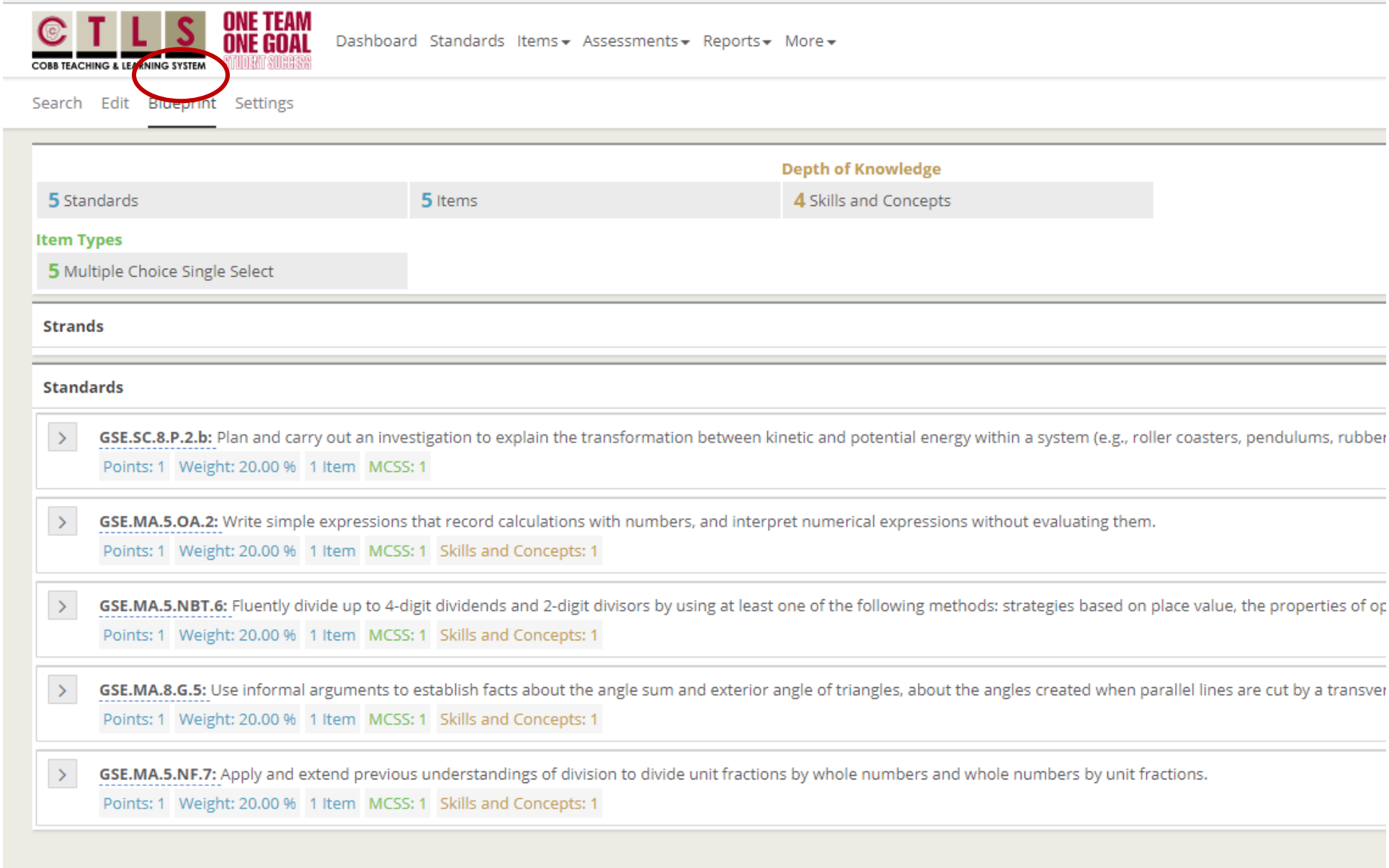
Selecting Answer Key provides an extensive answer key document that includes item ID, standard alignment, item type, and correct answer.

CTLS COBB TEACHING & LEARNING SYSTEM ONE TEAM ONE GOAL STUDENT SUCCESS

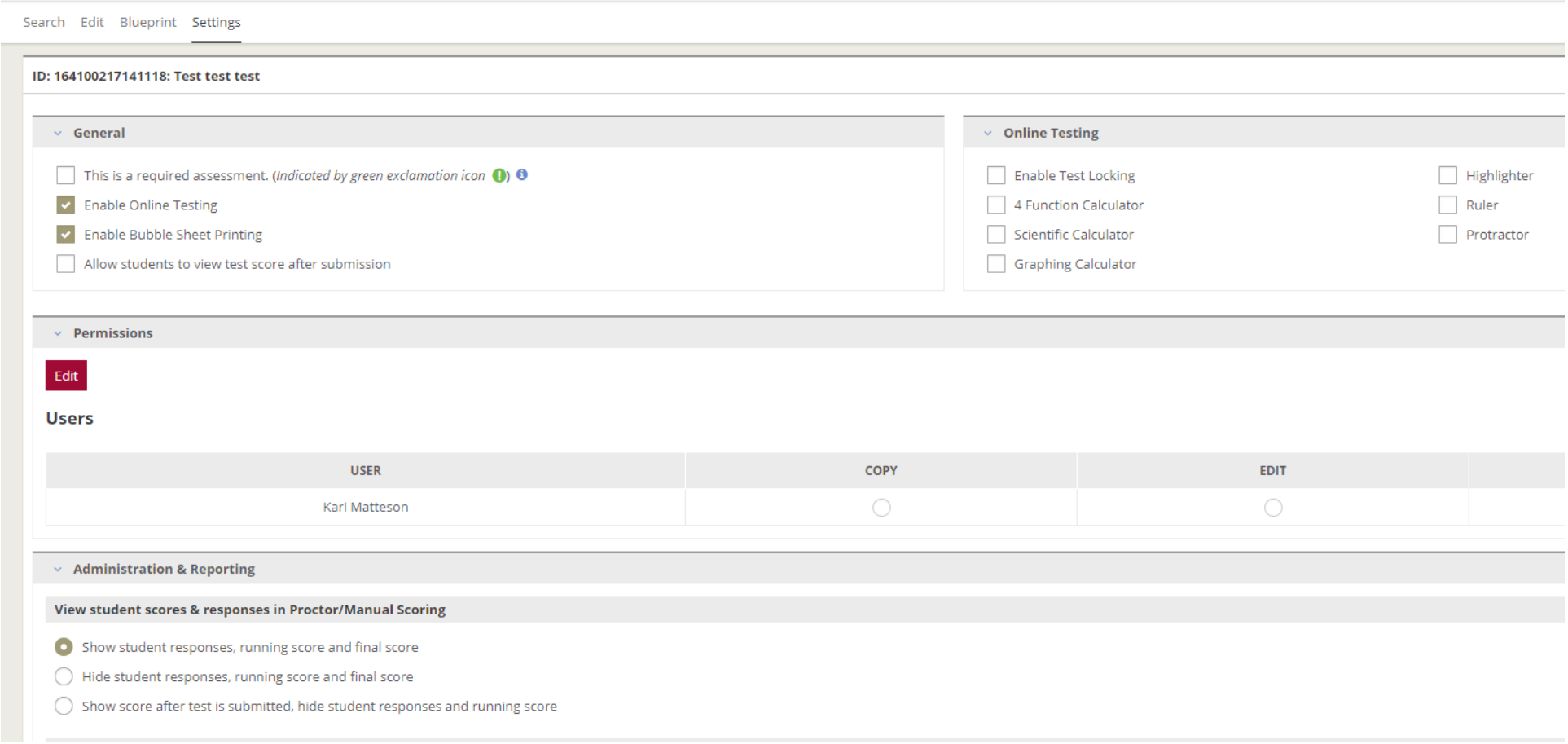
District:
Assessment: Touchstone
Description: 1819 GSE Alg I Mod & Ana Qua Touchstone

Item #	Item ID	Standard	Interaction Type	Correct Answer
1		GSE.MA.9-12.A-SSE.2	Multiple Choice Single Select	C
2		GSE.MA.9-12.A-SSE.2	Multiple Choice Single Select	C
3		GSE.MA.9-12.A-SSE.3a	Multiple Choice Single Select	B
4		GSE.MA.9-12.A-REI.4b	Multiple Choice Single Select	B
5		GSE.MA.9-12.A-REI.4b	Multiple Choice Single Select	C
6		GSE.MA.9-12.A-REI.4b	Multiple Choice Single Select	D
7		GSE.MA.9-12.A-REI.4b	Multiple Choice Single Select	C

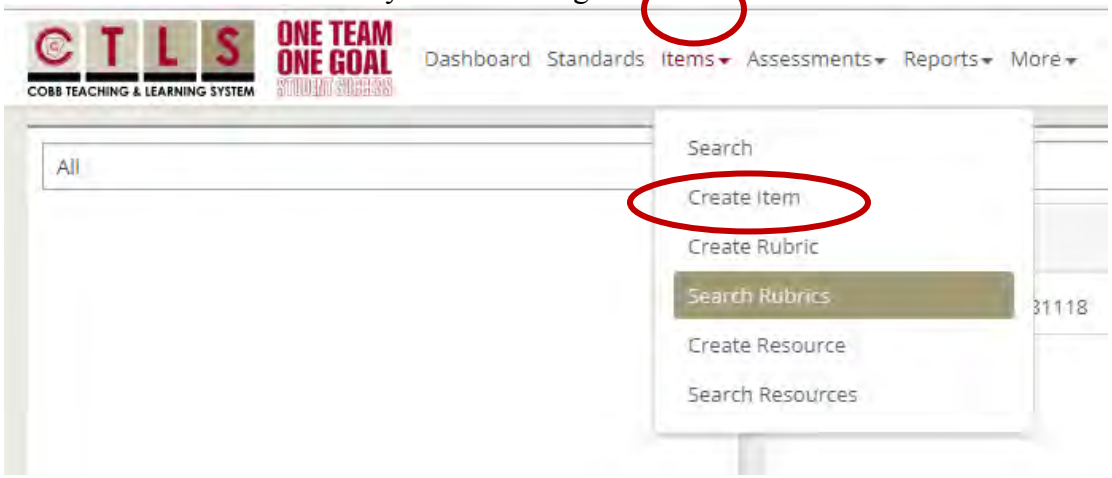
A blueprint for each finalized assessment is available – the blueprint includes an assessment summary (top) and a breakdown of standards assessed, number of items per standard, point assignment and item weight, along with DOK level.

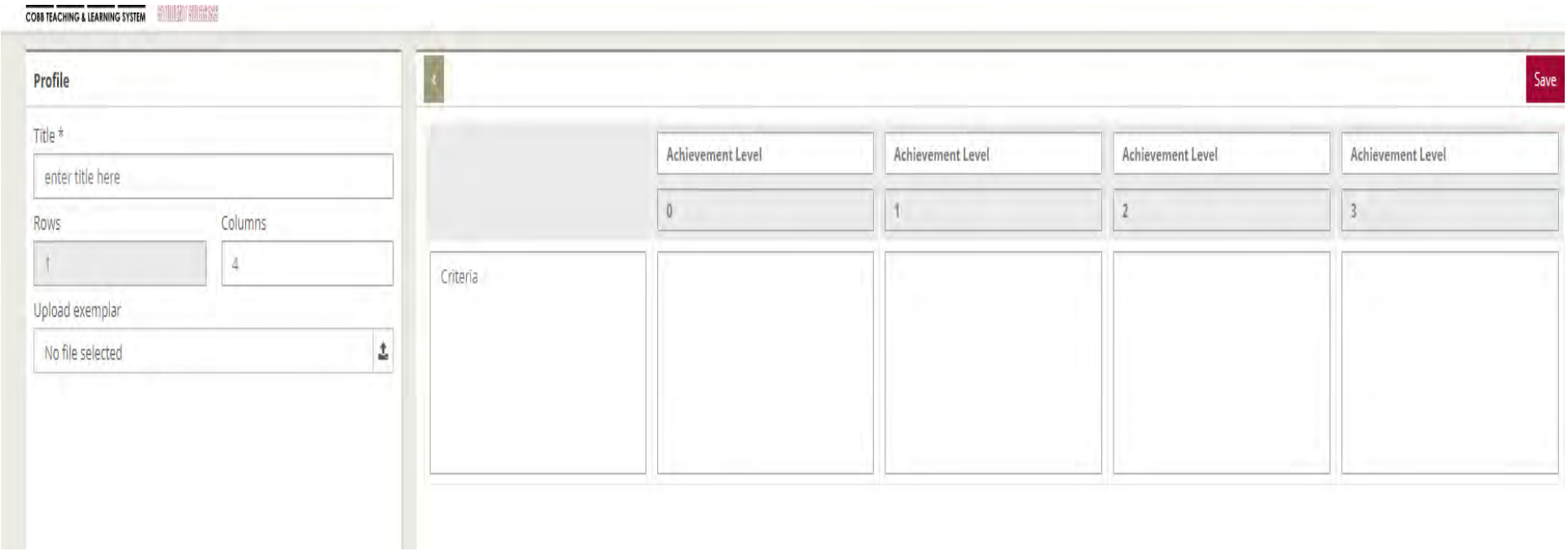


Assessment administration parameters are set using the Settings feature, including administration format, online testing tools, and scoring options.



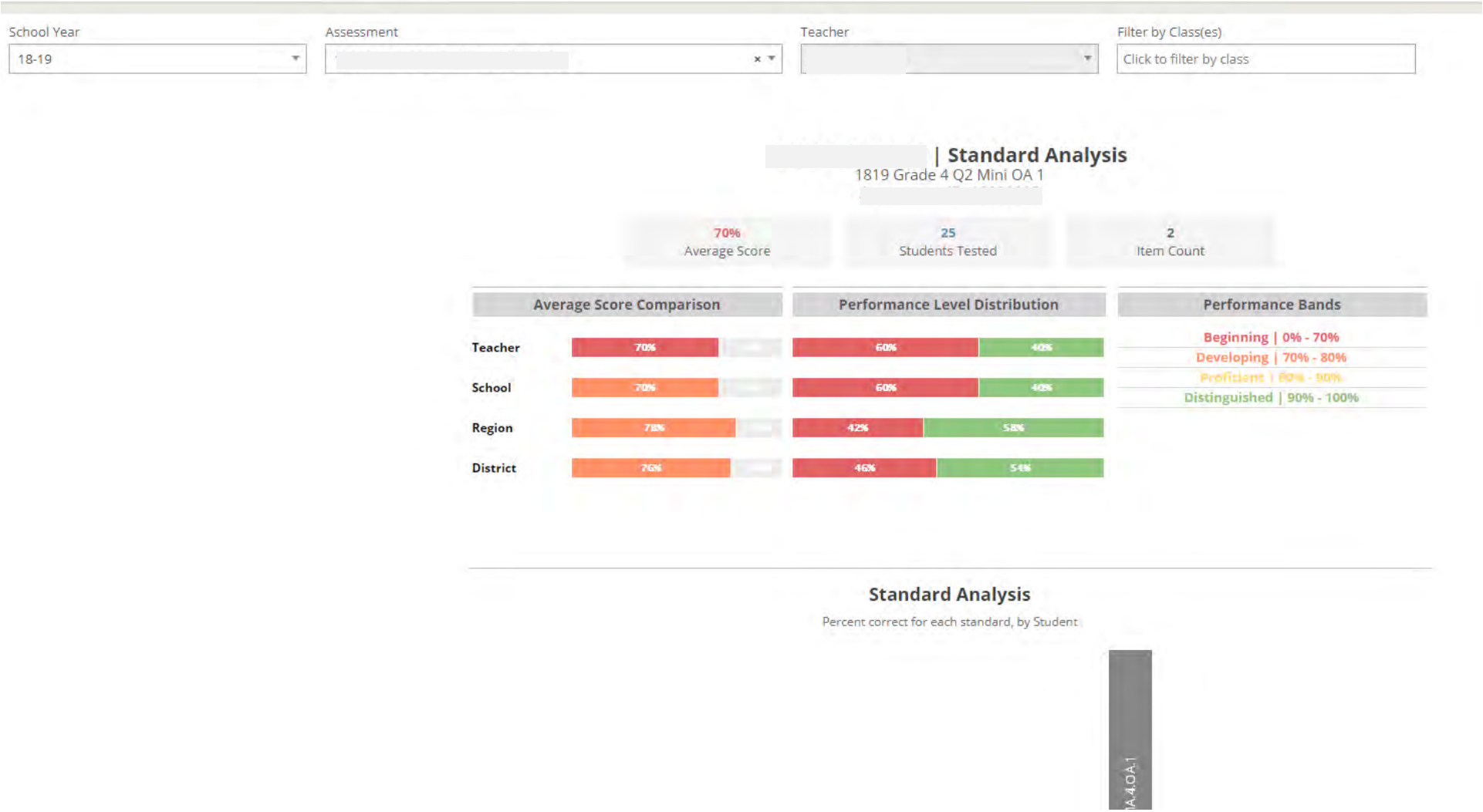
Teachers have much flexibility when creating rubrics – achievement levels and criteria can be customized, and exemplars can be uploaded.





Data Analysis Features

Standard Analysis (teacher level)



Standard Analysis

Percent correct for each standard, by Student

	GSE.MA.4.OA.1
Item Count	2
Percent Correct By Standard	70%
	50%
	50%
	50%
	50%
	100
	100
	100
	100
	50%
	50%
	100
	100

Item Analysis

70%	25	2
Average Score	Students Tested	Item Count

Average Score Comparison

Teacher	70%
School	70%
Region	78%
District	76%

Performance Level Distribution

Teacher	60%	40%
School	60%	40%
Region	42%	58%
District	46%	54%

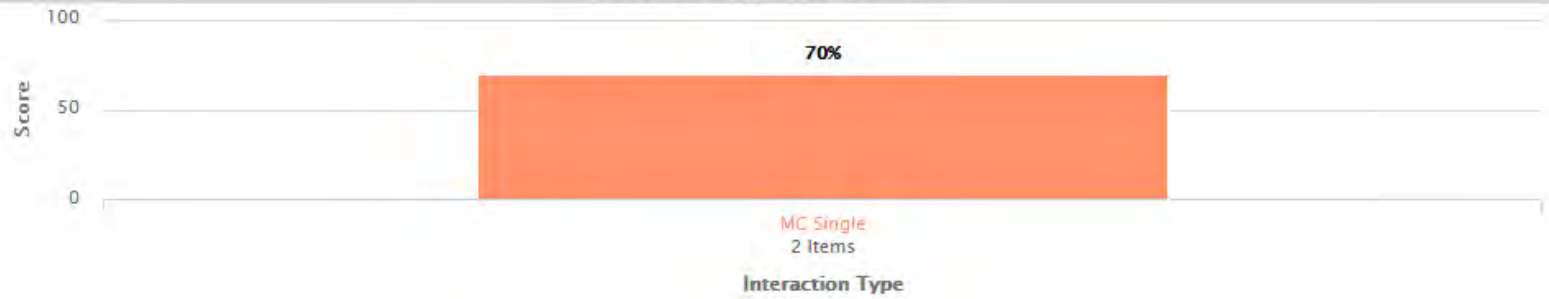
Performance Bands

Beginning | 0% - 70%
Developing | 70% - 80%
Proficient | 80% - 90%
Distinguished | 90% - 100%

Item Performance

Item #	Type	Standard	Average Score
1	MC Single	GSE.MA.4.OA.1	100%
2	MC Single	GSE.MA.4.OA.1	40%

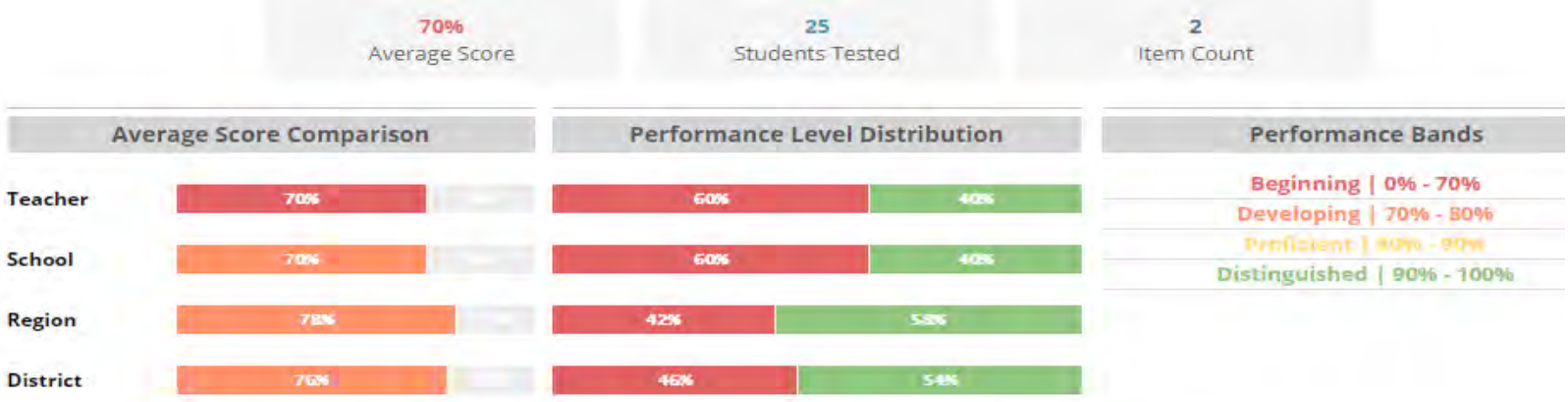
Interaction Type Performance



DOK Performance

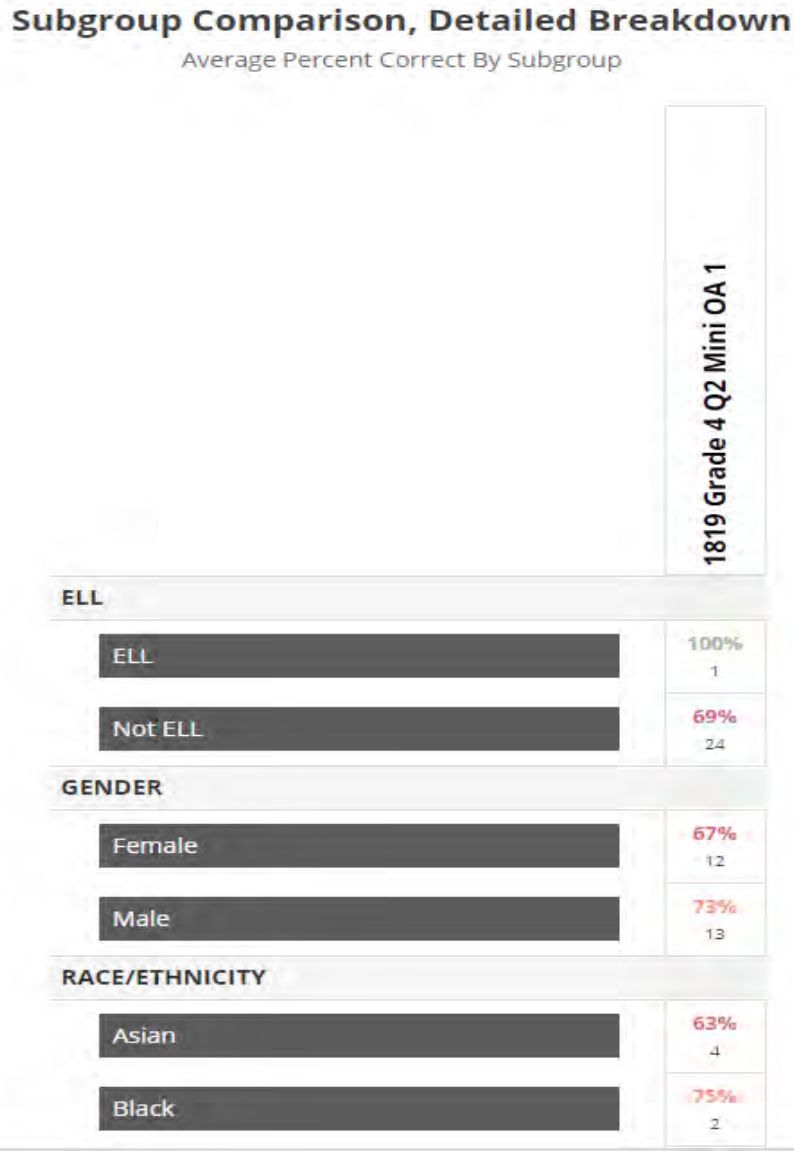
RBT Performance

Distractor Analysis (teacher level)

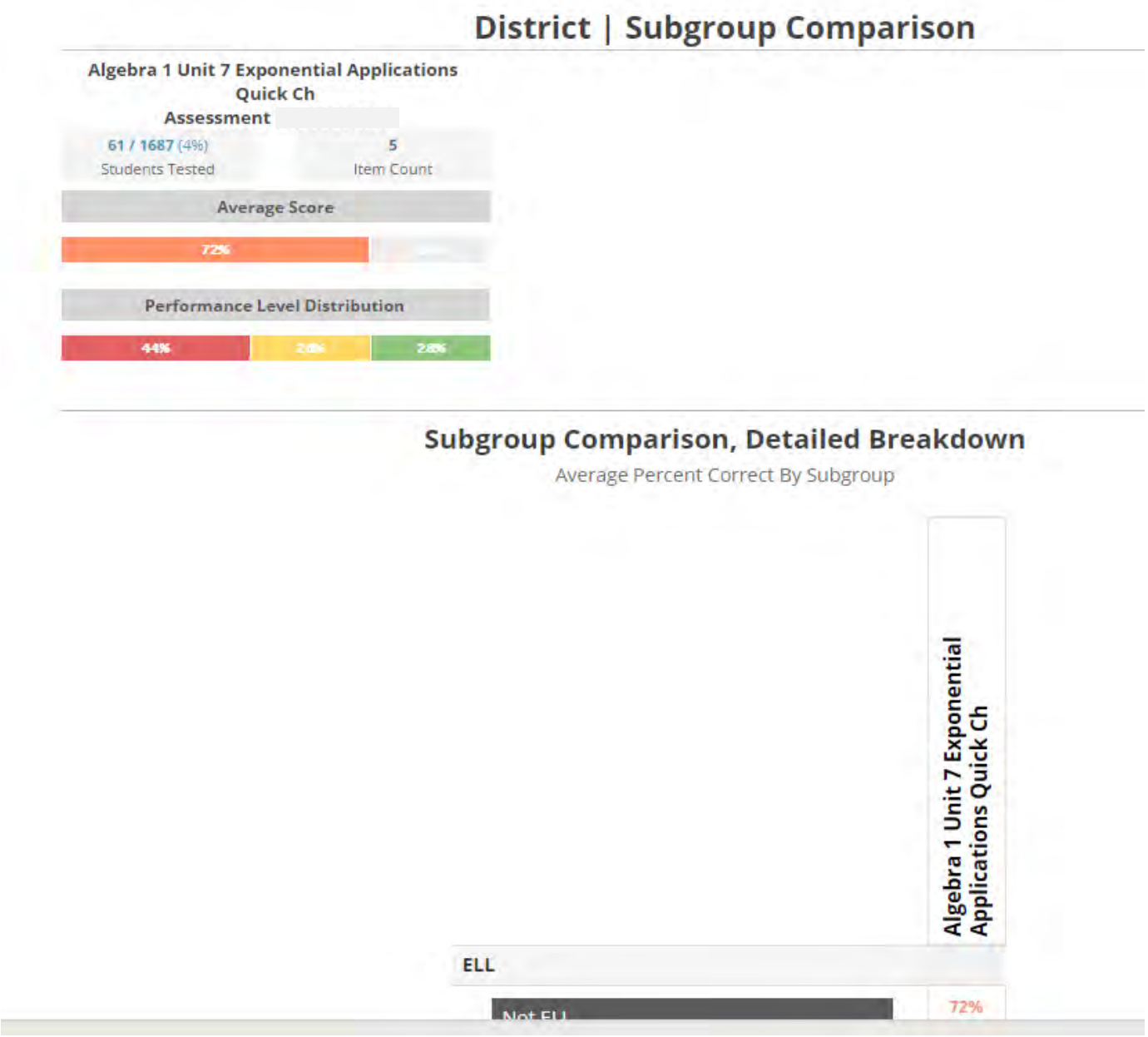


	Overall Percent Correct	GSE.MA.4.OA.1	GSE.MA.4.OA.1
		1	2
Item Level Percent Correct	70%	100%	40%
	100%	D	A
	100%	D	A
	50%	D	C
	50%	D	D

Subgroup Comparison (teacher level)



Subgroup comparison (School level and district level)



Assessment Strand (region level and district level)

District | Assessment Strands Analysis

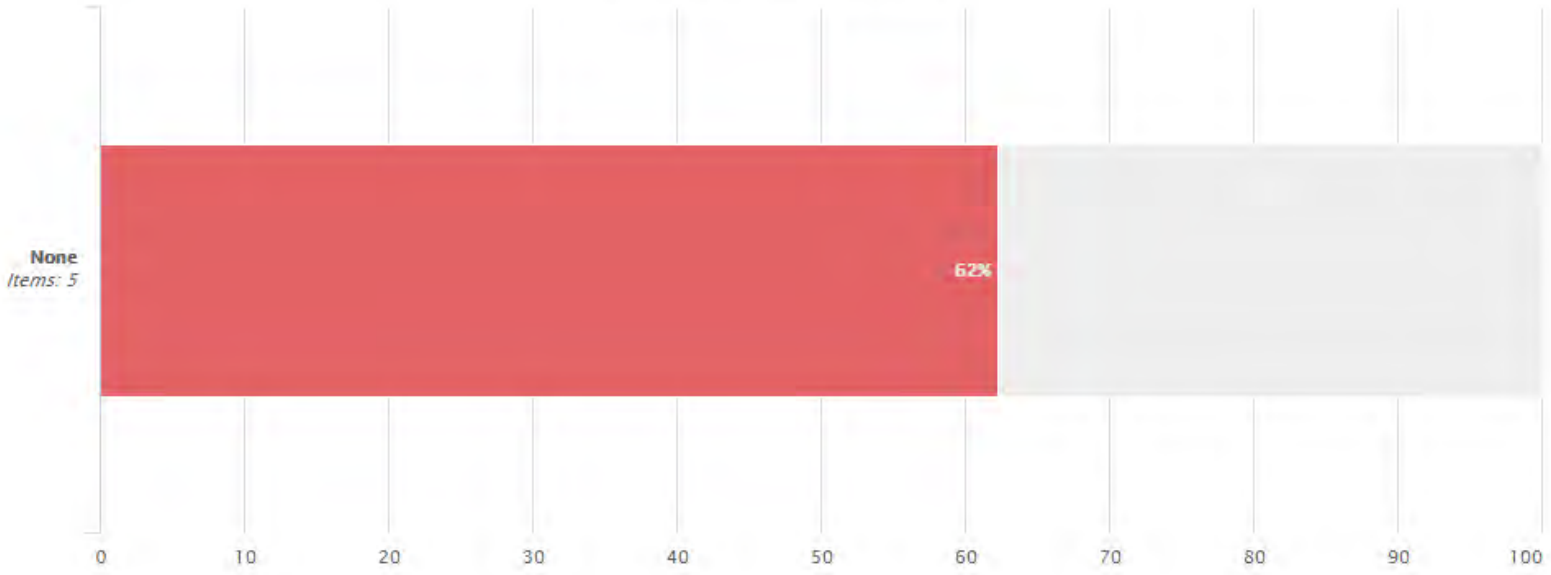
Geometry Unit 6 Quick Check
Assessment

73%	81 / 1686 (5%)	5
Average Score	Students Tested	Item Count

	Average Score	Performance Level Distribution			Performance Bands
District	73%	38%	43%	19%	Beginning | 0% - 70% Developing | 70% - 80% Proficient | 80% - 90% Distinguished | 90% - 100%

Assessment Strands Analysis

Percent correct by Assessment Strands



Assessment Strands Analysis, Detailed Breakdown

Breakdown by School

Assessment Summary (Student report)

Score Comparison

Class	70%
Teacher	70%
School	70%
Region	78%
District	76%

Performance Bands

- Beginning | 0% - 70%
- Developing | 70% - 80%
- Proficient | 80% - 90%
- Distinguished | 90% - 100%

Standard Performance

Standard Code	Standard Text	Item Count	Score
GSE.MA.4.OA.1	Understand that a multiplicative comparison is a situation in which one quantity is multiplied by a specified number to get another quantity.	2	50%

Item Performance

Item #	Type	Standard	DOK	RBT	Score
1	MC Single	GSE.MA.4.OA.1	Recall and		Correct
2	MC Single	GSE.MA.4.OA.1	Skills and Concepts		Incorrect

Interaction Performance

60

Georgia
Standards of Excellence
Curriculum Map

Mathematics

GSE Grade 7

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Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

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GSE Grade 7 Curriculum Map

1st Semester			2nd Semester			
Unit 1 *(4 – 5 weeks)*	**Unit 2** *(4 – 5 weeks)*	**Unit 3** *(4 – 5 weeks)*	**Unit 4** *(4 – 5 weeks)*	**Unit 5** *(4 – 5 weeks)*	**Unit 6** *(3 – 4 weeks)*	**Unit 7** *(3 – 4 weeks)*
Operations with Rational Numbers	**Expressions and Equations**	**Ratios and Proportional Relationships**	**Geometry**	**Inferences**	**Probability**	**Show What We Know**
MGSE7.NS.1 MGSE7.NS.1a MGSE7.NS.1b MGSE7.NS.1c MGSE7.NS.1d MGSE7.NS.2 MGSE7.NS.2a MGSE7.NS.2b MGSE7.NS.2c MGSE7.NS.2d MGSE7.NS.3	MGSE7.EE.1 MGSE7.EE.2 MGSE7.EE.3 MGSE7.EE.4 MGSE7.EE.4a MGSE7.EE.4b MGSE7.EE.4c	MGSE7.RP.1 MGSE7.RP.2 MGSE7.RP.2a MGSE7.RP.2b MGSE7.RP.2c MGSE7.RP.2d MGSE7.RP.3 MGSE7.G.1	MGSE7.G.2 MGSE7.G.3 MGSE7.G.4 MGSE7.G.5 MGSE7.G.6	MGSE7.SP.1 MGSE7.SP.2 MGSE7.SP.3 MGSE7.SP.4	MGSE7.SP.5 MGSE7.SP.6 MGSE7.SP7 MGSE7.SP.7a MGSE7.SP.7b MGSE7.SP.8 MGSE7.SP.8a MGSE7.SP.8b MGSE7.SP.8c	ALL

These units were written to build upon concepts from prior units, so later units contain tasks that depend upon the concepts addressed in earlier units.
All units will include the Mathematical Practices and indicate skills to maintain.

NOTE: Mathematical standards are interwoven and should be addressed throughout the year in as many different units and tasks as possible in order to stress the natural connections that exist among mathematical topics.

Grades 6-8 Key:
NS = The Number System
RP = Ratios and Proportional Relationships
EE = Expressions and Equations
G = Geometry
SP = Statistics and Probability.

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Georgia Standards of Excellence Grade 7 Mathematics
Curriculum Map Rationale

Unit 1: Building upon the understanding of rational numbers developed in 6th grade, this unit moves to exploring and ultimately formalizing rules for operations (addition, subtraction, multiplication and division) with integers. Using both contextual and numerical problems, students explore what happens when negative numbers and positive numbers are combined. Repeated opportunities over time will allow students to compare the results of adding, subtracting, multiplying and dividing pairs of numbers, leading to the generalization of rules. Fractional rational numbers and whole numbers should be used in computations and explorations.

Unit 2: Students build on what was learned in previous grades regarding mathematical properties such as commutative, associative, and distributive properties, and conventions, such as order of operations. Students use these conventions and properties of operations to rewrite equivalent numerical expressions. Students continue to use properties used with whole numbers, extending their use to integers, rational, and real numbers. Students write expressions and equations in more than one format, demonstrating that they are still equal. Variables are used to represent quantities in real-world problems.

Unit 3: This unit builds on student knowledge and understanding of rate and unit concepts, including the need to develop proportional relationships through the analysis of graphs, tables, equations, and diagrams. Grade 7 pushes the student to develop a deep understanding of the characteristics of a proportional relationship. Mathematics should be represented in as many ways as possible in this unit by using graphs, tables, pictures, symbols and words.

Unit 4: Students learn to draw geometric figures using rulers and protractors with an emphasis on triangles. Students explore two-dimensional cross-sections of cylinders, cones, pyramids, and prisms. Students write and solve equations involving angle relationships and solve problems that require determining the area, volume, and surface area of solid figures. This unit also introduces students to the formula for the circumference and area of a circle.

Unit 5: Building on the knowledge of statistics from sixth grade, students use random samples to make predictions about an entire population and judge the possible discrepancies of the predictions. Students use real-life situations from science and social studies to show the purpose for using random sampling to make inferences about a population. Note- Units 5 and 6 were combined in the revised curriculum map providing an uninterrupted exploration of statistics.

Unit 6: Students begin to understand the probability of chance (simple and compound). They develop models to find the probability of simple events, and make predictions using information from simulations.

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GSE Grade 7 Expanded Curriculum Map – 1st Semester

Standards for Mathematical Practice

1 Make sense of problems and persevere in solving them. **2** Reason abstractly and quantitatively. **3** Construct viable arguments and critique the reasoning of others. **4** Model with mathematics.	**5** Use appropriate tools strategically. **6** Attend to precision. **7** Look for and make use of structure. **8** Look for and express regularity in repeated reasoning.

Unit 1	Unit 2	Unit 3
Operations with Rational Numbers	**Expressions & Equations**	**Ratios and Proportional Relationships**
<u>Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.</u> **MGSE7.NS.1** Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. **MGSE7.NS.1a** Show that a number and its opposite have a sum of 0 (are additive inverses). Describe situations in which opposite quantities combine to make 0. *For example, your bank account balance is -$25.00. You deposit $25.00 into your account. The net balance is $0.00.* **MGSE7.NS.1b** Understand p + q as the number located a distance from p, in the positive or negative direction depending on whether q is positive or negative. Interpret sums of rational numbers by describing real world contexts. **MGSE7.NS.1c** Understand subtraction of rational numbers as adding the additive inverse, p – q = p + (– q). Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts. **MGSE7.NS.1d** Apply properties of operations as strategies to add and subtract rational numbers. **MGSE7.NS.2** Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. **MGSE7.NS.2a** Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as (-1)(-1) = 1 and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts. **MGSE7.NS.2b** Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers then – (p/q) = (– p)/q = p/(–q). Interpret	**<u>Use properties of operations to generate equivalent expressions.</u>** **MGSE7.EE.1** Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients. **MGSE7.EE.2** Understand that rewriting an expression in different forms in a problem context can clarify the problem and how the quantities in it are related. *For example a + 0.05a = 1.05a means that adding a 5% tax to a total is the same as multiplying the total by 1.05.* **<u>Solve real-life and mathematical problems using numerical and algebraic expressions and equations.</u>** **MGSE7.EE.3** Solve multistep real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals) by applying properties of operations as strategies to calculate with numbers, converting between forms as appropriate, and assessing the reasonableness of answers using mental computation and estimation strategies. *For example:* • *If a woman making $25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or $2.50, for a new salary of $27.50.* • *If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.* **MGSE7.EE.4** Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. **MGSE7.EE.4a** Solve word problems leading to equations of the form px + q = r and p(x + q) = r, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic	**<u>Analyze proportional relationships and use them to solve real-world and mathematical problems.</u>** **MGSE7.RP.1** Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. *For example, if a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction (1/2)/(1/4) miles per hour, equivalently 2 miles per hour.* **MGSE7.RP.2** Recognize and represent proportional relationships between quantities. **MGSE7.RP.2a** Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. **MGSE7.RP.2b** Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. **MGSE7.RP.2c** Represent proportional relationships by equations. **MGSE7.RP.2d** Explain what a point (*x*, *y*) on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0, 0) and (*1*,*r*) where r is the unit rate. **MGSE7.RP.3** Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, and fees. **<u>Draw, construct, and describe geometrical figures and describe the relationships between them.</u>** **MGSE7.G.1** Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.

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quotients of rational numbers by describing real-world contexts. **MGSE7.NS.2c** Apply properties of operations as strategies to multiply and divide rational numbers. **MGSE7.NS.2d** Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats. **MGSE7.NS.3** Solve real-world and mathematical problems involving the four operations with rational numbers.	solution, identifying the sequence of the operations used in each approach. *For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?* **MGSE7.EE.4b** Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. *For example, as a salesperson, you are paid $50 per week plus $3 per sale. This week you want your pay to be at least $100. Write an inequality for the number of sales you need to make, and describe the solutions.* **MGSE7.EE.4c** Solve real-world and mathematical problems by writing and solving equations of the form x+p = q and px = q in which p and q are rational numbers.	

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GSE Grade 7 Expanded Curriculum Map – 2nd Semester

Standards for Mathematical Practice

1 Make sense of problems and persevere in solving them.
2 Reason abstractly and quantitatively.
3 Construct viable arguments and critique the reasoning of others.
4 Model with mathematics.
5 Use appropriate tools strategically.
6 Attend to precision.
7 Look for and make use of structure.
8 Look for and express regularity in repeated reasoning.

Unit 4	Unit 5	Unit 6	Unit 7
Geometry	**Inferences**	**Probability**	**Show What We Know**
Draw, construct, and describe geometrical figures and describe the relationships between them. **MGSE7.G.2** Explore various geometric shapes with given conditions. Focus on creating triangles from three measures of angles and/or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle. **MGSE7.G.3** Describe the two-dimensional figures (cross sections) that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms, right rectangular pyramids, cones, cylinders, and spheres. **Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.** **MGSE7.G.4** Given the formulas for the area and circumference of a circle, use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle. **MGSE7.G.5** Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure. **MGSE7.G.6** Solve real-world and mathematical problems involving area, volume and surface area of two- and three dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.-	**Use random sampling to draw inferences about a population.** **MGSE7.SP.1** Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences. **MGSE7.SP.2** Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions **Draw informal comparative inferences about two populations.** **MGSE7.SP.3** Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the medians by expressing it as a multiple of the interquartile range. **MGSE7.SP.4** Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations.	**Investigate chance processes and develop, use, and evaluate probability models.** **MGSE7.SP.5** Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. **MGSE7.SP.6** Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency. Predict the approximate relative frequency given the probability. *For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.* **MGSE7.SP.7** Develop a probability model and use it to find probabilities of events. Compare experimental and theoretical probabilities of events. If the probabilities are not close, explain possible sources of the discrepancy. **MGSE7.SP.7a** Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events **MGSE7.SP.7b** Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. *For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land*	**ALL**

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		open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies? **MGSE7.SP.8** Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. **MGSE7.SP.8a** Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs. **MGSE7.SP.8b** Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., "rolling double sixes"), identify the outcomes in the sample space which compose the event. **MGSE7.SP.8c** Explain ways to set up a simulation and use the simulation to generate frequencies for compound events. For example, if 40% of donors have type A blood, create a simulation to predict the probability that it will take at least 4 donors to find one with type A blood.	

Accommodations Manual:

A Guide to Selecting, Administering, and Evaluating the Use of Test Administration Accommodations for Students with Disabilities

2018-2019

Georgia Department of Education

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INTRODUCTION

The Georgia Department of Education's *Accommodations Manual: A Guide to Selecting, Administering, and Evaluating the Use of Test Administration Accommodations for Students with Disabilities* presents a five-step process to guide the selection and use of accommodations. Individualized Educational Program (IEP) teams, Individual Accommodation Plan (IAP)/Section 504 plan committees, educators, and administrators will find this manual helpful as they consider the selection, administration, and evaluation of test administration accommodations for students with disabilities. Accommodations for English Learners (EL) are not addressed in this manual.

Accommodations are changes in the administration of an assessment in terms of how the student takes or responds to the assessment. Broad categories of accommodations include setting, scheduling, presentation, and response. Accommodations do not change the construct intended to be measured by the assessment or the meaning of the resulting scores. Accommodations are designed to provide equity, not advantage, and serve to level the playing field for students with disabilities. When used appropriately, they reduce or even eliminate the effects of a student's disability; they do not reduce learning expectations.

Importantly, accommodations provide equitable access during instruction and assessments for students with disabilities. Research consistently indicates there should always be a direct link between classroom instructional accommodations and assessment accommodations. Georgia policy mandates that any accommodation provided to a student must be the same for classroom instruction, classroom assessments, and state assessments. Accommodations must be specified in the student's IEP or IAP/504 Plan. No accommodations should be considered for the first time during a state assessment. Simply because a student needs an accommodation does not mean he/she will know how to use it. Students need training and practice in using accommodations. Informed decision making regarding accommodations is critical in ensuring successful and meaningful participation of students with disabilities in the assessment process.

IEP and IAP/504 teams should carefully consider what each assessment requires the student to do in order to take the test. Different tests serve different purposes and may measure content and skills through slightly different means; therefore, a specific accommodation may be allowed for one test, but not for another. IEP and IEP/504 teams should always consider the purpose of the assessment and consult Georgia's *Student Assessment Handbook*, published annually by the Georgia Department of Education (GaDOE), to determine if an accommodation is allowed for the assessment under consideration. Accommodations must be considered and discussed individually for each state assessment mandated for the student's grade level and may not be broadly assigned across all assessments. Only accommodations needed by the student, due to the disability, to access the assessment should be considered. Providing accommodations that are not required by the student to access the test may interfere with student performance and adversely impact student achievement as measured by the assessment.

The guidance in this manual pertains to students with disabilities who participate in Georgia's assessments and the instruction they receive. The five steps include the following:

1. Expect students with disabilities to achieve grade-level curriculum standards.
2. Learn about accommodations for instruction and assessment.
3. Select accommodations for instruction and assessment for individual students.
4. Administer accommodations during instruction and assessment.
5. Evaluate and improve accommodation use.

General Principles Guiding Georgia's Student Assessment Program

Participation of Students with Disabilities in Assessments

Georgia requires all students to participate in statewide assessment programs. For any grade where all students are assessed, students with disabilities must participate in the regular assessment or the Georgia Alternate Assessment (GAA 2.0). The GAA 2.0 is designed for students with the most significant cognitive disabilities, approximately one percent of all students enrolled in assessed grades. Questions regarding the GAA's role in accountability measures can be answered by the GaDOE Accountability Division. All students must be included to the fullest extent possible in all statewide assessments and have their assessment results included with Georgia's accountability system. The GaDOE participation requirement is supported by federal legislation requiring the participation of students with disabilities in standards-based instruction and assessment initiatives.

Local School System Responsibilities

Local school systems have policies and procedures that require the administration of assessments that are not part of the state assessment program. If a local system administers an assessment other than those specified by the state, the assessment must also include students with disabilities and provide an alternate assessment for students with significant cognitive disabilities. Students with disabilities may not be excluded if an assessment is administered to all students in a particular grade, class, or school. Local school systems must continue to review all assessments administered at the system's discretion and plan for accommodations and alternate assessment. The system should have policies and guidelines for including students with disabilities in locally administered assessments. For local assessments in grades other than state mandated, systems and schools may use the state alternate assessment (the GAA 2.0) or they may develop their own alternate assessment. Local systems and schools are responsible for the scoring and reporting of alternate assessments in grades other than those mandated by the state.

Students Eligible for Accommodations

In Georgia, three groups of students are eligible for accommodations – students with an Individualized Education Program (IEP), students with an Individual Accommodation Plan (IAP), also known as a Section 504 plan, and English Learners (EL) with a Test Participation Plan

(EL/TPC). This manual addresses the use of test accommodations for students with disabilities, students with an IEP or IAP. This manual does not address accommodations for EL students. For information on appropriate accommodations for EL students, please refer to the *Student Assessment Handbook*.

REQUIREMENTS FOR USE OF ACCOMMODATIONS

Accommodations are intended to reduce or even eliminate the effects of a student's disability; they do not reduce learning expectations. The accommodations provided to students in state assessments must be accommodations that are also provided during classroom instruction and assessment. There are some accommodations that may be appropriate for instruction but may not be appropriate for use on state assessments. There may be consequences (e.g. invalidating a student's test score) for the use of accommodations on state-mandated tests that are not addressed in this manual or the *Student Assessment Handbook*.

Accommodations must adhere to the following principles:

- Accommodations should enable students to participate more fully in instruction and assessments and to better demonstrate their knowledge and skills.
- Accommodations must be based upon individual student needs and not upon a category of disability, level of instruction, time spent in general classroom, or program setting.
- Accommodations must be justified and documented in the student's IEP or IAP.
- Accommodations must be aligned with and be a part of daily instruction; accommodations must not be introduced for the first time during the testing of a student.
- Accommodations should foster and facilitate independence for students, not dependence.
- Only accommodations listed as approved in Georgia's *Student Assessment Handbook* may be used on state-mandated tests.

THE FIVE STEP PROCESS

STEP 1: EXPECT STUDENTS WITH DISABILITIES TO ACHIEVE GRADE-LEVEL ACADEMIC CONTENT STANDARDS

FEDERAL AND STATE LAWS REQUIRING PARTICIPATION BY STUDENTS WITH DISABILITIES

Several important laws require the participation of students with disabilities in standards-based instruction and assessment initiatives. These include federal laws such as Every Student Succeeds Act (ESSA) and the Individuals with Disabilities in Education Act of 2004 (IDEA). Georgia law (20-2-281) also requires the participation of students with disabilities in the assessment process. For more information on how these laws require participation of students with disabilities see Appendix A.

INCLUDING ALL STUDENTS WITH DISABILITIES IN STATE-MANDATED ASSESSMENTS

Both federal and state laws require that all students with disabilities be administered assessments intended to hold schools accountable for the academic achievement of students. IEP and IAP team members must actively engage in a planning process that ensures:

- The participation of students with disabilities in mandated assessments programs in one of three ways:
  1. in the general assessment program with no accommodations,
  2. in the general assessment program with accommodations, or
  3. in the GAA 2.0 for students with significant cognitive disabilities; and
- the provision of accommodations as needed to facilitate student access to grade-level instruction and state assessments.

EQUAL ACCESS TO GRADE-LEVEL CONTENT

With the focus of legislation aimed at accountability and the inclusion of all students comes the drive to ensure equal access to grade-level content standards. The state-adopted standards set forth the learning expectations for students at each grade level and course. Teachers ensure that students work toward grade-level content standards by using a range of instructional strategies based on the varied strengths and needs of students. Providing accommodations during instruction and assessments may also promote equal access to grade-level content. To accomplish this goal of equal access:

- every IEP and IAP team member must be familiar with the state curriculum and the accountability systems at the state and system level;
- every IEP and IAP team member must know where to locate the curriculum standards; and
- collaboration between general and special educators must occur for successful student access.

All students with disabilities can work toward grade-level academic content standards, and most of these students will be able to achieve these standards when the following three conditions are met:

1. instruction is provided by teachers who are qualified to teach in the content areas addressed by the state curriculum and who know how to differentiate instruction for diverse learners;
2. IEP and IAP for students with disabilities are developed to ensure the provision of specialized instruction (e.g. specific reading skills, strategies for learning how to learn); and
3. appropriate accommodations are provided to help students access grade-level content.

The state's curriculum is the basis of instruction that helps teachers, students, and parents know what topics and skills must be covered and mastered for a particular grade or course. The curriculum establishes the minimum standards, and does not prohibit systems, schools, or teachers from adding material and/or content.

The curriculum drives both instruction and assessment in Georgia's schools, providing guidelines for teachers, students, and state testing programs. Georgia's teachers teach to a curriculum, not to a test or a textbook. Georgia's statewide assessments are aligned with the state-mandated content standards. The standards are posted at www.georgiastandards.org.

STEP 2: LEARN ABOUT ACCOMMODATIONS FOR INSTRUCTION AND ASSESSMENT

WHAT ARE ACCOMMODATIONS?

Accommodations are changes in the administration of an assessment in terms of how the student takes or responds to the assessment. Broad categories of accommodations include presentation, response, setting, and scheduling. Accommodations do not change the construct intended to be measured by the assessment or the meaning of the resulting scores. Accommodations are designed to provide equity, not advantage, and serve to level the playing field for students with disabilities. When used appropriately, they reduce or even eliminate the effects of a student's disability; they do not reduce learning expectations.

The accommodations provided to a student must be the same for classroom instruction, classroom assessments, and state assessments. It is critical to note that although some accommodations may be appropriate for instructional use, they may not be appropriate for use on a standardized assessment. There may be consequences (e.g. invalidating a student's test score) for the use of some accommodations during state assessments. It is very important for educators to become familiar with state policies regarding accommodations during assessments.

In Georgia, accommodations may not alter, explain, simplify, paraphrase, or eliminate any test item, reading passage, writing prompt, or answer option. Further, accommodations may not provide verbal or other clues or suggestions that hint at or give away the correct response to the student.

Typically, accommodation use does not begin and end in school. Students who use accommodations will generally also need them at home, in the community, and as they get older, in postsecondary education, and at work. Accommodations for instruction and assessment are integrally intertwined. However, some accommodations are appropriate for instruction and not assessment.

DESCRIPTION OF ACCOMMODATIONS CATEGORIES

Accommodations are commonly categorized in four ways: presentation, response, setting, and scheduling:

- **Presentation Accommodations** — adjusts the presentation of test material and/or test directions.
- **Response Accommodations** — adjusts the manner in which students respond to or answer test questions.

- **Setting Accommodations** — adjusts the place in which the testing normally occurs.
- **Scheduling Accommodations** — adjusts the time allowance or scheduling of a test.

MODIFICATIONS VERSUS ACCOMMODATIONS

Accommodations do not reduce learning expectations. They provide access. However, modifications or alterations refer to practices that change, lower, or reduce learning expectations. Modifications can increase the gap between the achievement of students with disabilities and expectations for proficiency at a particular grade level. Consistent use of modifications could adversely affect students throughout their educational career. Examples of modifications include:

- requiring a student to learn less material (e.g. fewer objectives, shorter units or lessons, fewer pages or problems),
- reducing assignments and assessments so a student only needs to complete the easiest problems or items,
- revising assignments or assessments to make them easier (e.g. crossing out half of the response choices on a multiple-choice test so that a student only has to pick from two options instead of four), or
- giving a student hints or clues to correct responses on assignments and tests.

Providing modifications to students during classroom instruction and/or classroom assessments may have the unintended consequence of reducing their opportunity to learn critical content. If students have not had access to critical, assessed content, they may be at risk for not meeting graduation requirements. Providing a student with an unapproved modification during a state-mandated assessment constitutes a test irregularity and may result in an investigation into the school's or system's testing practices, as well as an invalidation of the student's score.

STEP 3: SELECT ACCOMMODATIONS FOR INSTRUCTION AND ASSESSMENT FOR INDIVIDUAL STUDENTS

To assure students with disabilities are engaged in standards-based instruction and assessments, every IEP or IAP team member must be knowledgeable about the state curriculum and assessments. Effective decision-making about the provision of appropriate accommodations begins with making good instructional decisions. In turn, making appropriate instructional decisions is facilitated by gathering and reviewing good information about the student's disability and present level of performance in relation to local and state curricular standards. In essence, the process of making decisions about accommodations is one in which members of the IEP or IAP team attempt to 'level the playing field' so that students with disabilities can participate in the general education curriculum. IEP or IAP team meetings that simply engage in checking boxes on a state or local 'compliance' document are neither conducive to sound decision-making practices, nor do they advance equal opportunities for students to participate in the general education curriculum.

IEP and IAP/504 teams should analyze an assessment for what it requires the student to do in order to take the test. Different tests serve different purposes and may measure content and skills through slightly different means; therefore, a specific accommodation may be allowed for one test, but not for another. IEP and IEP/504 teams should always consider the purpose of the assessment and consult Georgia's *Student Assessment Handbook* to determine if an accommodation is allowed for the assessment under consideration. Accommodations must be considered and discussed individually for each state assessment mandated for the student's grade level and should not be broadly assigned across all assessments. Only accommodations needed by the student, due to the disability, to access the assessment should be considered. Providing accommodations that are not required by the student to access the test may actually interfere with student performance and adversely impact student achievement as measured by the assessment.

In addition, teams must also consider the following: (a) whether the accommodations are necessary for access to the assessment process; (b) previous experience and usefulness with the recommended accommodations; and (c) whether or not the recommended accommodation affects the integrity of the assessment. Students should receive the accommodations they need in order to participate in the assessment but should not be given more accommodations than are necessary to participate meaningfully.

INVOLVING STUDENTS IN SELECTING, USING, AND EVALUATING TEST ACCOMMODATIONS

It is critical for students with disabilities to understand their disabilities and learn self-advocacy strategies for success in school and throughout life. Some students have had limited experience expressing personal preferences and advocating for themselves. Speaking out about preferences, particularly in the presence of "authority figures," may be a new role for students, one for which they need guidance and feedback. Teachers and other IEP or IAP team members can play a key role in working with students to advocate for themselves in the context of selecting, using, and evaluating accommodations.

The more a student is involved in the selection process, the more likely the accommodations will be used, especially as the student reaches adolescence and the desire to be more independent increases. Self-advocacy skills become critical here. Students need opportunities to learn which accommodations are most helpful for them, and then they need to learn how to make certain those accommodations are.

DETERMINING THE CONSEQUENCES OF ASSESSMENT ACCOMMODATIONS USE

When selecting accommodations for state assessments for a student, it is important to look at state policies and procedures to determine whether use of an accommodation is permissible under state guidelines. Use of non-approved accommodations may result in consequences such as the invalidation of a student's score and a testing irregularity. IEP and IAP/504 teams should always consult Georgia's Student Assessment Handbook for the most current information on approved accommodations. Accommodations not listed in the *Student Assessment Handbook*

may not be used on state-mandated tests without prior approval from GaDOE Assessment Administration Division.

STANDARD AND CONDITIONAL ACCOMMODATIONS

Georgia has developed a testing program that is inclusive, designed to consider the needs of students with disabilities, and who, with access to the general education curriculum, can participate in regular state assessments with approved accommodations. Two types of accommodations are approved, which include:

- Standard Accommodations: those accommodations that provide access to the assessment without altering the construct measured by the assessment.
- Conditional Accommodations: more expansive accommodations that provide access for students with more severe disabilities who would not be able to access the assessment without such assistance.

Because conditional accommodations (formally referred to as non-standard accommodations) are more expansive than standard accommodations and may encroach on the skills targeted by the assessments, caution must be exercised in considering whether a student requires a conditional accommodation in order to access the test. Further, test results for a student provided conditional accommodations must be interpreted in light of the conditional accommodations.

Conditional accommodations should be used sparingly. State Board of Education Rule 160-3-1-.07 (Testing Programs-Student Assessment) requires that only a small percentage (less than 3%) participate with Conditional Accommodations. The 3% is calculated using the enrollment of all students in the tested grades at the district level. Only in the rarest of circumstances would a 504 (IAP) student qualify for a Conditional Accommodation. The majority of students requiring accommodations should be able to successfully demonstrate their achievement with standard accommodations. The use of any accommodation must be considered in light of the student's disability and must be required by the student to access the test because of his/her disability. Conditional accommodations may not be provided solely as a way to help ensure proficiency. The ultimate goal of any accommodation is meaningful measurement of what the student has learned. Guidelines for the use of conditional accommodations are provided on pages 24 – 25.

QUESTIONS TO GUIDE ACCOMMODATION SELECTION

Selecting accommodations for instruction and assessment is the role of a student's IEP team or IAP (Section 504) committee. Use the questions provided below to guide the selection of appropriate accommodations for students with disabilities for the first time and for students who are currently using accommodations:

- What are the student's learning strengths and areas that need improvement?
- How does the student's learning needs affect the achievement of grade-level content standards?

- What specialized instruction (e.g. learning strategies, organizational skills, reading skills) does the student need to achieve grade-level content standards?
- What accommodations will increase the student's access to instruction and assessment by addressing the student's learning needs and reducing the effect of the student's disability? These may be new accommodations or accommodations the student is currently using.
- What accommodations does the student use regularly during instruction and classroom assessment?
- What are the results for assignments and assessments when accommodations were used and not used?
- What is the student's perception of how well an accommodation worked?
- What difficulties did the student experience when using accommodations?
- What are the perceptions of parents, teachers, and specialists about how will the accommodation worked?
- Should the student continue to use an accommodation, are changes needed, or should the use of the accommodation be discontinued?
- Are there effective combinations of accommodations for the student?
- How will the use of accommodations impact the interpretation of the student's scores?

Of the accommodations that match the student's needs, consider:

- the student's willingness to learn to use the accommodation,
- opportunities to learn how to use the accommodation in classroom settings, and
- conditions for use on state assessments.

Plan how and when the student will learn to use each new accommodation. Be certain there is ample time to learn to use instructional and assessment accommodations before an assessment takes place. Finally, plan for the ongoing evaluation and improvement of the student's use of accommodations.

STEP 4: ADMINISTER ACCOMMODATIONS DURING INSTRUCTION AND ASSESSMENT

ACCOMMODATIONS DURING INSTRUCTION

The student must be provided the selected accommodations during instructional periods that necessitate their use. An accommodation may not be used solely during assessments.

ACCOMMODATIONS DURING ASSESSMENT

Planning for Test Day

Once decisions have been made about providing accommodations to meet individual student needs, the logistics of providing the actual accommodations during state assessments must be mapped out. It is not uncommon for members of the IEP team, most often special education teachers, to be given the responsibility for arranging, coordinating, and providing assessment accommodations for all students who may need them. Thus, it is essential that IEP and IAP

team members know and understand the requirements and consequences of state assessments, including the use of accommodations. It is important to engage the appropriate personnel to plan the logistics and provisions of assessment accommodations on test day.

School Test Coordinators are responsible for the overall conduct of the assessment administration and should be involved in the planning and coordination of accommodations. Prior to the day of a test, the School Test Coordinator should ensure certain test administrators and proctors know what accommodations each student will be using and how to administer them properly. For example, test administrators and proctors need to know whether a student will be allowed extra time to complete the test and when the testing time is ended, what plan exists for the student to continue working. Staff administering accommodations, such as reading to a student or scribing student responses, must adhere to specific guidelines so that student scores are valid.

Administering Assessments and Accommodations

State and local policies specify practices to assure test security and the standardized and ethical administration of assessments. Test administrators, proctors, and all staff involved in test administration must adhere to these policies. The Code of Professional Responsibilities in Educational Measurement (NCME, 1995) states that test administrators and others involved in assessments must

- take appropriate security precautions before, during, and after the administration of the assessment;
- understand the procedures needed to administer the assessment prior to administration;
- administer standardized assessments according to prescribed procedures and conditions and notify appropriate persons if any nonstandard or delimiting conditions occur;
- avoid any conditions in the conduct of the assessment that might invalidate the results;
- provide for and document all reasonable and allowable accommodations for the administration of the assessment to persons with disabilities or special needs; and
- avoid actions or conditions that would permit or encourage individuals or groups to receive scores that misrepresent their actual levels of attainment.[1]

Failure to adhere to these practices may constitute a test irregularity or a breach of test security and must be reported and investigated according to local and state testing policies. Consult the *Student Assessment Handbook* for more specific information about Georgia policies and procedures.

[1] National Council on Measurement in Education. (1995). *Code of Professional Responsibilities in Educational Measurement.* Washington, DC: Author.

ETHICAL TESTING PRACTICES

Ethical testing practices must be maintained during the administration of a test. Unethical testing practices relate to inappropriate interactions between test administrators and students taking the test. Unethical practices include, but are not limited to, allowing a student to answer fewer questions or choose from fewer options, changing the content by paraphrasing or offering additional information, coaching students during testing, editing student responses, or giving clues in any way.

STANDARDIZATION

Standardization refers to adherence to uniform administration procedures and conditions during an assessment. Standardization is an essential feature of educational assessments and is necessary to produce comparable information about student learning. Strict adherence to guidelines detailing instructions and procedures for the administration of accommodations is necessary to ensure test results reflect actual student learning.

TEST SECURITY

Test security involves maintaining the confidentiality of test items and answers, and is critical in ensuring the integrity and validity of a test. Test security can become an issue when accessible test formats are used (e.g. Braille, large print) or when someone other than the student is allowed to see the test (e.g. interpreter, reader, scribe). In order to ensure test security and confidentiality, test administrators need to (1) keep testing materials in a secure place to prevent unauthorized access, (2) keep all test content confidential and refrain from sharing information or revealing test content with anyone, and (3) return all materials as instructed.

Any action which compromises test security or leads to the invalidation of an individual student's or a group of students' test scores will be viewed by the GaDOE as inappropriate use or handling of test materials and will be treated as such. Any concern regarding test security must be reported to GaDOE immediately. Assessment staff members are available to help system personnel implement appropriate test security procedures.

If questions arise or if any situation occurs that could cause any part of the test administration to be compromised, System Test Coordinators should contact the GaDOE Assessment Division at (404) 656-2668 or (800) 634-4106.

STEP 5: EVALUATE AND IMPROVE ACCOMMODATIONS USE

Accommodations must be selected on the basis of the individual student's needs and must be used consistently for instruction and assessment. Collecting and analyzing data on the use and effectiveness of accommodations is necessary to ensure the meaningful participation of students with disabilities in state assessments. To that end, state regulations require accurate coding of accommodation use on student answer sheets. Data on the use and impact of accommodations during assessments may reveal questionable patterns of accommodation use,

as well as support the continued use of some accommodations or the rethinking of others. Examination of the data may also indicate areas in which the IEP or IAP team and test administrators need additional training and support.

In addition to collecting information about the use of accommodations within the classroom, information also needs to be gathered on the implementation of accommodations during assessment. Observations conducted during test administration, interviews with test administrators, and talking with students after testing sessions will likely yield data that can be used to guide the formative evaluation process at the school or system level and at the student level.

Accommodation information can be analyzed in different ways. Here are some questions to guide data analysis at the school and system level and the student level.

QUESTIONS TO GUIDE EVALUATION OF ACCOMMODATION USE AT THE SCHOOL OR SYSTEM LEVEL

1. Are there policies to ensure ethical testing practices, the standardized administration of assessments, and test security practices are followed before, during, and after the day of the test?
2. Are there procedures in place to ensure test administration procedures are not compromised with the provision of accommodations?
3. Are students receiving accommodations as documented in their IEP and IAP/504 plans?
4. Are there procedures in place to ensure that test administrators adhere to directions for the implementation of accommodations?
5. How many students with IEPs or IAP/504 plans are receiving accommodations?
6. What types of accommodations are provided and are some used more than others?
7. Are conditional accommodations used sparingly and only with those students who require them to access the assessment?
8. How well do students who receive accommodations perform on state and local assessments? If students are not meeting the expected level of performance, is it due to the students not having had access to the necessary instruction, not receiving the accommodations, or using accommodations that were not effective?

QUESTIONS TO GUIDE EVALUATION AT THE STUDENT LEVEL

1. What accommodations does the student use during instruction and assessments?
2. What are the results of classroom assignments and assessments when accommodations are used versus when accommodations are not used? If a student did not meet the expected level of performance, is it due to not having access to the necessary instruction, not receiving the accommodations, or using accommodations that were ineffective?
3. What is the student’s perception of how well the accommodation worked?
4. What combinations of accommodations seem to be effective?
5. What are the difficulties encountered in the use of accommodations?

6. What are the perceptions of teachers and others about how the accommodation appears to be working?

These questions can be used to formatively evaluate the accommodations used at the student level, as well as the school or system levels. A committee responsible for continuous improvement efforts can address school- and system-level questions, while the student-level questions need to be considered by the IEP or IAP/504 team. It is critical to stress that formative evaluation is not the responsibility of just one individual. The entire IEP or IAP/504 team should contribute to the information gathering and decision-making processes.

ALLOWABLE ACCOMMODATIONS FOR GEORGIA'S STUDENT ASSESSMENT PROGRAM

The following is a table of approved accommodations for use by students with disabilities on Georgia statewide assessments. Additional guidance is also provided in the *Student Assessment Handbook*. Always refer to the more specific directions for use of the accommodation found in each test's administration manual.

Allowable Accommodations for Students with Disabilities

Setting Accommodation	GAA 2.0	ACCESS FOR ELLS 2.0[16]	GKIDS	Georgia Milestones	NAEP
1. Special education classroom	A	A	S	S	S
2. Special or adapted lighting	A	A	S	S	S
3. Small group	A	A	S	S	S
4. Preferential seating	A	A	S	S	S
5. Sound field adaptations	S	A	S	S	S
6. Adaptive furniture (e.g. slant board)	A	A	S	S	S
7. Individual or study carrel	A	A	S	S	S
8. Individual administration	A	A	S	S	S
9. Test administered by certified educator familiar to student	A	A	S	S	S
Presentation Accommodations	**GAA 2.0**	**ACCESS FOR ELLS 2.0[16]**	**GKIDS**	**Georgia Milestones**	**NAEP**
10. Large Font/Large Print	S	S	S	S	S
11. Video Sign Language/Sign the directions	S	S	S	S	S
12. Video Sign Language/Sign test questions	S		S	S	S
13. Sign English Language Arts (ELA) passages	S		S	C[1]	
14. Oral reading of test questions in English	A	S[3]		S[11]	S
15. Text to Speech/Oral reading of English Language Arts (ELA) passages in English	A	S[3]		C[1]	
16. Explain or paraphrase the directions for clarity (in English only)	S	A	S	S	
17. Braille	S	S	S	S	S
18. Color overlays, templates, or place markers	S	S[2]	S	S	S
19. Use of highlighter by student	S	S[2]			S

20. Magnification/Low vision aids (e.g. CCTV, other magnifying equipment)	S	S[2]	S	S	S
21. Repetition of directions (in English only)	A	S	S	S	
22. Audio amplification devices or noise buffer/listening devices	S	S[2]	S	S	S
23. Use directions that have been marked by teacher		S			
Response Accommodations	**GAA 2.0**	**ACCESS FOR ELLS 2.0[16]**	**GKIDS**	**Georgia Milestones**	**NAEP**
24. Technology applications, such as Brailler or other communications device with grammar and spell checks disabled; Internet disabled for device	S	S	S	S	S
25. Student marks answers in test booklet	A	S[12]			
26. Student points to answers[15]	A	S[12]	S	S	S
27. Verbal response in English only	A	S[4]	S	S	S
28. Scribe	A	S[6,7]	S[6]	S[6]	S[8]
29. Braille writer/Braille Note-Taker	S	S[14]	S	S	S
30. Abacus	A			S[9]	
31. Basic function calculator or adapted basic calculator (e.g. Braille or talking calculator)	S			C[1]	S[5]
32. Adapted writing tools (e.g. pencil grips, large diameter pencil)	A	S[2]	S	S	S
33. Adapted/lined paper	A			S	
Scheduling Accommodations	**GAA 2.0**	**ACCESS FOR ELLS 2.0[16]**	**GKIDS**	**Georgia Mile-stones**	**NAEP**
34. Frequent monitored breaks	A	A	S	S	S
35. Optimal time of day for testing	A	S	S	S	S
36. Extended time	A	S	S	S	S
37. Flexibility in the order of administration for content areas	A	S[13]		S	
38. Extending sessions over multiple days	A	S[10]			

A = Administration procedures allowable for all eligible students.
S = Standard accommodation required for eligible students.
C = Conditional accommodation for required for eligible students.

Footnotes

1. Restricted to eligible students only; see guidance for eligibility. For oral reading, screen reader is the preferred method of administration (exception Signing of ELA Passages). Where a human reader delivers the accommodation, examiners must adhere to directions provided in the Read-Aloud Guidelines.
2. If prescribed as an accommodation, allowable for all ACCESS FOR ELLS 2.0 domains. Allowable as an accessibility tool for all students.
3. Allowed for ACCESS FOR ELLS 2.0 Writing, Listening, and Speaking domains only.
4. Allowed for ACCESS for ELLs 2.0 Listening, Reading, Speaking domains; not allowed for Writing domain.
5. Only NAEP calculator active blocks will be given to students who need this accommodation.
6. Use of a scribe is allowable if guidelines are followed exactly *from the Student Assessment Handbook*.
7. Use of a scribe is not allowed for ACCESS FOR ELLS 2.0 Speaking domain.
8. Accommodation not allowed on NAEP Writing assessments.
9. Allowed for students with visual impairments only.
10. Paper-Pencil Mode: Allowed for ACCESS FOR ELLS 2.0 Listening and Reading domains; not allowed for Writing and Speaking domains. Not allowed for any domain via online testing mode.

11. Screen reader is the preferred method of administration. Where a human reader delivers the accommodation, examiners must adhere to directions provided in the posted Read-Aloud Guidelines.
12. Paper-Pencil Mode: Allowed for ACCESS FOR ELLS 2.0 Listening, Reading, and Writing domains; not allowed for Speaking domain. Online Mode is not recommended for students requiring this accommodation.
13. ACCESS for ELLs 2.0 Reading domain must be administered prior to Speaking and Writing domains.
14. Allowed for ACCESS FOR ELLS 2.0 Writing, Listening, and Reading domains; not allowed for Speaking domains.
15. Student selects answer by eye gaze allowed for GAA 2.0 participants.
16. Allowable accommodations for Alternate ACCESS can be found in the *WIDA Accessibility and Accommodations Supplement*.

SPECIAL CONSIDERATIONS FOR CONDITIONAL ACCOMMODATIONS

Conditional accommodations must be used sparingly and only when the student requires the accommodation to access the test due to the disability. The student's IEP team must determine and document that the conditional accommodation is absolutely necessary in order for the student to participate in the general testing program. Guidance on the use of each conditional accommodation is provided below.

Note: Given the purpose of each assessment program may differ, accommodations may be standard for some assessments, but conditional for other assessments.

Eligibility Guidelines: Reading of English Language Arts (ELA) Passages
Guidance for Use of Conditional Accommodation 13: Sign ELA passages.
The use of this conditional accommodation for the English Language Arts Georgia Milestones, *regardless of grade level*, must be restricted to only those students with IEPs who meet the **ALL** eligibility criteria outlined below:

1. The student is deaf and has a specific documented disability that severely limits or prevents his or her ability to decode text at any level of difficulty, even after varied and repeated attempts to teach the student to do so; **and**
2. The student has access to printed materials only through a sign-language interpreter or is provided with signed text or other electronic format during routine instruction; **and**
3. There are clear and specific goals within the student's IEP addressing the deficits which necessitate the need for this conditional accommodation.

Under secure conditions, supervised by the School or System Test Coordinator, the sign interpreter may review test materials prior to the test administration to plan appropriate signing.

Guidance for Use of Conditional Accommodations 15: Oral Reading of ELA passages.

The use of this conditional accommodation for the English Language Arts Georgia Milestones, *regardless of grade level*, must be restricted to only those students with IEPs who meet **ALL** eligibility criteria outlined below:

1. The student has a specific documented disability that severely limits or prevents his or her ability to decode text at any level of difficulty, even after varied and repeated attempts to teach the student to do so (i.e., the student is a non-reader, not simply reading below grade level); **and**
2. The student has access to printed materials only through a reader or electronic format during routine instruction; **and**
3. There are clear and specific goals within the student's IEP addressing the deficits which necessitate the need for this conditional accommodation.

NOTE: The preferred method of administration for this conditional accommodation is screen reader. Where a human reader delivers the accommodation, examiners must adhere to directions provided in the posted Read-Aloud Guidelines.

Eligibility Guidelines: Calculator Usage
Guidance for Use of Conditional Accommodations 31: Basic function calculator or adapted basic calculator.

The use of this conditional accommodation for the Mathematics Georgia Milestones for students in **grades 3-5** must be restricted to only those students with IEPs who meet **ALL** eligibility criteria outlined below:

1. The student has a specific disability that prohibits him or her from performing basic calculations (i.e., addition, subtraction, multiplication, and division), even after varied and repeated attempts to teach the student to do so; **and**
2. The student is unable to perform calculations without the use of a calculation device, which the student uses for routine classroom instruction; **and**
3. There are clear and specific goals within the student's IEP addressing the deficits which necessitate the need for this conditional accommodation.

NOTE: Only a basic function or basic adapted calculator may be used; scientific and other advanced calculators are strictly prohibited. The test administrator may not provide any assistance or direction to the student regarding the use of the calculator.

ACCOMMODATIONS NOT SPECIFIED IN THIS DOCUMENT

On rare occasion, a student may require an accommodation that is not listed in the *Student Assessment Handbook*. If a unique situation arises and an individual student requires an accommodation that is not in this manual, approval must be sought from the GaDOE Assessment Division prior to the use of the accommodations on any state-mandated test. Key consideration for approving the use of the accommodation includes protecting the integrity of the assessment and what the assessment measures. Addressing the issue of validity involves an examination of the purpose of the test and the specific skills to be measured. Accommodations that impact the validity and reliability of the assessment cannot be approved. The *Student Assessment Handbook* outlines the procedures for requesting consideration of accommodations not listed as approved.

FACT SHEET 1: CATEGORY OF ACCOMMODATIONS

CATEGORY OF ACCOMMODATION	WHO CAN BENEFIT
Presentation	Students who benefit most from presentation accommodations are those with print disabilities, defined as difficulty or inability to visually read standard print because of a physical, sensory, or cognitive disability.
Response	Response accommodations can benefit students with physical, sensory, or learning disabilities (including difficulties with memory, sequencing, directionality, alignment, and organization).
Setting	Setting accommodations, which are changes in instructional and assessment locations, can benefit students who are easily distracted in large group settings and who concentrate best in a small group or individual setting. Changes in location also benefit students who receive accommodations (e.g. reader, scribe, frequent breaks) that might distract other students. Students with physical disabilities might need a more accessible location, specific room conditions, or special equipment.
Scheduling	Scheduling accommodations are most helpful for students who need more time than generally allowed to complete activities, assignments, and assessments. Extra time may be needed to process written text (e.g. a student with a learning disability who processes information slowly), to write (e.g. a student with limited dexterity as a result of arthritis), or to use other accommodations or equipment (e.g. assistive technology, audiotape, scribe). Students who cannot concentrate continuously for an extended period or who become frustrated or stressed easily may need frequent or extended relaxation breaks. It may also help to schedule in the morning those classes and tests that require the greatest concentration for students who have difficulty concentrating and staying on task as the day progresses. Scheduling changes might also be helpful for students on medications that affect their ability to stay alert or who have more productive times of the day. Some students with health-related disabilities may have functioning levels that vary during the day because of the effects of medications or diminishing energy levels. For example, blood sugar levels may need to be maintained by eating several times a day at prescribed times. These students could be accommodated by scheduling tests and activities around the eating schedule, or by allowing food to be taken to the classroom or testing site. Students who fatigue easily may need to take some academic classes and tests before rather than after a physical education class or recess, or may need to reduce physical activity.

FACT SHEET 2: EXAMPLES OF ACCOMMODATIONS BASED ON STUDENT CHARACTERISTICS

STUDENT CHARACTERISTIC: BLIND, LOW VISION, PARTIAL SIGHT		
Category	**Accommodations to Consider for Instruction**	**Accommodations to Consider for Assessments**
Presentation	• Large print • Magnification devices • Braille • Tactile graphics • Human reader • Audiotape or compact disk (CD) • Screen reader • Large print or Braille notes, outlines, and instructions • Descriptive video • Talking materials	• Large print/Large Font • Magnification devices • Braille • Human reader/Screen reader • Assistive Technology
Response	• Express response to a scribe through speech • Type on or speak to word processor • Type on brailler or note taking device • Speak into tape recorder • Use calculation devices (e.g. talking calculator with enlarged keys, abacus) • Use personal note taker	• Express response to a scribe through speech • Use word processor (spelling and grammar check disabled) • Type on brailler • Abacus • Use calculator
Setting	• Change location so student does not distract others • Change location to increase physical access • Change location to access special equipment	• Change location so student does not distract others • Change location to increase physical access • Change location to access special equipment
Scheduling	• Extended time	• Extended time

STUDENT CHARACTERISTIC: DEAF; HARD OF HEARING		
Category	**Accommodations to Consider for Instruction**	**Accommodations to Consider for Assessments**
Presentation	• Sign language • Audio amplification devices • Screen reader • Visual cues • Written notes, outlines, and instructions • Videotape and descriptive video • Provide advanced organizers and outlines of lectures for student to follow • Use gestures (e.g. point to materials) • Repeat questions and responses from classmates • Allow student to copy notes from classmate • Use captioned versions of instructional films and include script when possible • Give interpreter instructional materials in advance • Learn manual signs and teach them to hearing classmates • Allow student to use telecommunication device	• Sign language • Audio amplification devices • Screen or text reader (assistive technology)
Response	• Express response to scribe or interpreter • Type on or speak to word processor • Use spelling and grammar assistive devices • Use visual organizers • Use graphic organizers	• Express response to scribe or interpreter • Use word processor (spelling and grammar check disabled)
Setting	• Change location to reduce distractions • Change location so student does not distract others • Change location to increase physical access (e.g. minimize background noise, face student when speaking, speak to student and not to interpreter, and increase wait time for interpreter to finish)	• Change location to reduce distractions • Change location so student does not distract others • Change location to increase physical access (e.g. minimize background noise, face student when speaking, speak to student and not to interpreter, and increase wait time for interpreter to finish)

STUDENT CHARACTERISTIC: WEAK MANUAL DEXTERITY; DIFFICULTY WITH PENCIL; DIFFICULTY TYPING ON STANDARD KEYBOARD		
Category	**Accommodations to Consider for Instruction**	**Accommodations to Consider for Assessments**
Response	• Express response to a scribe through speech, pointing or by using an assistive communication device • Type on or speak to word processor • Use adapted keyboard or mouse • Speak into tape recorder • Use adapted pencil or pencil grip • Use written notes, outlines, and instructions	• Express response to a scribe through speech, pointing or by using an assistive communication device • Use word processor or adapted keyboard (spelling and grammar check disabled) • Use adapted pencil or pencil grip

STUDENT CHARACTERISTIC: READING DISABILITY; DIFFICULTY DECODING		
Category	**Accommodations to Consider for Instruction**	**Accommodations to Consider for Assessments**
Presentation	• Human reader • Audiotape or CD • Screen or text reader (assistive technology) • Videotape	• Human reader • Screen or text reader (assistive technology)
Setting	• Change location so student does not distract others • Use written notes, outlines, and instructions	• Change location so student does not distract others
STUDENT CHARACTERISTIC: WRITING DISABILITY		
Category	**Accommodations to Consider for Instruction**	**Accommodations to Consider for Assessments**
Response	• Express response to a scribe through speech • Type on or speak to word processor • Speak into tape recorder • Use written notes, outlines, and instructions	• Express response to a scribe through speech • Use word processor (spelling and grammar check disabled)
STUDENT CHARACTERISTIC: MATHEMATICS DISABILITY		
Category	**Accommodations to Consider for Instruction**	**Accommodations to Consider for Assessments**
Response	Use: • Calculator • Visual organizers • Graphic organizers • Math tables and formula sheets	Use: • Basic Calculator
STUDENT CHARACTERISTIC: PHYSICAL DISABILITY		
Category	**Accommodations to Consider for Instruction**	**Accommodations to Consider for Assessments**
Response	• Express response to a scribe through speech, pointing, or by using an assistive communication device • Type on or speak to word processor (including adapted keyboard) • Speak into tape recorder • Write in test booklet instead of on answer sheet • Use augmentative devices for single or multiple messages (e.g. BIGmack, Jelly Bean switch, or Dynavox) • Use written notes, outlines, and instructions	• Express response to a scribe through speech, pointing, or by using an assistive communication device • Use word processor or adapted keyboard (spelling and grammar check disabled) • Write in test booklet instead of on answer sheet
Setting	• Change location to increase physical access • Change location to access special equipment	• Change location to increase physical access • Change location to access special equipment
Scheduling	• Extended time • Multiple or frequent breaks	• Extended time • Multiple or frequent breaks

STUDENT CHARACTERISTIC: EASILY DISTRACTED; SHORT ATTENTION SPAN		
Category	**Accommodations to Consider for Instruction**	**Accommodations to Consider for Assessments**
Presentation	• Use books on tape or recorded books to help focus on text • Give short and simple directions with examples	
Response	• Write in test booklet instead of on answer sheet • Monitor placement of student responses on answer sheet • Use materials or devices used to solve or organize responses • Use visual organizers • Use graphic organizers • Highlight key words in directions • Have student repeat and explain directions to check for understanding • Use template	• Write in test booklet instead of on answer sheet • Use template or place-marker
Setting	• Sit in front of room • Change location to reduce distractions	• Sit in front of room • Change location to reduce distractions
Scheduling	• Use short segment test booklets (when available) • Allow for multiple or frequent breaks • Schedule tests in the morning • Cue student to begin working and stay on task • Change testing schedule or order of subtests • Limit reading periods • Schedule activities requiring more seat time in the morning and more hands-on and physical activities in the afternoon • Divide long-term assignments	• Allow for multiple or frequent breaks • Schedule tests in the morning • Change testing schedule or order of subtests

FACT SHEET 3: DO'S AND DON'TS WHEN SELECTING ACCOMMODATIONS

Do…make accommodation decisions based on individualized needs.
Don't…make accommodations decisions based on whatever is easiest to do (e.g. preferential seating).

Do…select accommodations that reduce the effect of the disability to access instruction and demonstrate learning.
Don't…select accommodations unrelated to documented student learning needs or are intended to give students an unfair advantage.

Do…be certain to document instructional and assessment accommodation(s) on the IEP or IAP.
Don't…use an accommodation that has not been documented on the IEP or IAP.

Do…be familiar with the types of accommodations that can be used as both instructional and assessment accommodations.
Don't…assume that all instructional accommodations are appropriate for use on assessments.

Do…be specific about the "Where, When, Who, and How" of providing accommodations.
Don't…simply indicate an accommodation will be provided "as appropriate" or "as necessary."

Do…refer to state accommodation policies and understand implications of selections.
Don't…check every accommodation possible on a checklist simply to be "safe."

Do…evaluate accommodations used by the student.
Don't…assume the same accommodations remain appropriate year after year.

Do…get input about accommodations from teachers, parents, and students, and use it to make decisions at IEP or IAP team planning committee meetings.
Don't…make decisions about instructional and assessment accommodations alone.

Do…provide accommodations for assessments routinely used for classroom instruction.
Don't…provide an assessment accommodation for the first time on the day of a test.

Do…select accommodations based on specific individual needs in each content area.
Don't…assume certain accommodations, such as extra time, are appropriate for every student in every content area.

FACT SHEET 4: GUIDELINES FOR ADMINISTERING SPECIFIC ACCOMMODATIONS

PRESENTATION ACCOMMODATIONS

Read Aloud Test Directions and Items

Test readers must ensure that all students understand what is expected of them when reading test directions aloud. Students must have an opportunity to ask questions and understand how to mark their answers before they begin taking the test. However, test readers should not answer questions about specific test items. When reading test items aloud, test readers must be careful not to inadvertently give clues that indicate the correct answer or help eliminate some answer choices. Readers should use even inflection so that the student does not receive any cues by the way the information is read. It is important for readers to read test items/questions and text word-for-word, exactly as written. Readers may not clarify, elaborate, or provide assistance to students. Note that in the areas of mathematics, science, and social studies, there are no passages – only test items. As a result, when delivering this accommodation, all parts of a test item may be read.

Sign Language Interpreter

If a student's teacher serves as the interpreter in a testing situation, it is recommended that a second person is present to monitor for quality and fairness. If allowed to sign test items and prompts, interpreters must not clarify, elaborate, paraphrase, or provide assistance with the meaning of words, intent of test questions, or responses to test items. Interpreter services need to be arranged prior to test day.

Large Print/Large Font

If a student needs a large-print test edition, it must be ordered in a timely manner. After a student finishes a large-print edition of a test, a certified educator, under the supervision of the School Test Coordinator, must transcribe the student's answers verbatim onto a standard answer sheet.

Braille

If a student needs a braille test edition, it must be ordered in a timely manner. The test administrator for a braille test needs to be provided with a print version of the test during test administration. After a student finishes a braille edition of a test, a certified educator, under the supervision of the School Test Coordinator, must transcribe the student's answers verbatim onto a standard answer sheet or response form.

RESPONSE ACCOMMODATIONS

Writing in Test Booklet

Allow the student to write in the test booklet instead of on an answer sheet. After a student finishes the test, a certified educator, under the supervision of the School Test Coordinator, must transcribe the student's answers *exactly* onto a standard answer sheet or response form, including any double coding the student may have erroneously done, etc.

Dictation to Scribe

Scribes may be provided for students with verified disabilities that significantly impact the area of written expression or a physical disability that impedes motor process or writing. Scribes must be impartial and should be experienced in transcription. They must write exactly what the student dictates. Scribes are not allowed to elaborate on what is being written. They cannot answer or explain anything to the student during testing and must be careful not to give hints of any type. Additional guidance on the use this accommodation on state-mandated assessments is provided in the Student Assessment Handbook and test administration manuals.

SETTING ACCOMMODATIONS

Supervised Test Locations

It may be difficult to find testing locations that are private and free of distractions, especially when many students in a building are tested at the same time. Each student tested in a private location needs adult supervision by a certified educator and each adult supervisor needs clear instructions about test administration procedures. This includes students tested in the home, hospital, and residential or other alternative settings.

SCHEDULING ACCOMMODATIONS

Providing Extended Time

Timed tests usually require students to request a fairly specific amount of extra time; which in many cases should mirror the amount of extended time provided during day to day instruction and/or classroom assessments. A common extension, though not a mandated one, is time and one half. This means that for a test normally taking 60 minutes, a student may be allowed 90 minutes. Double time may also be allowed. Decisions should be made on a case-by-case basis, keeping in mind the type of accommodations being provided, the disability involved, and the type of test. For example, if a reader or scribe is used, double time may be appropriate. Specifying unlimited time is not appropriate or feasible.

TEACHER TOOL 1: ACCESS NEEDS THAT MAY REQUIRE ACCOMMODATIONS

Directions: Use these questions to identify various types of presentation, response, setting, and scheduling accommodations for students with disabilities. The list is not exhaustive—its purpose is to prompt members of IEP teams and 504 planning committees to consider a wide range of accommodation needs. Use the list in planning by indicating Y (YES), N (NO), or DK/NA (Don't Know/Not Applicable).

		Y	N	DK/ NA
PRESENTATION ACCOMMODATIONS				
1.	Does the student have a visual impairment that requires large-type or braille materials?	☐	☐	☐
2.	Is the student able to read and understand directions?	☐	☐	☐
3.	Can the student follow oral directions from an adult?	☐	☐	☐
4.	Does the student need directions repeated frequently?	☐	☐	☐
5.	Are assistive technology devices indicated on the student's IEP?	☐	☐	☐
6.	Has the student been identified as having a reading disability?	☐	☐	☐
7.	Does the student have low or poor reading skills that may require the reading of tests or sections of tests that do not measure reading comprehension in order to demonstrate knowledge of subject areas?	☐	☐	☐
8.	Does the student have a hearing impairment that requires an interpreter to sign directions?	☐	☐	☐
9.	Does the student have a hearing impairment and need a listening device?	☐	☐	☐
RESPONSE ACCOMMODATIONS				
10.	Does the student have difficulty tracking from one page to another and maintaining that student's place?	☐	☐	☐
11.	Does the student have a disability that affects the ability to record that student's responses in the standard manner?	☐	☐	☐
12.	Can the student use a pencil or writing instrument?	☐	☐	☐
13.	Does the student use a word processor to complete homework assignments or tests?	☐	☐	☐
14.	Does the student use a tape recorder to complete assignments or tests?	☐	☐	☐
15.	Does the student need the services of a scribe?	☐	☐	☐
16.	Does the student have a disability that affects that student's ability to spell?	☐	☐	☐
17.	Does the student have a visual or motor disability that affects that student's ability to perform math computations?	☐	☐	☐
SETTING ACCOMMODATIONS				
18.	Do others easily distract the student or does that student have difficulty remaining on task?	☐	☐	☐
19.	Does the student require any specialized equipment or other accommodations that may be distracting to others?	☐	☐	☐
20.	Does the student have visual or auditory impairments that require special lighting or acoustics?	☐	☐	☐
21.	Can the student focus on the student's own work in a setting with large groups of other students?	☐	☐	☐

		Y	N	DK/ NA
22.	Does the student exhibit behaviors that may disrupt the attention of other students?	☐	☐	☐
23.	Do any physical accommodations need to be made for the student in the classroom?	☐	☐	☐
SCHEDULING ACCOMMODATIONS				
24.	Can the student work continuously for the length of time allocated for standard test administration?	☐	☐	☐
25.	Does the student use other accommodations or adaptive equipment that require more time to complete test items (e.g. Braille, scribe, use of head pointer to type)?	☐	☐	☐
26.	Does the student tire easily due to health impairments?	☐	☐	☐
27.	Does the student have a visual impairment that causes eyestrain and requires frequent breaks?	☐	☐	☐
28.	Does the student have a learning disability that affects the rate at which that student processes written information?	☐	☐	☐
29.	Does the student have a motor disability that affects the rate at which that student writes responses?	☐	☐	☐
30.	Does the student take any type of medication to facilitate optimal performance?	☐	☐	☐
31.	Does the student's attention span or distractibility require shorter working periods and frequent breaks?	☐	☐	☐

TEACHER TOOL 2: ACCOMMODATIONS FROM THE STUDENT'S PERSPECTIVE

Use this questionnaire to collect information about needed accommodations from the student's perspective. The questions can be completed independently or as part of an interview process. Whatever method is used, however, be certain that the student understands the concept of an "accommodation," providing examples as necessary. Also, provide a list of possible accommodations to give the student a good understanding of the range of accommodations that may be available.

1. Think about all the classes you are taking now. Which is your best class?

_____

2. Explain what you do well in this class.

_____

The things you said you could do well above are your strengths. For example, you may have mentioned reading, writing, listening, working in groups, working alone, drawing, or doing your homework as some things you can do well. If you said you really like the subject, have a good memory, and work hard in class, these are also examples of your strengths.

3. Now ask yourself, "What class is hardest?"

_____

4. What's the hardest part of this class for you?

_____

The things you said were hardest are areas you need to work on during the school year. For example, you might have listed paying attention in class, reading the book, taking tests, listening, staying in the seat, remembering new information, doing homework, or doing work in groups. These are all things in which an accommodation may be helpful for you.

5. In the list that follows, write down all of the classes you are taking now. Then look at a list of accommodations. Next to each class, write down what accommodation(s) you think might be helpful for you.

Class List

Classes	Accommodations
_____	_____
_____	_____
_____	_____
_____	_____

This questionnaire was adapted from *A Student's Guide to the IEP* by the National Dissemination Center for Children with Disabilities. Retrieved July 28, 2005.

TEACHER TOOL 3: ASSESSMENT ACCOMMODATIONS AGREEMENT

This is an example of a form a student could carry on test day. Some accommodations (e.g. special test editions) need to be arranged long before test day but should still be included on this list to make certain the student receives the correct test booklet. A similar form could be carried to class to remind teachers about daily accommodations. Different schools, teachers, and students might format these statements differently.

I, _____,

(Student's name)

need the following accommodations to take part in this assessment:

If I need more information about these accommodations, I can talk to:

_____

(Name of special education teacher, parent, principal, and/or related service provider)

Thank you for helping me to do my best on this test!

_____ _____

(Student signature) (Date)

TEACHER TOOL 4: LOGISTICS PLANNING CHECKLIST

Directions: This Logistics Planning Checklist can be used in the planning and implementation of assessment accommodations for students. Use the checklist by indicating Y (Yes), N (No), or NA (Not Applicable).

		Y	N	NA
ACCOMMODATIONS THROUGHOUT THE ACADEMIC YEAR				
1.	Accommodations are documented on students' IEP or 504 plan.	☐	☐	☐
2.	Students use accommodations regularly and evaluates use.	☐	☐	☐
3.	A master accommodations plan/data base listing assessment accommodation needs for all students tested is updated regularly.	☐	☐	☐
PREPARATION FOR TEST DAY				
4.	Special test editions are ordered for individual students based on information contained in master accommodations plan (e.g. braille, large print).	☐	☐	☐
5.	Test administrators/proctors receive a list of accommodation needs for students they will supervise (list comes from master accommodations plan/data base).	☐	☐	☐
6.	Adult supervision is arranged and test administrators receive training for each student receiving accommodations in small group or individual settings, including extended time (with substitutes available).	☐	☐	☐
7.	Trained readers, scribes, and sign language interpreters are arranged for individual students (with substitutes available) and provided room locations with rosters.	☐	☐	☐
8.	Special equipment is arranged and checked for correct operation (e.g. calculator, word processor with spell and grammar check disabled).	☐	☐	☐
ACCOMMODATIONS ON THE DAY OF THE TEST				
9.	All eligible students receive accommodations as determined by their IEP or 504 plan.	☐	☐	☐
10.	Provision of accommodations is recorded by test administrator.	☐	☐	☐
11.	Providers of accommodations are available as needed (e.g. interpreters, readers, scribes)	☐	☐	☐
12.	Plans are made to replace defective equipment.	☐	☐	☐
CONSIDERATION AFTER THE DAY OF THE TEST				
13.	Responses are transferred to scannable answer sheets for students using special equipment and adapted test forms and response documents	☐	☐	☐
14.	All equipment is returned to appropriate locations.	☐	☐	☐
15.	Students who take make-up tests receive needed accommodations	☐	☐	☐
16.	Effectiveness of accommodations use is evaluated by test administrators and students, and plans are made for improvement.	☐	☐	☐

APPENDIX

FEDERAL AND STATE LAWS REQUIRING PARTICIPATION BY STUDENTS WITH DISABILITIES

EVERY STUDENT SUCCEEDS ACT (ESSA)

Continuous improvement for all students through the examination of accountability results is a key provision of ESSA. To this end, the law requires public accountability at the school, system, and state levels. This includes the publication of assessment data disaggregated by student subgroups, including children with disabilities.

Accordingly, ESSA explicitly calls for

> …the participation in such assessments of all students [Sec. 1111 (b) (2) (vii)]. (The term 'such assessments' refers to a set of high-quality, yearly student academic assessments.) ''(II) the appropriate accommodations, such as interoperability with, and ability to use, assistive technology, for children with disabilities (as defined in section 602(3) of the Individuals with Disabilities Education Act (20 U.S.C. 1401(3)), including students with the most significant cognitive disabilities, and students with a disability who are provided accommodations under an Act other than the Individuals with Disabilities Education Act (20 U.S.C. 1400 et seq.), necessary to measure the academic achievement of such children relative to the challenging State academic standards or alternate academic achievement standards described in paragraph (1)(E)…

Through ESSA, in addition to other state and local system initiatives, assessments aimed at increasing accountability provide important information with regard to

- how successful schools are including all students in standards-based education,
- how well students are achieving standards, and
- what needs to be improved upon for specific groups of students.

There are several critical elements in ESSA that hold schools accountable for educational results. Academic content standards (what students should learn) and academic achievement standards (how well they should learn) in reading/language arts, mathematics, science, and social studies form the basis of state accountability systems. State assessments are the mechanism for checking whether schools have been successful with students attaining the knowledge and skills defined by the content standards. States must provide assessments in reading/language arts and mathematics for all students, including students with disabilities, in grades 3-8 and once in high school. In accordance with federal and state laws, Georgia teachers will administer social studies and science assessments in grade 5, 8, and high school. School, system, and state accountability is based on measuring success in educating all of its students and determining what needs to be improved for specific groups of students. The accountability system is defined as a way to measure the improvement in achieving standards for all students and designated subgroups each year. Schools, systems, and states are held accountable for

improvements on an annual basis by public reporting and ultimately through consequences if accountability goals and requirements are not met.

INDIVIDUALS WITH DISABILITIES EDUCATION IMPROVEMENT ACT OF 2004

IDEA specifically governs services provided to students with disabilities. Accountability at the individual level is provided through IEPs developed on the basis of each child's unique needs. IDEA requires the participation of students with disabilities in state and system-wide assessments. Specific IDEA requirements include:

> Children with disabilities are included in general state and system-wide assessment programs, with appropriate accommodations, where necessary [Sec. 612 (a) (16) (A)]. The term 'individualized education program' or 'IEP' means a written statement for each child with a disability that is developed, reviewed, and revised in accordance with this section and that includes…a statement of any individual modifications in the administration of state or system-wide assessments of student achievement that are needed in order for the child to participate in such assessment; and if the IEP team determines that the child will not participate in a particular state or system-wide assessment of student achievement (or part of such an assessment), a statement of why that assessment is not appropriate for the child; and how the child will be assessed [Sec. 614 (d) (1) (A) (V) and VI)].

With the implementation of the Georgia Milestones Assessment System, Georgia educators have developed four achievement levels to describe student mastery and command of the knowledge and skills outlined in Georgia's content standards. Most students have at least some knowledge of the content described in the content standards; however, achievement levels succinctly describe how much mastery a student has. Achievement levels give meaning and context to scale scores by describing the knowledge and skills students must demonstrate to achieve each level.

The four achievement levels on Georgia Milestones are *Beginning Learner, Developing Learner, Proficient Learner,* and *Distinguished Learner.* The general meaning of each of the four levels is provided below:

Beginning Learners do not yet demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students *need substantial academic support* to be prepared for the next grade level or course and to be on track for college and career readiness.

Developing Learners demonstrate partial proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students *need additional academic support* to ensure success in the next grade level or course and to be on track for college and career readiness.

Proficient Learners demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students *are prepared* for the next grade level or course and are on track for college and career readiness.

Distinguished Learners demonstrate advanced proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students *are well prepared* for the next grade level or course and are well prepared for college and career readiness.

More detailed and content-specific concepts and skills are provided for each grade, content area, and course in the **Achievement Level Descriptors** (ALDs). ALDs are narrative descriptions of the knowledge and skills expected at each of the four achievement levels and were developed for each grade level, content area, and course by committees of Georgia educators in March 2015 and July 2015. The ALDs are based on the state-adopted content standards.

ALDs show a *progression of knowledge and skills* for which students must demonstrate competency across the achievement levels. It is important to understand that a student should demonstrate mastery of the knowledge and skills within his/her achievement level *as well as all content and skills in any achievement levels that precede his/her own, if any*. For example, a Proficient Learner should also possess the knowledge and skills of a Developing Learner *and* a Beginning Learner.

Jennifer Hunt Lawson

PROFESSIONAL PREPARATION

Educational Specialist
University of Georgia, Athens Georgia 2000
Certification: Leadership and Administration
Grade Point Average: 3.8/4.00

Master of Education
University of Georgia, Athens Georgia 1996
Certification: Early Childhood Education
Grade Point Average: 4.00/4.00

Bachelor of Science
University of Alabama, Tuscaloosa, Alabama 1990
Major: Psychology Minor: Biology
Grade Point Average: 3.2/3.5

PROFESSIONAL EXPERIENCE

2018-Present Chief Academic Officer
2017-2018 Interim Chief Academic Officer
Cobb County School District
Marietta, Georgia

2015-2017 Assistant Superintendent Teaching and Learning Division

2011-2015 Principal, Sedalia Park Elementary School
Cobb County School District
Marietta Georgia

2008-2011 Principal, West Side Elementary School
Marietta City Schools
Marietta Georgia

2002-2008 Assistant Principal, West Side Elementary School
Marietta City Schools
Marietta Georgia

2000-2001 Classroom Teacher, West Side Elementary School
Marietta City Schools
Marietta, Georgia

1996-2000 Classroom Teacher, Lockheed Elementary School
Marietta City Schools
Marietta, Georgia

Lori Marie Horn

Education:

Ed.S. 2011	Kennesaw State University Major: Leadership for Learning Concentration: Inclusive Education
M.Ed. 2009	Kennesaw State University Major: Educational Leadership
B.A. 2000	Jacksonville State University Major: Music Education

Additional Coursework:

Currently a doctoral candidate in the Ed.D Leadership for Learning program at Kennesaw State University with projected defense date of July 2019

32 hours of graduate level coursework in the field of special education at Jacksonville State University

Certificates and Endorsements:

SRL	Educational Leadership (P-12)
SRT	Special Education General Curriculum (P-12) Consultative
SRT	Special Education Language Arts Cognitive Level (P-5, 4-8)
SRT	Special Education Math Cognitive Level (P-5, 4-8)
SRT	Special Education Science Cognitive Level (P-5, 4-8)
SRT	Special Education Social Studies Cognitive Level (P-5, 4-8)

Employment History:

2017-Present	Cobb County School District 514 Glover Street Marietta, Georgia 30060 Position: Director, Office of Assessment and Personalized Learning
2015-2017	McClure Middle School, Cobb County School District 3660 Old Stilesboro Road Kennesaw, GA 30152 Position: Support and Services Administrator
2011-2015	Cobb County School District 514 Glover Street Marietta, Georgia 30060 Position: Special Education Cluster Supervisor
2004-2011	Carroll County Schools

164 Independence Drive
Carrollton, Georgia 30116
Position: Exceptional Children's Services, Instructional Facilitator

2001-2004 Temple Middle School, Carroll County School System
275 Rainey Road
Temple, Georgia 30179
Position: Special Education Lead Teacher of 5th-8th grade

Other Professional Experience:

2016-2017 Member, McClure Middle School, Professional Learning Community Guiding Coalition
2015-2017 Member, McClure Middle School, School Leadership Team
2015-2017 Co-chair, CCSD Special Education Department, Operational Compliance Committee
2014-2017 Member, CCSD Special Education Department, Assessment Committee
2015-2017 Member, McClure Middle School, Achievement Gap Committee
2013-2015 Member, CCSD Special Education Department, Instructional Committee
2013-2015 CCSD Student Learning Objectives Development Team
2013-2015 Member, CCSD Special Education Department, Leadership Training & Development Committee
2012-2015 Member, CCSD Special Education Department, Small Group Committee
2011-2012 Member, CCSD Special Education Department, iPad Committee
2003-2011 Member, Carroll County School System, Teacher Induction Program Planning Team
2004-2011 Member, Carroll County School System, Consolidated Application Committee
2007-2011 Trainer, Carroll County School System, *Learning Focused Strategies*
2007-2011 Member, Carroll County School System, Technology Team
2010-2011 Member, Carroll County School System, Root Cause Analysis Team
2010-2011 Co-Chair, Temple High School RTI Committee
2009-2010 Georgia Department of Education Special Education Leadership Development Academy
2009-2010 Member, Temple High School, School Improvement Grant Committee
2007-2008 Member, Carroll County School System, Math Textbook Selection Committee

Innovative Assessment Demonstration Authority Application Assurances for Georgia Pilot Districts

This form assures that each LEA participating in an approved Georgia innovative assessment pilot will:

(1) Continue use of statewide academic assessments in reading/language arts, mathematics, and science required under 34 CFR 200.2(a)(1) and section 111(b)(2) of the Act –
   (i) In all non-participating schools; and
   (ii) In all participating schools for which such assessments will be used in addition to innovative assessments for accountability purposes under section 111(c) of the Act consistent with paragraph (b)(1)(ii) of this section or for evaluation purposes consistent with 34 CFR 200.106(e) during the demonstration authority period;

(2) Ensure that all students and each subgroup of students described in section 111(c)(2) of the Act in participating schools are held to the same challenging State academic standards under section 111(b)(1) of the Act as all other students, except that students with the most significant cognitive disabilities may be assessed with alternate assessments aligned with alternate academic achievement standards consistent with 34 CFR 200.6 and section 111(b)(1)(E) and (b)(2)(D) of the Act, and receive the instructional support needed to meet such standards;

(3) Report the following annually to the GaDOE, for purposes of reporting to the Secretary of the U.S. Department of Education, at such time and in such manner as the GaDOE may reasonably require:
   (i) An update on implementation of the innovative assessment pilot, including –
   (A) The pilot's progress against its timeline under 34 CFR 200.106(c) and any outcomes or results from its evaluation and continuous improvement process under 34 CFR 200.106(e); and
   (B) A description of the pilot's progress in scaling up the system to additional LEAs within the consortium or schools within the LEA consistent with its strategies under 34 CFR 200.106(a)(3)(i), including updated assurances from participating LEAs consistent with paragraph (e)(2) of this section.
   (ii) The performance of students in participating schools at the consortium, LEA, and school level, for all students and disaggregated for each subgroup of students described in section 1111(c)(2) of the Act, on the innovative assessment, including academic achievement and participation data required to be reported consistent with section 1111(h) of the Act, except that such data may not reveal any personally identifiable information.
   (iii) School demographic information, including enrollment and student achievement information, for the subgroups of students described in section 1111(c)(2) of the Act, among participating schools and LEAs and for any schools or LEAs that will participate for the first time in the following year, and a description of how the participation of any additional schools or LEAs in that year contributed to progress toward achieving high-quality and consistent implementation across demographically diverse LEAs in the State consistent with the SEA's benchmarks described in 34 CFR 200.106(a)(3)(iii).
   (iv) Feedback from teachers, principals and other school leaders, and other stakeholders consulted under paragraph (a)(2) of this section, including parents and students, from participating schools and LEAs about their satisfaction with the innovative assessment system;

(4) Ensure that each participating LEA informs parents of all students in participating schools about the innovative assessment, including the grades and subjects in which the innovative assessment will be administered, and, consistent with section 1112(e)(2)(B) of the Act, at the

beginning of each school year during which an innovative assessment will be implemented. Such information must be –

(i) In an understandable and uniform format;

(ii) To the extent practicable, written in a language that parents can understand or, if it is not practicable to provide written translations to a parent with limited English proficiency, be orally translated for such parents; and

(iii) Upon request by a parent who is an individual with a disability as defined by the Americans with Disabilities Act, provided in an alternative format accessible to that parent; and

(5) Provide information to GaDOE, as applicable, so that GaDOE can coordinate with and provide information to, as applicable, the Institute of Education Sciences for purposes of the progress report described in section 1204(c) of the Act and ongoing dissemination of information under section 1204(m) of the Act.

(6) Cooperate with any evaluation that the GaDOE carries out, or arranges for, of the implementation of the pilot.

(7) Transition back to the regular assessment system (Georgia Milestones) if the LEA fails to meet requirements of section 1204 for the duration of the pilot timeline.

(8) Will comply with all requirements of this section for each year that the LEA is participating.

Authorized Representative (Printed Name): Chris Ragsdale	
LEA Name: Cobb County School District	
Signature:	**Date:** 12-17-18

Appendix C:
Georgia MAP Assessment Partnership

Abby Javurek

Abby Javurek joined NWEA in 2018 as the Senior Director of Large Scale Solutions. Prior to NWEA, she was the Director of Accountability Systems for the South Dakota Department of Education, where she saw the state through the implementation of ESEA Flexibility Waivers, the design of two state and district Report Card and Accountability Systems, the creation of the state ESSA plan, the transition from fixed-form paper-and-pencil assessments to online adaptive assessments. She also oversaw the offices of teacher licensure and certification, data systems, educator preparation program approval, and K-12 accreditation. Additionally, Ms. Javurek served in a leadership capacity with the Smarter Balanced Assessment Consortia, most recently in the capacity of Executive Chair, where she helped lead her peers through the transition of fiscal agents, strategic planning, and a successful peer review process. She has additional experience in gender-equity, diversity, and culturally responsive education. Ms. Javurek is working towards a doctorate, expected in December 2019, in Political Science: Public Policy from the University of South Dakota. She also holds a master of science in Industrial Engineering, a program focused on large scale systems thinking and systems improvement, a graduate certificate in Systems Engineering, and a master of arts in sociology, all from New Mexico State University.

Relevant Professional Experience

NWEA

Senior Director of Large Scale Solutions (2018-Present)

- Guides the creation of summative and other innovative large scale solutions in a manner that is customer-centered, comprehensive, and maintains appropriate rigor
- Articulate the vision and strategy for NWEA's state assessment work.
- Serve as a core member of state and large district solution design teams; support solutions across product lines.
- Development of Summative and Innovative Through Year Assessment models.
- Lead initiatives aimed at creating capability and innovation needed for envisioned future success.
- Lead and advocate a strong understanding of current assessment design across multiple markets.
- Identify emerging needs and potential solutions (e.g., accommodations, adaptive models, assessment design, item types, etc.) with a cross-departmental, systems perspective and ensure multiple measures lens is applied consistently across the organization.
- Evaluate and improve design methodology and propose alternatives and solutions to meet needs.

South Dakota Department of Education

Director, Division of Accountability Systems (2012-2018)

- Designed innovative systems in the areas of assessment, accountability, K-20 accreditation, educator licensure and development, and data management; engaged internal and external stakeholders in system development; and created policy to support program implementation.

- Responded to emerging needs in the field due to external conditions, state and federal law, and other factors.
- Informed decisions of key policy makers via data analysis, education, legislative lobbying and advocacy.
- Built critical partnerships at the local, state, and national levels to drive innovation and continuous improvement of educational systems.
- Managed complex assessment, accountability, and data systems to ensure accuracy, technological adequacy, and data security.
- Mentored, developed leadership trainings and trained staff department-wide.
- Oversight of five offices and associated staff including high profile assessment contracts; federal plans; and $200M+ budget.

Smarter Balanced Assessment Consortium

Chair of the Smarter Balanced Executive Committee (2017-2018); Member of the Executive Committee (2015-2017)

- Led member states through decision making processes to craft, monitor, and adjust a consortia strategic plan.
- Led the executive committee in providing oversight of consortia vision and of key executive staff.
- Led state partners through the transition between fiscal agents, including move of staff to new University employment.
- Managed critical partnerships with external stakeholders and thought partners.
- Represented the consortia at national assessment and policy related meetings.
- Served as primary liaison with member state chiefs and deputies to ensure consortia was responsive to emergent needs.
- Served as the primary state voice to consortia staff and contractors to ensure strategic vision was maintained.
- Advocated for the consortia with vendors and with the U.S. Department of Education, including through the peer review process.

South Dakota State University

Adjunct Professor (2013-2018)

- Instruction of: Introductory Sociology, Contemporary Social Problems, Marriage and the Family in Society, Rural Sociology, Marriage and Courtship to adult learners and dual-credit students in face-to-face and hybrid formats.

New Mexico State University Institutional Analysis

Research Analyst Senior/ Institutional Researcher Senior (2007-2012)

- Served as assistant director through multiple leadership changes.
- Evaluation, analysis and presentation of student, HR, and financial aid data at local, state, and national levels.
- Data analysis and reporting of federal IPEDS and Title III/V data for five campuses.
- Data analysis to assist in university and legislative planning, grant evaluation, and accreditation.

- Survey research, Focus group design, and program evaluation for university programs.
- Data analysis for EPSCOR and RISE grants.
- Data analysis and reporting for HLC, NCATE, ABET, CCNE accreditation systems.
- Oversight of assessments to determine "value added" metric of student success, related accountability reporting, and student engagement research and reporting.
- Mentor to graduate students and junior staff.

New Mexico State University at Alamogordo

Adjunct Professor (2006-2014)

- Instruction of: Introductory Sociology, Contemporary Social Problems, Marriage and the Family in Society, Gender Studies, Women's Studies to community college, Air Force, and dual-credit students.
- Developed first online course offerings for the university in the areas of Sociology and Women's Studies.

New Mexico State University NSF ADVANCE/ PAID Grants

Research Analyst / Program Coordinator (2005-2007)

- Program evaluation including survey design, qualitative interviews, workshop and training evaluation, and data analysis.
- Research, data analysis, reporting and coordination workshops around: fair hiring, job search packages, promotion and tenure, curriculum development and alignment, classroom management, assessment and other faculty career development issues.
- Program successful in retention of high quality diverse faculty. Institutionalized as the NMSU Teaching Academy program.
- Research support and writing of proposals and reports for large federal grant projects. Proposals were successful in maintaining a $4.8 million dollar grant at NMSU and for obtaining a $1.4 million collaborative grant.
- Planned and Implemented expansion of mentoring and promotion and tenure programs to three additional NM institutions under the PAID grant program (New Mexico Institute of Mining and Technology, University of New Mexico, and Los Alamos National Laboratory).

Education

- PhD (planned), Political Science: Public Policy, University of South Dakota
- MS, Industrial Engineering, New Mexico State University
- Graduate Certificate, Systems Engineering, New Mexico State University
- MA, Sociology, New Mexico State University

Selected Publications, White Papers, Presentations, and Service

- Board President; Central Region Regional Educational Laboratory (REL); 2017-2018.
- Board Member; Central Region Regional Educational Laboratory (REL); 2012-2017.
- Board Member; North Central Comprehensive Center; 2012-2018.
- Regional Advisory Committee, Subject Matter Expert, US Department of Education; 2016.

- Linking Interim Assessments to Instruction: From Smarter Balanced Interim Assessment Blocks to Playlists. Michael Bunch, Abby Javurek, Heidi Kroog and Patricia Reese. Presentation at the National Conference on Student Assessment; June 2018.
- *Getting Instructionally Actionable Information from Summative Assessment: An Example from Writing Process Analysis*. Peggy Carr, Paul Deane, Abby Javurek-Humig and Randy Bennett. Presentation at the National Conference on Student Assessment; June 2017.
- *Supporting Data Use at State Education Agencies*. Javurek-Humig, Myer, Culberson, Brodersen; Presentation at the National Center for Education Statistics, Stats-DC Conference; July 2016.
- *Every Student Succeeds Act: Making Sense of Federal Changes*. Abby Javurek-Humig; Presentation at the South Dakota Elementary and Secondary Principals Association Annual Conference; April 2016.
- *Making Connections: Assessment, Accountability, and Differentiated Classroom Goal Setting*. Abby Javurek-Humig, Jan Martin, and Matthew Gill; Presentation at the South Dakota Elementary and Secondary Principals Association Annual Conference, April 2016.
- *Accountability Overview: What the future holds*. Abby Javurek-Humig and Laura Scheibe; Presentation at SASD/ASBSD Joint Conference; August 2015.
- *Understanding Assessment Data: Appropriate Uses and Next Steps*. Abby Javurek-Humig and Jan Martin; Presentation at SASD/ASBSD Joint Conference; August 2015.
- *State Accountability and Assessment Roadmap*. Abby Javurek-Humig and Laura Scheibe; Presentation at South Dakota Systems Change Conference; October 2014.
- *Measuring School Performance*. Abby Javurek-Humig and Jan Martin; Presentation at SASD/ASBSD Joint Conference; August 2014.
- *Evaluating Teachers and Principals to Promote Quality and Continuous Growth: A Panel Discussion*. Abby Javurek-Humig facilitator; Presentation at SASD/ASBSD Joint Conference; August 2013.
- *Using Data to Drive Decisions About Your Educational System*. Tamara Darnall and Abby Javurek-Humig; Presentation at SASD/ASBSD Joint Conference; August 2013.
- *Pivot Tables as a Method for Retention Analysis using SAS*. Abby Rose Javurek-Humig and Reed Blalock; Presentation and Workshop at National Association for Institutional Research (AIR) Meetings; May 2009.
- *Retention and Success of STEM Majors*. Biniam Tesfamariam; Abby Rose Javurek-Humig; and Reed Blalock; Presentation and Panel at National Association for Institutional Research (AIR) Meetings; May 2009.
- *The Fallacy of Critical Mass: Female Composition in Academic Departments as a Predictor of Climate Attitudes.* Abby Rose Javurek-Humig; Thesis. Copyright 2007.
- *Society of Women Engineers (SWE) Annual Literature Review*; Lisa Frehill; Abby Javurek-Humig; Cecily Jeser-Cannavale; Spring 2006
- *Navigating Faculty Life: The Promotion and Tenure Process: NMSU ADVANCE P&T Workshops*; Abby Javurek-Humig; Cecily Jeser-Cannavale; and Lisa Frehill; presented at the annual Pacific Sociological Association meetings; Hollywood; CA: April 22; 2006.

Chris Rozunick

Chris Rozunick joined NWEA in 2016 as director of Summative Content. Prior to joining NWEA, Ms. Rozunick created and guided test development solutions for large-scale assessment programs at Pearson. During her more than ten years with this assessment vendor, she held a variety of senior positions and developed an expertise in content standards, item and test specifications, assessment blueprints, test design and construction, fairness, and industry best practices. Ms. Rozunick began her career as a high school science teacher. Ms. Rozunick has a master of science in educational psychology from Florida State University and a bachelor of science in secondary education/physics from the University of Scranton.

Relevant Professional Experience

NWEA

Senior Director, Assessment Solutions (2018-Present)

- Maintains strong understanding of current project status across all projects and new solution opportunities within Content Solutions.
- Ensures overall quality of project materials delivered by the assessment specialists.
- Leads teams that facilitate committee meetings such as item writer workshops, bias review, content review, data review, or standard setting.
- Represents assessment solutions, including summative content, with the Content Solutions team and the larger NWEA team.
- Fulfills the needs of the partner by solving problems.
- Understands culture and ensures team culture builds upon company culture and department identity; cultivate the appropriate actions and behaviors in staff.
- Guides and mentors a team of assessment solutions experts to grow and balance their skills.

Director, Summative Content (2016-2018)

- Maintained strong understanding of current project status across all projects.
- Ensured overall quality of project materials delivered by the assessment specialists.
- Facilitated committee meetings such as bias review, content review, or data review.
- Represented the summative content experts and the larger team.
- Fulfilled the needs of the partner by solving problems.
- Demonstrated understanding of culture and ensured team culture built upon company culture and department identity; cultivated the appropriate actions and behaviors in staff.
- Guided and mentored a team of summative content experts to grow and balance their skills.

Pearson

Senior Assessment Solutions and Design Manager (2014-2016)

- Created and guided solutions for item and test development topics including content standards, item and test specifications, assessment blueprints, test design and construction, fairness, and industry best practices across English Language Arts/Reading, English as a second language, Mathematics, Science, Social Studies, and special education/alternate assessments.
- Provided consultation services to on technical issues related to content and assessment topics, including: implementation of the Programme for International Student Assessment (PISA) 2015 Scientific Literacy Framework, writing of the PISA 2018 Questionnaire Framework, and the PISA for Development program.

Director, Content Development (2012-2013)

- Directed day-to-day operations of the Item and Test Development organization; responsible for organizational design, staffing, and business processes.
- Guided staff on item and test development topics including content standards, item and test specifications, assessment blueprints, test design and construction, fairness, and industry best practices across English Language Arts/Reading, English as a second language, Mathematics, Science, Social Studies, and special education/alternate assessments.
- Provided consultation services to clients on technical issues related to content and assessment topics.

Manager, Content Development, Science and Social Studies-Content Support Services (2011-2012)

- Trained staff members assisted in the development of training materials.
- Supported all content and measurement endeavors during the course of contract implementation such as:
  - Reviewed specifications and documentation of the procedures needed to implement solution.
  - Advised in the implementation of the specifications.
  - Evaluated the results of the specifications.
  - Reported on the results.

Manager, Science Content Services-Content Support Services (2009-2011)

- Supported all content and measurement endeavors during the course of contract implementation such as:
  - Reviewed specifications and documentation of the procedures needed to implement solution.
  - Advised in the implementation of the specifications.
  - Evaluated the results of the specifications.
  - Reported on the results.

Senior Test Development Manager, Content Support Services (2006-2009)

- Managed overall delivery of item and test development services.
- Created communication plans and communicated status with clients.
- Assisted with the development of training materials for item writers, content specialists, and other team members.
- Facilitated item writing workshops and various customer meetings such as content review, sensitivity review, data review, test construction, and forms review.

Project Manager, Content Support Services (2005-2006)

- Supported test development manager and content specialists within Content Support Services in development and execution of item development for the Louisiana State assessment program.

National Center for Educational Accountability

Manager of Data Acquisition (2001-2005)

- Managed state data acquisition, including state-administered assessment and enrollment/demographic data, for fifty states for various projects.
- Developed, administered, and annually updated an online survey of data collection status of all fifty states.
- Processed both student and school aggregated data using statistical, psychometric, and programming skills to meet analysis and reporting needs.

Education

- MS, Educational Psychology: Measurement and Statistics, Florida State University
- BS, Secondary Education/Physics, University of Scranton

Professional Activities and Certifications

- St. Edward's University, PMP® Exam Prep Course, fall 2006
- University of Texas at Austin, Project Management Seminar, spring 2005
- The SAS Austin Training Center, fall 2000-spring 2001
- PMP certified by the Project Management Institute

Publications

- Bay-Borelli, M; Rozunick, C; Way W.; Weisman, E. "Considerations for Developing Test Specifications for Common Core Assessments: Adopting Curriculum Standards-Only the First Step," a white paper from Pearson (December 2010).

Presentations

- Center for Assessment's Annual Colloquium, *International Benchmarking: Rationale, Procedures, and Validation,* May 2014.
- National Center for Education Statistics (NCES) Forum and Summer Data Conference, *Best Practices for School Improvement: Data in Action,* July 2004.
- U.S. Department of Education High School Summits: Billings, Montana; Atlanta, Georgia, and Cleveland, Ohio, *Assessment, Accountability, and Data with Meaning for Students, Teachers, and Leaders,* Spring 2004.
- NCES Forum and Summer Data Conference, *Key Elements of Statewide Data Collection Systems Used for School Improvement,* July 2003.
- 33rd Annual National Conference on Large-Scale Assessment, With M. Hudson and L. Goudy, *Educator Empowerment: Using Assessment Data in Nuts and Bolts Ways for School Improvement,* June 2003.
- 15th Annual MIS Conference, with N. Smith, One Model, Multiple States: Using Data to Improve Education, March 2002.

Dr. Christina Schneider

Dr. Christina Schneider joined NWEA in 2016 as the Senior Director of Psychometrics, where she oversees Ph.D. level scientists working on summative assessment contracts and sets the technical direction for those contracts. Prior to NWEA, she was a Senior Associate at the National Center for the Improvement of Educational Assessment, Inc. (NCIEA), where she advised national assessment consortiums, states, districts, and schools on student learning, psychometrics, hand scoring, and policy issues. Dr. Schneider has published widely on topics including formative assessment, automated essay scoring, standard setting, and test accommodations. She led psychometric work on large-scale assessment programs such as Florida, Wisconsin, and West Virginia, and automated essay scoring studies for Smarter Balanced, West Virginia, and the Automated Scoring Assessment Prize. Forty percent of states currently use the Achievement Level descriptor (ALD) framework she co- authored. Dr. Schneider has a doctorate in educational research, a master of educational research, a master of music education, and a bachelor of music education, all from the University of South Carolina.

Relevant Professional Experience

NWEA

Senior Director, Psychometrics (2016-Present)

- Manages a team of psychometricians, statistical analysts, and technical writers who conduct user testing and deployment of blueprint compliant computer adaptive tests.
- Establishes standard work processes that facilitate effective collaboration through documentation of work specifications, standard operating procedures, and audit trails.
- Leads customized assessment design when the development focus is principled with a specialty focusing on learning progressions and/or ALDs.

NCIEA

Senior Associate (2015-2016

Associate (2013-2015)

- Gave technical expertise to national assessment consortiums, states, districts, and schools regarding student learning, psychometrics, hand scoring, and policy issues.
- Published research addressing formative assessment, automated essay scoring, standard setting, and test accommodations.
- Researched the development, research, and validation of teacher practice measures in formative assessment.
- Supported South Carolina’s roll-out of a formative assessment based student learning objective model.

CTB/McGraw Hill

Research Manager (2011-2012)

- Managed and provided psychometric leadership to a team of research scientists, research associates, and standard-setting specialists who worked primarily on custom contracts.
- Led the evaluation and deployment of automated essay scoring engines for formative and high-stakes projects, including setting the statistical and rule-based filters for detecting aberrant student responses.
- Led the psychometric work on multiple custom contracts that used item response theory scaling and equating and consulted with senior state department of education staff across multiple customer contracts to ensure testing programs psychometrically met policy needs.
- Designed and conducted peer review approved standard settings and achievement level descriptor workshops for multiple statewide assessments.
- Co-authored an innovative development framework for ALDs used by the Smarter Balanced Assessment Consortium (SBAC) and other states as they developed Common Core State Standards-aligned ALDs to meet multiple purposes.
- Developed a formative and classroom assessment curriculum for the state of South Carolina.

Research Scientist (2006-2011)

- Led psychometric work teams and customer communications for custom contracts using pre-equated designs with post-equated verifications and contracts using post-equated only designs
- Conducted field-test analyses, monitored form selection, and conducted field test and operational item response theory scaling and equating with experience using 1PL, 3PL, and partial-credit models.
- Monitored technical quality of horizontal and vertical scales, designed and oversaw sampling of students for item calibration, and designed and conducted research studies for statewide testing programs.
- Designed and conducted peer review approved standard settings for multiple statewide assessments in reading, mathematics, science, social studies, and English language proficiency using the Bookmark and Angoff methods, as well as designed model building and implementation studies of custom and shelf automated essay scoring engines.

South Carolina Department of Education

Psychometric and Data Analysis Group Coordinator (2005-2006)

- Managed the psychometric and data analysis personnel within the Office of Assessment.
- Monitored contractor technical work and technical reports for the South Carolina statewide testing program and the Office of School Quality Benchmark Assessments.
- Facilitated development of performance level descriptors for English language arts, mathematics, and science for the Palmetto Achievement Challenge Tests; developed technical portions of the peer review submission for English language arts and mathematics.

Education

- PhD, Music Education, University of South Carolina
- MEd, Educational Research, University of South Carolina
- MME, Music Education, University of South Carolina
- BM, Music Education, University of South Carolina

Selected Publications, White Papers, Presentations, and Service

- Schneider, M.C. and R.L. Johnson. (TBD) *Creating and Implementing Student Learning Objectives to Support Student Learning and Teacher Evaluation.* Under contract. Taylor and Francis.
- Schneider, M.C., K.L. Egan, and B. Gong. (in press). "Defining and Challenging Fairness in Tests Involving Students with Dyslexia: Key Opportunities in Test Design and Score Interpretations." *In Test Fairness in a New Generation of Large Scale Assessments,* edited by H. Jiao and R. W. Lissitz.
- Schneider, M.C., B. Gong, and K. Egan. 2016. "Testing Accommodations for Students with Dyslexia: Key Opportunities to Understand Student Thinking." NCIEA. Retrieved from http://www.nciea.org/publication_PDFs/Testing%20Accommodations%20for%20Students%20with%20Dysle xia.pdf
- Schneider, M.C., K.L. Egan, and B. Gong. October 2015. "Comparability in Non-Standard Conditions: Real-World Problem Solving." Paper presented at the fifteenth-annual meeting of the Maryland Assessment Research Center Conference, College Park, Maryland.
- Schneider, M.C., J. Smith, and A. Davidson. April 2014. "Measuring Teacher Skill in Formative Assessment." Paper presented at the annual meeting of the NCME, Philadelphia, Pennsylvania.
- Schneider, M.C., and K. Egan. 2014. "A Handbook for Creating Range and Target Performance Level Descriptors." NCIEA. Retrieved from http://www.nciea.org/publication_PDFs/Handbook%20091914.pdf
- Hall, E., D. Gagnon, J. Thompson, M.C. Schneider, and S. Marion. 2014. "State Practices Related to the Use of Student Achievement Measures in the Evaluation of Teachers in Non-Tested Subjects and Grades." NCIEA. Retrieved from http://www.nciea.org/publication_PDFs/Gates%20NTGS_Hall%20082614.pdf
- Schneider, C., and H. Andrad, editors. 2013. "Teachers' and Administrators' Use of Evidence of Student Learning to Take Action." *Applied Measurement in Education* 26(3).
- AERA Division D Significant Contribution to Measurement committee member, 2010-2013.

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Dr. Garron Gianopulos

Dr. Garron Gianopulos joined NWEA in 2018 as a Senior Research Scientist. Prior to NWEA, he was a Psychometrician at North Carolina State University, College of Education, the North Carolina Department of Public Instruction (NCDPI), Professional Testing and FirstPoint Management Resources, and the Institute for Instructional Research and Practice Dr. Gianopulos joined NCDPI in 2010 just as the state was adopting the common core state standards. As a psychometrician, he lead the development of end-of-year and end-of-course summative assessments in Mathematics and state-developed interim assessments in English Language Arts, Mathematics, Science, and History, now known as the NC Final Exams. In 2014, he joined a team of interdisciplinary researchers at NC State in a project to develop a suite of through-year diagnostic assessments based on an innovative digital learning map for middle-grade mathematics centered around learning trajectories. During his tenure at NC State, Dr. Gianopulos served on the NC technical advisory group supporting DPI until his transition to NWEA. Dr. Gianopulos holds a doctorate in Curriculum and Instruction: Educational Measurement and Research and a master of education in Curriculum and Instruction: Measurement and Evaluation from the University of South Florida, and a bachelor of arts in Ministry/Theology from Southeastern University.

Relevant Professional Experience

NWEA

Senior Research Scientist (2018-Present)

- Plans, documents, coordinates and leads projects and research studies that include sampling designs, DIF analysis, item calibration, linking, scaling, and equating with the 1PL, 2PL, 3PL, and partial credit models.
- Designs, develops, and documents technical and operational procedures and statistical guidelines for assigned areas.
- Develops SAS and R code to conduct routine item and score analyses.
- Provides guidance to project teams in completing their work and acquiring skills.
- Develops plans, work flows, and documentation of quality control processes.
- Independently provides consulting support to internal and external clients.
- Conducts research, publishes, and presents at professional conferences on measurement issues.

North Carolina State University: College of Education

Psychometrician (2014-2018)

- Developed SAS code and R code to build, score, and analyze all diagnostic tests (50 tests/750 forms) in the new Scaling Up Digital Design Studies digital learning system
- Conducted confirmatory multidimensional item response theory analyses, dimensionality analyses, multi-group IRT calibrations, and fit IRT models (Rasch and PCM) to produce calibrated item banks for scaling purposes
- Developed SAS and R code to generate item characteristic curves, item information functions, histograms, Wright Maps, and heatmaps for dashboard displays

- Authored technical reports; co-authored grant proposals, developed and gave presentations at professional conferences; managed databases, interfaced with software programmers for product development, communicated extensively with team
- Developed measurement techniques to support diagnostic and differentiated assessment within the context of personalized learning
- Identified psychometric models and methodologies for diagnosing student needs, measuring growth, and reporting on student progress

North Carolina Department of Public Instruction

Member, Technical Advisory Group (2014-2018)

- Participated in meetings to review technical aspects of the NC Department of Public Instruction's accountability and assessment program. I provide technical advice and recommendations relevant to the reliability, validity, and fairness of the testing program.

Psychometrician (2010-2014)

- Responsible for the psychometric quality of multiple end-of-course (EOC) and end-of-grade (EOG) assessments. Primary responsibility were the common core aligned EOG and EOC assessments in Mathematics and Science
- Developed a plan to ensure test items align to the cognitive rigor of the common core state standards for English Language Arts and Mathematics
- Produced custom programs in SAS for scoring and analyzing 47 high-stakes tests
- Used BilogMG and IRTPRO software to estimate item response theory (IRT) parameters
- Conducted exploratory and confirmatory factor analyses
- Performed large sample multi-group concurrent calibrations
- Constructed and pre-equated test forms using IRT and classical item parameters
- Conducted mode studies of paper and online (computer based) forms
- Developed SAS code to score a variety of item types
- Developed blueprint and form layout files for content experts
- Wrote code in SAS to implement DIF analysis
- Conducted usability studies of technology enhanced item types
- Produced written technical reports and reviewed technical reports written by vendors
- Performed linking studies using equipercentile equating and logistic regression
- Developed item maps for standard setting studies
- Created matched samples for special studies
- In collaboration with peers, developed a five year psychometric plan
- Actively participated in the psychometric workgroup of the Smarter Balanced Assessment Consortium
- Planned and conducted training for test specification meetings with content experts

Professional Testing

Psychometrician (2007-2010)

- Managed six certification programs
- Conducted item writing/review workshops, cut score studies, and job analyses
- Developed and maintained scoring, equating, and item history programs in SAS
- Developed IRT calibrated item banks using concurrent and separate calibration methods
- Performed IRT true score equating
- Produced monthly dashboard reports for over 50 test forms for international Food Safety Exam stakeholders
- Equated translated certification exam forms across seven languages
- Assembled test forms using Automated Test Assembly software
- Performed item bias studies and prepared item analysis reports
- Conducted psychometric training courses

Institute for Instructional Research and Practice

Psychometrician (2005-2007)

- Developed and maintained scoring, equating, and item history programs in SAS
- Managed scoring and equating process for Florida Educational Leadership Exam (FELE)
- Prepared technical reports for the Florida Teacher Certification Exam (FTCE) and FELE pertaining to test reliability, inter-rater reliability, item quality, and item bias
- Managed item histories for 52 tests
- Analyzed job skills surveys

Capital One Financial Corporation

Instructional Designer/Corporate Trainer (1998-2005)

- Managed instructional design and new hire training projects supporting a staff of more than 300 employees
- Created print and computer-based training materials, including paper/pencil and computer-based surveys and knowledge tests
- Conducted training classes
- Conducted job analyses and needs assessments
- Provided statistical consultation to quality assurance department in performance improvement efforts
- Conducted training program evaluations
- Developed and analyzed customer satisfaction surveys

Education

- PhD, Curriculum and Instruction: Educational Measurement and Research, University of South Florida
- MEd, Curriculum and Instruction: Measurement and Evaluation, University of South Florida
- BA, Ministry/Theology, Southeastern University

Selected Publications, White Papers, Presentations, and Service

- Confrey, J., Gianopulos, G., McGowan, W., Shah , M., & Belcher, M. (2017). *Scaffolding learner-centered curricular coherence using learning maps and diagnostic assessments designed around mathematics learning trajectories*. ZDM Mathematics Education, 49(5), 717–734.
- Confrey, J., Gianopulos, G. G., Hennessey, M., & Jones, R. S. (2015). *SUDDS digital learning system and learning map*. Report to the Bill & Melinda Gates Foundation; July 2015.
- Confrey, J., Jones, R. S., & Gianopulos, G. (2015). *Challenges in Modeling and Measuring Learning Trajectories. Measurement: Interdisciplinary Research and Perspectives*, 13(2), 100 105.
- Mottley, M. and Gianopulos, G. (2014). *Moving Beyond Math & Reading 3-8: How Value-Added Models Can Incorporate Other Types of Assessments*. Presentation at National Conference on Student Assessment. New Orleans, LA.
- Gianopulos, G., Vineyard, R. and Sinclair, N. (2013). *Transitioning Reporting Assessment Results: From Performance Status to Achievement Growth.* Presentation at National Conference on Student Assessment. National Harbor, Maryland.
- Gianopulos, G., McCormick, E., Fitzpatrick, R. and Gallagher, C. (2013). *Building Coherent Post-NCLB Accountability Systems That Incorporate Multiple Components*. Presentation at National Conference on Student Assessment. National Harbor, Maryland.
- Goldschmidt, P., Gong, B., Olsen, B., Beaudoin, J., d'Brot J., and Gianopulos, G. (2012). *Choosing a Growth Model: Does It Make a Difference In Real Life?* Presentation at National Conference on Student Assessment. Minneapolis, MN.
- Gianopulos, G. (2011). *Scaling, linking, and measuring growth with through-course summative assessments.* Invited discussant at the Invitational Research Symposium on Through-Course Summative Assessments sponsored by the Center for K-12 Assessment and Performance Management at ETS (Pat Forgione, Chair).
- Gianopulos, G. (2011). *Uses and Misuses of Subscale Scores*. Presentation at Collaborative Conference for Student Achievement. Greensboro, NC.
- Gianopulos, G. (2010). *How to Decide if You Should Equate*. Presentation at Association of Test Publishers. Palm Springs, California.
- Gianopulos, G., John Ferron, J. M., Dedrick, R. F., Chen, Y.-H., & Stark, S. (2009). *The Robustness of Rasch True Score Preequating to Violations of Model Assumptions.* Presentation at the annual meeting of the American Educational Research Association, San Diego, California.
- Gianopulos, G. (2008). *The Robustness of Item Response Theory Preequating to Violations of Model Assumptions Under Equivalent and Nonequivalent Populations*. University of South Florida, United States -- Florida. ProQuest Dissertations database. (Publication No. 3376181).

Georgia Center for Assessment

October 31, 2018

Georgia Center for Assessment
1985 New Jimmy Daniel Rd.
Athens, Georgia 30606

Dear Ms. Javurek,

The Georgia Center for Assessment (GCA) provides this letter in support of Northwest Evaluation Association's application to the US Department of Education related to the Georgia Innovative Assessment Pilot Program under Georgia Senate Bill 362. GCA expresses a willingness to collaborate with NWEA by providing facilitation services to engage Georgia educators in the assessment development process in order to reflect their voice. Our history and work with educators across the state positions GCA to provide an authentic context of the Georgia Standards of Excellence with an understanding of the nuances of schools and districts who are a part of this consortium.

We look forward to partnering to support districts in the state of Georgia.

Sincerely,

Dr. Jeff Barker, Director

Kay Elder, Associate Director

UNIVERSITY OF GEORGIA

The Georgia Center for Assessment
University of Georgia College of Education
1985 New Jimmy Daniel Road
Athens, Georgia 30606

Phone: (706) 542-5231
Phone: (888) 392-8977
Fax: (706) 542-5676
Website: http://gca.coe.uga.edu/

Jennie M. Persinger

jennie.persinger@barrow.k12.ga.us
Work: (770) 867-4527

EDUCATION

Rising Stars Leadership Certification Program (2013)
Northeast Georgia RESA ~ Winterville, GA

Specialist in Education (2000); Major: Instructional Technology
University of Georgia ~ Athens, GA

Master of Education (1998); Major: Middle Grades
University of Georgia ~ Athens, GA

Bachelor of Science in Education (1996); Major: Middle Grades
University of Georgia ~ Athens, GA

CERTIFICATION

Certification ID: 134434
Expires 6/30/2021
Media Specialist (P-12)
Middle Grades (4-8), Language Arts, Social Studies
Educational Leadership

EXPERIENCE

BARROW COUNTY PROFESSIONAL DEVELOPMENT CENTER 2013-Present
Testing and Data Coordinator

- Oversee and manage the administration of the testing program which includes ordering tests, test security, coordinating of dates and procedures, and the distribution and collection of tests.
- Work one on one with teachers to develop meaningful and standards-based Georgia Alternate Assessment portfolios.
- Compile and publish test results in accordance with state standards.
- Assist with interpreting and analyzing test results.
- Assist with collection and reporting of all student information which includes but is not limited to FTE, Student Records, and all state and federal reporting requirements.
- Compile periodic student counts as required.
- Prepare data reports as requested.
- Serve as district coordinator for the Georgia Online Formative Assessment Resource (GOFAR).
- Assist with reviewing, evaluating, and recommending programs to improve test scores.

- Develop and implement training sessions for school-based test coordinators.
- Coordinate district media specialists.

WESTSIDE MIDDLE SCHOOL ~ Winder, GA 2005-2013
Media Specialist
Planned, directed, implemented, and evaluated the library program.

HOLSENBECK ELEMENTARY SCHOOL ~ Winder, GA 2004-2005
Media Specialist
Planned, directed, implemented, and evaluated the library program.

PROFESSIONAL DEVELOPMENT CENTER ~ Winder, GA 2002-2004
Technology Integration Specialist
Encouraged the integration of technology to enrich and support teaching and learning.

APALACHEE HIGH SCHOOL ~ Winder, GA 2001-2002
Media Specialist
Planned, directed, implemented, and evaluated the library program.

STATHAM ELEMENTARY SCHOOL ~ Statham, GA 1999-2001
Media Specialist
Planned, directed, implemented, and evaluated the library program.

WESTSIDE MIDDLE SCHOOL ~ Winder, GA 1997-1999
6th Grade Language Arts Teacher

PROFESSIONAL MEMBERSHIPS

Professional Association of Georgia Educators:
Building Contact, System Contact, Board of Directors

SKILLS

BusinessObjects Web Intelligence, Lumira Discovery 2.1, TKES Credentialed Evaluator, Instructional Technology, Technology Integration, Professional Learning, Library Management, Collection Development, Middle School Education, Communicating with Stakeholders

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SERVICE

Piedmont Regional Library System, Barrow County Board of Library Trustees
Atlanta Track Club, Volunteer, Crew Chief

REFERENCES AVAILABLE UPON REQUEST

MICHAEL V. TAPPLER, PH.D.

Metropolitan Atlanta

EDUCATION

Capella University, Minneapolis, MN
Ph.D. in Education/Distance Learning **2006**
Dissertation: "The Significance of Learning Styles Preference of Online Graduates and its impact on Learner Success.
Graduated Magnum Cum Laude

Kennesaw State University, Kennesaw, GA
Education Leadership Certificate (MA Equivalent) **2004**
Thesis: ISLLC Standards and their influence on leadership in Georgia.

University of Phoenix, Phoenix, AZ
M.A. in Education / Curriculum & Technology
Thesis: Efficacy study on the Impact of parental involvement in a Title I school. **2002**

Alabama State University
B.S. in Education
Early Childhood Education (PK-8) **1999**
Minor: Business / History
Thesis: Educational Philosophy of Constructivist in the 20th Century

CERTIFICATION

Education Research & Measurement University of Illinois Chicago (2007)

Educational Leadership (P-12)	FLD704 – June 2017
Early Childhood Education (P-5)	FLD808 – June 2017
Middle Grades (4-8)	FLD809 – June 2017
Middle Grades (4-8) Language Arts	FLD853 – June 2017
Middle Grades (4-8) Science	FLD852 – June 2017
Middle Grades (4-8) Social Science	FLD854 – June 2017

AWARDS

Outstanding AERA Reviewer Division H	
Outstanding AERA Reviewer Division G & H	2013
Presidential University Instructor Award – Argosy	2011
Marquis Who's Who in Education	2010
Cambridge Who's Who in Educational Leadership	2009
NAACP Freedom Fighters Award	2007
	2006

EXPERIENCE

District Administrator

Psychometrician - Clayton County Public Schools **2015 – Present**

Duties & Responsibilities:

Construct tests and interpret results for the purpose of assessing a person's intelligence, personality, skills or other psychological attributes. To ensure the accuracy and validity of exams and gather data that will be instrumental to improving the performance of an individual, diagnose or determine aptitude for district assessments.

Purdue University

Educational Technology **2014 – 2015**

EDCI 66000 Seminar in Educational Technology

Course Description:

This seminar is designed to be experiential where students learn about the applications of instructional design and educational technology in K-12 and higher education settings, corporate and R&D environments, and consulting. In addition, students are engaged in discussions with Ed-Tech faculty about topics related to the program and program requirements, such as comprehensive exams and the portfolio.

Educational Technology **2013 – 2016**

EDCI 52800 Human Performance Technology

Course Description:

This course provides an introduction to the field of Human Performance Technology (HPT). It examines basic concepts and principles of human performance, the theoretical underpinnings of the field, research and application literature, and various approaches to solving human performance problems. A systematic approach to the analysis, design, development, implementation and evaluation of performance improvement interventions within organizations is emphasized.

Mercer University

Educational Technology **2005 – 2015**

EDUC 210 Instructional Technologies for Teaching and Learning Committees

Course description:

This course will cover technologies utilized in the early childhood/middle grade classroom. Emphasis is placed on organizing, planning and assessing learning while using various technological tools. Students will utilize new technological strategies to create constructivist-based learning environments that emphasize the following: 1) student-centered learning; 2) multisensory stimulation; 3) multimedia for teaching; 4) collaborative work.

Argosy University Atlanta

Educational Leadership **2007 – 2014**

E7111 Introduction to Advanced Academic Study and Writing
Course descriptions:
This course demystifies the doctoral level research process and provides a solid foundation for academic writing by analyzing and evaluating current research articles, literature reviews, and dissertations. Emphasis is placed on APA style guidelines, preparation for the doctoral comprehensive examination, and university publication requirements. It also includes a self-inventory based on state and national standards and develops a self-improvement plan that is the basis for activities during internship.

E7033 Leading and Managing Change in a Diverse Society
Course description:
This course focuses on concepts and strategies for managing change in educational, human services, and business settings. Special consideration is given to the recognition of human diversity and strategies that empower both individuals and the organization. Processes, procedures, and skills for change are presented in terms of situational considerations and implications.

E7245 Teaching and Effective Learning Strategies
Course description:
The use of best practices and sound research on helping all students to learn more successfully is the core of this course. Issues related to human development theory, proven learning strategies, modern technologies; barriers to learning, and concern for diversity are studied for their impact on effective teaching and learning. The development of lifelong learning is emphasized. A field experience is part of this course.

E7834 Writing for Research and Professional Publications
Course description:
This course builds on the introduction to the dissertation process provided in W7000 and leads students through the university research proposal, formation of a dissertation committee, application for human subject review, and revision of dissertation research for journal publication. Students will develop their research questions or hypotheses and submit a finished research proposal or prospectus that is required before beginning the dissertation sequence.

Graduate Research Courses

E6100 Introduction to Research
Course description:
This course introduces the theory and practice of research in the field of education. Both design and analysis issues are discussed. The student is involved in both research review and design relevant to his/her professional level of certification. Action research will be the research design of major focus.

R7001 Introduction to Research Methods
Course description:
This course is taken before all other research courses. The course offers a brief introduction to the philosophical underpinnings of research inquiry. It offers an overview of quantitative, qualitative, and mixed-method research methodologies used across the disciplines of business, education, and behavioral sciences. Emphasis is placed on the establishment of appropriate connections between research questions and methodologies.

R7031 Methods and Analysis of Quantitative Research
Course description:
This introductory course focuses on descriptive and inferential statistical methods across the disciplines of business, education, and behavioral sciences. The material presented will include conceptual understanding and practical application of data entry, analysis, and interpretation. The student will critique descriptive research studies. Computer applications, logistical issues of data collection, and ethical considerations are examined. Upon completion of this course, students will be able to produce a final project that will include application, analysis, and interpretation of a data set. It is recommended that students have a minimum working knowledge of basic Excel or SPSS functions before taking this course.

R7035 Methods and Analysis of Qualitative Research
Course Description:
This course introduces the assumptions, theories, and processes of qualitative inquiry. The purpose of this course is to provide students with the theoretical foundations necessary to understand qualitative inquiry and to enhance their abilities to conduct qualitative research and evaluation.

R7036 Program Evaluation Methods
Course description:
This seminar emphasizes the acquisition of knowledge and skills in program evaluation methodology. Six alternative evaluation approaches are surveyed, with a focus on developing a management/decision-oriented evaluation plan. This seminar also serves as a practicum for the conceptualization and development of a doctoral research study that employs a program evaluation model.

R7037 Survey Techniques
Course description:
This quantitative course provides students with skills necessary for the survey research process used across the disciplines of business, education, and the behavioral sciences. The goal is to familiarize students with survey design and analysis. Approaches include item construction, sampling, reliability, validity, and data analysis and interpretation using SPSS. The final product is a completed prospectus reflective of the survey design.

Higher Education

E6504 Impact of Technology and Its Applications in Student Services
Course description:
This course provides administrators an overview of current and emerging technology applications to promote the development and implementation of effective services for student success. An analysis of program and institutional needs, mandates and federal imperatives, as well as personnel roles and services will be considered in the planning and implementation of technology applications in student services.

Education Technology

E7801 Instructional Technology Planning & Management
Course description:
This course provides participants with a basic understanding of the instructional applications of modern technology. Participants will gain an understanding of the philosophy and purposes behind instructional technology as well as strategies for its integration into the classroom. Major topics include the synthesis of concepts, knowledge and skills of the instructional technologist and distance educator, future trends in the field, strategic planning for the professional, refining roles, and responsibilities of the leader in the field.

E7802 Integrating Technology into the Classroom
Course description:
Practical integration of technology into the curriculum, with emphasis on content-appropriate planning, teaching, assessment, and management strategies, evaluation of educational technology tools, and the design of technology-enhanced environments for new teaching and learning roles. This course will be applicable for both K-12 and higher education environments. Learners will apply constructivist-learning theory to planning of technology-integrated lessons. Students will apply databases, spreadsheets, the Internet, web design, robotics, and programming software to a variety of academic settings.

E7803 Instructional Design
Course description:
This course provides students with an in-depth exploration of the instructional design process, from analysis through evaluation and implementation, and includes practice in all phases. The course focuses on design issues including course planning, selection of instructional strategies, assessment of instruction, and course revision evaluation and revision. Students practice the design of effective instruction based on principles from instructional design theory. This course will be applicable for both K–12 and higher education environments.

E7805 Distance Learning Technologies and Teaching Method
Course description:
This course examines the concepts, technologies and issues related to the development and delivery of distance education. The learner will explore the theory and history of distance education, current technologies in distance learning, components beyond the course website of a distance education system, course design and development, technology and media, instruction and interaction, and policy and administration in distance education.

Walden University
(Part-Time)

Teaching and Learning 2007 – Present

EDAD Leading to Promote Learning
Course Description:
Research has considerably expanded our knowledge of teaching and learning in recent years. These gains have resulted in a new paradigm for the design and assessment of learning experiences. In this course, candidates will 1) advance their understanding of research methods as they examine literature about design and assessment and 2) apply research-based principles to design a project to develop learning experiences for a specific population of learners, whether on-site, online, or through a hybrid model.

Graduate Research Courses
EDUC 8025 Quantitative Statistics
Course description:
This research course is designed to provide an understanding and working knowledge of key quantitative data collection and analysis concepts. It approaches statistics from a problem-solving perspective with emphasis on selecting appropriate statistical techniques for various research designs and on interpreting and reporting findings. The important outcome is that each doctoral student will have an understanding of quantitative data analysis and be competent in reading, discussing, and applying statistical concepts and data results from quantitative studies.

EDUC 8015 Research Approaches

Course description:

Educational leaders need to be well informed about current developments in their fields of expertise. This course addresses the role of research in generating and testing theory, as well as in solving problems and making decisions. It emphasizes the importance of integrity in research and how to study human participants responsibly and ethically. A variety of research approaches, research methodologies, and research designs are explored. The components of research design are examined, and students evaluate research for quality of design. Construction of questions for inquiry is explored.

DISTANCE LEARNING COURSE DEVELOPMENT

E6801 The Impact of Technology and Its Applications in Student Services (2011-2012)

Course description:

This course provides administrators an overview of current and emerging technology applications to promote the development and implementation of effective services for student success. An analysis of program and institutional needs, mandates and federal imperatives, as well as personnel roles and services that will be considered in the planning and implementation of technology applications in student services.

E7805 Distance Learning Technologies and Teaching Method

Course description:

This course examines the concepts, technologies and issues related to the development and delivery of distance education. The learner will explore the theory and history of distance education, current technologies in distance learning, components beyond the course website of a distance education system, course design and development, technology and media, instruction and interaction, and policy and administration in distance education.

E7803 Instructional Design

Course description:

This course provides students with an in-depth exploration of the instructional design process, from analysis through evaluation and implementation, and includes practice in all phases. The course focuses on design issues including course planning, selection of instructional strategies, assessment of instruction, and course revision evaluation and revision. Students practice the design of effective instruction based on principles from instructional design theory. This course will be applicable for both K–12 and higher education environments.

RELATED EXPERIENCE

President of SSRG, Inc.
2009 - Present *Director of Research and Development*
As director of the SSRG, Inc., sought and responded to public and private RFP's, recruited and managed a team of subject matter experts to work with federal agencies and coordinate services to counties and districts throughout the state. I utilized expertise on program and project management, quantitative and qualitative research methods and analysis, and conducted research. Moreover, I assisted in analyzing the development and implementation of education policy and its impact on social systems.

Verus Government Solutions
Business Development
2010-2011
A certified SDVOSB involved with solutions and staff augmentation in the Finance/Accounting, Healthcare, IT and Human Resources arena. Subcontracted on the Army ADCMS Contract, Army HR Command HRSS-Human Resources Solutions, Administrative support for Price Waterhouse Federal at Walter Reed, as well as a sole source that was awarded to us from the Veterans Administration for RN Case Managers involved with Cardiopulmonary research and monitoring services. Additionally, we are currently worked on RFP's for the US Mint/Training Solutions, Lockheed Martin at the NIH, Kentucky National Guard, and Booz Allen Hamilton for Casualty support and survivor outreach services.

Startup Charter School Developer & Leader
Marietta Charter School, Imagine Schools Inc. **2006 – 2007**

- Built meaningful and sustainable relationships within diverse communities; established thriving interdependent community relations that yield positive results.
- Served as the educational leader, responsible for managing the policies, regulations, and procedures to ensure that all students are supervised in a safe learning environment that met the approved curricula and mission of the school.
- Oversaw the daily project management, logistics, and operations to retrofit a newly renovated 55,000 sq. ft. facility.
- Created and developed marketing plan and strategy for the school to attract and retain families

Leadership & Supervision
Assistant Principal, Cobb County School District **2001 – 2006**

- Assisted in the supervision of students and staff on a daily basis. Directed afternoon transportation for over 550 students.
- Assisted in the supervision, observation and evaluation of staff; assisted in the establishment of team building, which promotes cohesive and inventive processes?
- Created an afterschool Math program that involved parents and volunteers who aided in introducing students to higher-level math concepts to enable students to excel on adaptive testing and Intelligent Quotient exams.
- Demonstrated accuracy and timeliness in grading, record keeping and other administrative tasks.

PUBLICATIONS

Tappler, M. (2012). *Outcome evaluation white paper: dare to achieve: 21st clcc, sylvan hills middle school.* Atlanta: Social Science Research Group, Inc.

Tappler, M. (2010). Learning with technology, A brief look at current literature. (H. M. McGinnis, Ed.) *Quartely Journal of the Social Science Research Group, Inc. , 1* (3), 3-12.

Tappler, M. (2006). *The significance of learning styles preference and online graduate students and its impact on learner success*. (Doctoral dissertation), Available from Proquest. (9780542771293).

Chames, V., & Tappler, M. U.S. Department of Defense, Alabama Army Reserves. (2005). *White paper: Analytical report for reservist service men morale*. Montgomery: Alabama Reserve Army Command.

FUNDED RESEARCH

Tappler, M., Holmes, M., Fitts, S. Carrollton City Schools, Carrollton Middle School,. (2014). *Middle school response to intervention*. Atlanta: Social Science Research Group, Inc.

Tappler, M., & Benson, V.W. Atlanta Public Schools, B.E.S.T Academy, Professional Development. (2014). *Gender Specific High school Differentiated Instruction*. Atlanta: Social Science Research Group, Inc.

Holliday, H.E., & Tappler, M. Kennesaw State University, Educational Leadership. (2013). *Mother and son community initiative*. Kennesaw: Holliday & Associate.

Tappler, M., MacFarlane, L., DeKalb County School System, Stone Mountain Middle School (2012). *Staff development: Response to intervention; alternative assessments in secondary education*. Atlanta: Social Science Research Group, Inc.

Tappler, M., & Hickerson, D. DeKalb County School System, Robert Shaw Elementary (2012). *Home to school connection for esol families*. Atlanta: Social Science Research Group, Inc.

Tappler, M., Hickerson, D., & George, J. Marietta City Schools, Marietta Middle School. (2012). *Differentiated instruction for the middle school teacher*. Atlanta: Social Science Research Group, Inc.

Tappler, M. (2011). *Psychosocial support: Alternative high school participatory action research* Atlanta: Social Science Research Group, Inc.

Tappler, M. Cobb County School District, Lindley Middle School. (2011). *Having school data make sense: Improve achievement and awareness of how test affect cognitive growth*. Atlanta: Social Science Research Group, Inc.

Tappler, M. Cobb County School District, Lindley Middle School. (2011). *Beyond the bell curve; the correlation among the level of knowledge of staff, the application of school based benchmarks*. Atlanta: Social Science Research Group, Inc.

Tappler, M., Ramsey, M., and Manyam, S. Marietta City Schools, Marietta Middle School (2010). *Connecting with students: Improving the classroom effectiveness of transitional teachers in a middle school to make meaningful growth in academic performance.* Atlanta: Social Science Research Group, Inc.

Tappler, M. Atlanta Public Schools, Institute of School Effectiveness. (2009). *Case study evaluation: Atlanta public schools; new teaching induction program*. Atlanta: MET Life

Meriwether, R., Davis, A. V., & Tappler, M. (2008). *Skill development module for effective training*. Unpublished manuscript, Clark Atlanta University.

NON-FUNDED PROPOSALS

Holliday, H.E. & Tappler, M. Open Society Institute, National Initiatives (2012). *Black male initiative: A rights of passage for boys to become men*. Kennesaw: Holliday & Associate.

Tappler, M. Institute of Noetic Science, Collective Consciousness. (2012). *Shiva project: A study regarding the sense of presence.* Atlanta: Social Science Research Group, Inc.

Lewis, K., & Tappler, M. Fulton County, Urban Development. (2011). *Proposal for Atlanta neighborhood study*. Atlanta: Joint Venture: Globe CORE & SSRG, Inc.

PRESENTATIONS

Tappler, M., & Beates, B. (2011, October). *Navigating the dissertation process*. Delivered at the Ph.D. Residency Atlanta, GA.

Tappler, M., & Cavanaugh, T. (2009, October). *Choosing the right methodology*. Delivered at the Ph.D. Residency Mixed method research, Atlanta, GA.

Tappler, M. (2007). *Norm referenced testing, the norm for the future*. Unpublished manuscript, Presentation for Phi Delta Kappa Kennesaw State University, Kennesaw, GA.

Tappler, M., & Laurent, K. (2006, September). Resourceful Presentations, Inc., Sheritta Hughes (Organizer). *How are your leadership and management skills*? Interpersonal effectiveness, Huntsville, AL.

EDITORIAL MANUSCRIPT

McFarlane, L. (2011). Evaluating the effects of monetary incentives on science and mathematics achievement. M. Tappler & H. McGinnis (Eds.), *Monetary Incentives on Science and Mathematics Achievement* (2 ed., Vol. 2). Atlanta: Social Science Research Group, Inc.

McGinnis, H., Smith, S., & Smith, S. (2010). Predictors of success on reading assessments for students with language disorders. M. Tappler, H. Miller & V. Landu (Eds.), *Predicting Success in Reading* (2nd ed., Vol. 1). Atlanta: Social Science Research Group, Inc.

Hibbert, T. (2010). An evaluation of the implementation of single-gender middle school program. M. Tappler, H. Miller & H. Holliday (Eds.), *Single Gender Learning Environments* (3 ed., Vol. 2). Atlanta: Social Science Research Group, Inc.

McLemore, A. (2009). A comparative analysis of online to face-to-face instructional delivery. In M. Tappler & H. McGinnis (Eds.), *Instructional Learning Delivery* (1 ed., Vol. 1). Atlanta: Social Science Research Group, Inc.

RESEARCH MANUSCRIPT REVIEW

Black, A. (2013). Comparative analysis of the information value generated from vam and regression-based accountability models: Are accountability indicators based on regression residuals as useful as value-added indicators? In M. Tappler (Ed.), *AERA Outstanding Dissertation Award*. American Education Research Association. Retrieved from http://www.aera.net/default.aspx

Schmitt, L. (2012). Program evaluation: Austin independent school grant program summary. In M. Tappler (Ed.), *AERA Outstanding Program Evaluation Award*. *Austin independent school district* (10 ed., Vol. 97). Austin, TX:

BOOK REVIEWS

Cennamo, K., Ross, J., & Ertmer, P. (2010). Technology integration for meaningful classroom use: A standards-based approach. In M. Tappler (Ed.), (1st ed.). Belmont, CA: Wadsworth. www.cengage.com/international

Well, D. (2009). Charter school movement: History, politics, policies, economics & effectiveness. M. Tappler (Reviewer.), *Charter Schools: A Reference Handbook* (2nd ed.). Amenia, NY: Grey House Publishing. Retrieved from http://www.greyhouse.com/charter.htm

Sacks, A. (2009). Special education: A reference book for policy & curriculum development second edition. M. Tappler (Reviewer), *Special Education: A Reference Handbook* (2nd ed.). Amenia, NY: Grey House Publishing. Retrieved from http://www.greyhouse.com/specialed.htm

COMMUNITY INVOLVEMENT

Watch D.O.G.S Clay Elementary – *Chartering member (2012 – 2013)*
WATCH D.O.G.S. (Dads of Great Students) - Engage men, inspire children, reduce bullying and enhance the educational environment at your school. WATCH D.O.G.S. (Dads of Great Students) - Is the father involvement initiative of the National Center for Fathering that organizes fathers and father figures in order to provide positive male role models for the students and to enhance school security. Today, more than **2276 active programs in 41 states** participate in the WATCH D.O.G.S. Program.

Kennesaw State University College of the Arts - *Board Member for the Flourish Luncheon (2011)*
The Annual Flourish Luncheon is presented by the Kennesaw State University College of the Arts to raise funds for endowed and non-endowed scholarships. More than 300 people are expected to attend the event, which has garnered more than $120,000 last year. In 10 years of fundraising events, the college has raised more than $1.5 million. In the last five years, the college has tripled the amount of scholarships awarded

Conference Panel Member *(2008)*
Invited to facilitate at the National Literacy Summit in Chicago, Ill. With a focus on solutions to raise the literacy levels of students in our schools and adults in our community.

Kennesaw Educational Leadership - *Advisory Council (2006-2008)*
Served as a voice for graduate student ideas and concerns about pertinent university issues and, more fundamentally, enhanced communication between graduate students, faculty, and administration throughout the university

Cobb Literacy Leadership Academy – *Committee Member (2002-2004)*
Assisted in aligning the comprehensive literacy curriculum – content standards for all 1-5 subjects and aligning the 2003 language arts adoption coupled with science and social studies vertically and horizontally to state and national standards; test objectives; district resources and; programs; learning domains; pacing suggestions; and benchmarked for levels of academic achievement.

Education for a Sustainable Future (ESF) – *School Site Representative (2005)*
Assembled and implemented a collection of flexible, technology-based educational resources that support learning and action on sustainable development.

Grant Writing - *Committee Chairman (1999-2000)*
Led school wide committee to obtain funding from government and foundation resources for additional school initiatives.

PROFESSIONAL LEARNING

Video Skills & Production - Art Institute of Atlanta – *(2012)*
The Evaluators Institute; Outcome Based Evaluations – George Washington University – *(2011)*
NVIVO 8 for Qualitative Analysis; Model Building for Grounded Theory – QSR - *(2010)*

PASW (SPSS) Risk and Odds for Forecasting – IBM - *(2009)*
LISREL; Causation; Structural Equation Modeling – Scientific Software International – *(2008)*

PROFESSIONAL MEMBERSHIPS & AFFILITAIONS

International Society for Technology in Education (ISTE)
Social Return On Investment Network (SROI)
Institute of Noetic Science (IONS)
National Government Contractors (NGC)
International Association of Black Actuaries (IABA)
American Statistical Association (ASA)
Association for Supervision and Curriculum Development (ASCD)
United Nations Consultant (UNSSC)
Phi Delta Kappa
Alpha Phi Alpha Fraternity Inc.
Prince Hall Grand Lodge
American Education Research Association (AERA)
American Evaluation Association (AEA)
Georgia Center for Nonprofits (GNC)

LAURA V. ORR
CHIEF LEARNING OFFICER
DALTON PUBLIC SCHOOLS

SUMMARY OF PROFESSIONAL EXPERIENCE AND QUALIFICATIONS

2009 – Present **Dalton Public Schools Central Office**

Positions Currently Held *Chief Learning Officer*
Title I Director
Assessment Director

Past Positions Held *CTAE Director*
Migrant Director

1985 – 2009 **Roan School** **Dalton Public Schools**

2003 – 2009 *Principal/Instructional Leader*

1996 – 2003 *Elementary Instructional Specialist/Teaching & Learning Coordinator*

1991-1996 *Title I Teacher*

1985 – 1990 *Kindergarten Teacher*

EDUCATION

2001 Lincoln Memorial University, Harrogate, TN
Ed.S Administration/Supervision

1995 West Georgia College Carrollton, GA
Instructional Supervision Certification

1995 Georgia State University Atlanta, GA
Reading Recovery Certification

1985 University of Georgia Athens, GA
M.Ed Reading Education

1984 University of Georgia Athens, GA
B.S.Ed Child Development/Early Childhood Education
Magna cum laude graduate

John Parker

706-234-1031
jparker@floydboe.net

Educational leader seeking to establish new and profound methods for ensuring a world class learning experience for all students.

EXPERIENCE

Floyd County Schools, Rome GA — *Assistant Superintendent and Chief Academic Officer*

June 2016 - PRESENT

Current Responsibilities: oversee all aspects of teaching and learning and direct all programs that have an academic component. The following departments fall under my supervision: Curriculum and Instruction, Assessment, Professional Learning, Federal Programs, Special Education, School Improvement, Advanced Academic Programs, Move On When Ready, Fine Arts, and Student Services.

Budget: Instructional $1,000,000 SPED $2,500,000 Federal $3,000,000

Walker County Schools, Lafayette GA — *Coordinator of Secondary Instruction*

December 2011 - June 2016

Job responsibilities included: implementation of GSE secondary curriculum, directing all CTAE programs, and coordinating K-12 STEM programs, facilitating dual enrollment opportunities, supervising school counselors K-12, facilitating the district rollout of TKES/LKES, overseeing district accountability process (CCRPI), postsecondary outreach, and business and industry integration.

Budget: CTAE $570,000 SIG $3,600,000 STEM $600,000

Walker County Schools, Naomi Elementary — *Principal*

July 2007 - December 2011

Served in the capacity of instructional leader and managed every aspect of school personnel, budget, professional learning, and accountability.

Budget: Instructional $30,000 General $25,000 Title I $280,000

Calhoun City Schools, Calhoun Primary — *Assistant Principal*

July 2005 - July 2007

Primary duties consisted of GPS math implementation, student discipline, maintenance/operations, and community relations.

RELEVANT 2017 DATA

FCS System Level CCRPI = 77.7 an increase of 7.7 points and a record high for Floyd County

Armuchee High School achieves record high CCRPI score of 96.7

Average ACT score for FCS 21.1 Average SAT score for FCS 1109

Record high FCS graduation rate 94.3

AWARDS

Cave Spring Elementary achieves STEM Certification 2017

Floyd County CCA honored as CCA of the year 2017

Gilbert Elementary School achieves STEM Certification 2016

Ridgeland High School awarded TAG STEM high school of the year 2015

Rossville Middle School awarded TAG STEM middle school of the year 2014

Calhoun City Schools, Calhoun High — *Teacher*

August 2003 - August 2005

English teacher, varsity football coach, varsity track coach

Bartow County Schools, Woodland High School — *Teacher*

August 1999 - August 2003

English teacher, varsity football coach (1st playoff appearance in school history), varsity soccer coach (school record for wins)

Bartow County Schools, Woodland Middle School — *Teacher*

August 1998 - August 1999

ELA teacher, head football coach, head basketball coach

CIVIC/COMMUNITY INVOLVEMENT

Leadership Rome XXXV
Currently enrolled

Rome Noon Optimist Club-Member
2017- Current

Communities and Schools- Board Member
2016- Current

Rome Floyd Chamber Education and Workforce Committee -Member
Current

Floyd County College and Career Academy- Board Member
2016- Current

Leadership Walker County
Graduate

President of the Walker County Principal's Association
Fall of 2009-Fall of 2011

Member of the Walker County Young Farmers Association
Spring 2011-Fall 2016

EDUCATION

Adairsville High School, Adairsville GA — *Honor Graduate - 1993*

The University of the South: Sewanee, Sewanee TN — *Bachelor of Arts, English Literature - 1998*

Lincoln Memorial university, Harrogate TN — *Master of Education, Educational Leadership - 2001*

Lincoln Memorial University, Harrogate TN — *Specialist of Education, Educational Leadership - 2003*

Georgia School Superintendents Association, — *Planning, Funding and Budgeting Institute - Spring 2017*

COMMITTEES AND NOTABLE PRESENTATIONS

Floyd County Schools Executive Cabinet Member
June 2016 -Present

GADOE TKES Planning and Implementation Committee — *Fall of 2014-Present*

PSC STEM Endorsement Standards Committee — *Fall of 2015*

PSC Computer Science Endorsement Standards Committee, — *Fall of 2016*

Saddle Ridge K-8 School Construction and Facilities Planning Committee, — *Fall of 2012-Fall of 2015*

Georgia Educational Technology Conference , — *Presenter 2013*

Georgia Career and Technical Education Conference , — *Presenter 2012*

Georgia School Improvement Grant Conference , — *Presenter Fall 2011-Fall 2014*

INNOVATIONS

FCS Leadership Academy Founder
Fall of 2016

Floyd Virtual Academy (O.A.S.I.S.)
Spring 2018

CCA/Georgia Tech Collaboration (N.E.R.D.)
Fall of 2017

FCS Instructional Expectations
Fall of 2016

FCS Needs Based Support System
Fall of 2017

WCSD/Georgia Tech (G.T.R.I.) Summer Intern Program
Summer of 2015

Cofounder of Walker County First Lego League
Spring of 2014

Walker County STEM mini grants
Fall of 2015

Walker Farms STEM/Ag Collaborative
Fall of 2014

Dr. Hal Brian Ridley

299 Robertson Ave. Tallapoosa, GA 30176Office Phone: 770-574-2500
Brian.ridley@haralson.k12.ga.us

EDUCATION

University of West Georgia – *Carrollton, Ga.* Educational Doctorate (School Improvement) 2011

Dissertation Title: *Teacher Expectations of Economically Disadvantaged Rural Students Among Highly Efficacious Teachers and Those With Low Levels of Teacher Efficacy*

University of West Georgia – *Carrollton, Ga.* Educational Specialist (Ed. Administration) 2006

State University of West Ga. – *Carrollton, Ga*. Master of Music Performance 2001

Berry College – *Rome, Ga*. Bachelor of Music 1993

EXPERIENCE

Haralson County School District – *Tallapoosa, Ga*. **Asst. Superintendent 2016-**

- General supervision of six schools and all central office departments serving 3,700 students
- Oversaw all aspects of K-12 curriculum and instruction.
- Responsible for assessment, student information, instructional software, school improvement, accountability, and all other student services.
- Implemented a district-wide literacy system and led the development of STEM programs in all schools.
- Supervised the implementation of the Infinite Campus student information system
- Increased FTE funding by over $1.3 million dollars per year.
- System-wide improvement efforts have led to significant increases student achievement and the highest graduation rate the history of the school system.
- Designed and opened the Haralson County Rebel Academy Alternative Education Program facility.

Haralson County Middle School – *Tallapoosa, Ga*. **Principal 2009-2016**

- Responsible for all aspects of school administration for a school of 700+ students and over 90 employees. Implemented a turnaround school improvement program
- Demonstrated consistent gains in academic performance and dramatic reductions in discipline.
- Initiated the first C.A.F.E program in Georgia in an effort to increase community involvement and awareness through school outreach activities.
- Pioneered the use of Facebook, Twitter and other social media as parental engagement tools.
- Led HCMS from **NI-8 to AYP**, recognition as a **2012 Breakout School** by the Georgia Association of Secondary School Principals (GASSP) and a **2014 Thinking Maps National Spotlight School**.

Kennesaw State University – *Kennesaw, Ga*. **Leadership Coach 2014-2016**

- Administrative mentoring and coaching for educational leadership students in field experience/internship programs within the Bagwell College of Education of Kennesaw State University (*Assistant Professorship*).

West Haralson Elementary School – *Tallapoosa, Ga*. **Principal 2008-2009**

- Responsible for all aspects of school administration for a school of 700+.
- Developed and implemented innovative school improvement efforts.
- Selected as a **Title I Distinguished School.**

Haralson County Middle School – *Tallapoosa, Ga*. **Asst. Principal 2005-2008**

- Responsible for discipline, transportation, school safety, and facilities.
- Helped to develop and implement improvement programs.
- Served as administrator for the HC Alternative School.

PROFESSIONAL AFFILIATIONS

Georgia Association of Educational Leaders (GAEL) 2005-
Georgia Association of Curriculum and Instructional Supervisors (GACIS) 2016-
Georgia Middle School Association (GMSA) – State Board of Directors 2014-2016
Georgia Association of Secondary School Principals (GASSP) – State Board of Directors 2011-2016
National Association of Secondary School Principals (NASSP) 2011-2016

AWARDS/HONORS

Thinking Maps National Spotlight School - 2014
GASSP Georgia MetLife Middle Level Principal of the Year – 2013
GAEL President's Award – Professional of the Year - 2013
Tallapoosa Lions Club-Person of the Year – 2013
GASSP Breakout School Award – 2012
State Finalist - Parent To Parent of Georgia's Education Impact Award - 2012

PROFESSIONAL PRESENTATIONS

Haralson County WATCH- General Session Plenary Presentation – 2018 Georgia Department of Education Safety in Our Schools Conference. June 23rd 2018. Macon, Georgia.

Building Relationships Through Customer Service-Presented at The Georgia College and State University Annual Middle School Summit. October 10th, 2014. Milledgeville, Georgia.

Haralson County Middle School: CAFÉ & GraduateFirst-A presentation for Georgia's Special Education State Advisory Panel. March 14th, 2014. Macon, Georgia.

Share Your Experience – A Panel Presentation sponsored by the NASSP New Principals Center. Ignite '14 NASSP National Conference. February 7th, 2014. Dallas, Texas.

GraduateFIRST: A System of Student Support– Presented at the General Session of the Department of Education, Division of Special Education Services and Supports State Personnel Development Grant (SPDG) GraduateFIRST Best Practices Forum. December 5th, 2013. Pine Mountain, Georgia.

Promoting a Climate of Success – Presented at the Opening Session of the 2013 GASSP Fall Conference. November 2nd, 2013. Savannah, Georgia.

A Discussion of Current Education Policy (Panel Member) – Panel Presentation for the Andrew Young School of Policy Studies at Georgia State University. October 3rd, 2013. Atlanta, Georgia.

Haralson County Middle School: A GASSP Breakout School - Presented at the General Session of the GASSP Middle School Showcase. September 9th, 2013. Macon, Georgia.

Increasing Student Achievement Through School/Family/Community Partnerships – Presented as a Breakout Session at the 2013 Griffin RESA Summer Leadership Conference. June 10th, 2013. Peachtree City, Georgia.

Increasing Student Achievement Through the School/Family/Community Partnership of the C.A.F.E. – Presented as the Keynote Address at the 2012 Georgia Parent Mentor Partnership Annual Kick-off Conference. September 20th, 2012. Pine Mountain, Georgia.

Planning Parental Involvement for School Improvement. – Presented at the General Session of the Georgia Department of Education's Focus Schools Institute. July 17 & 20th, 2012. Pine Mountain, Georgia.

2915 Muscadine Way
Jefferson, GA 30549
W: 706-742-8292
C: 706-338-9264

Todd R. Nickelsen

Summary

Effective leader with strong planning and organizational skills; accomplished educator with proven ability to teach and motivate learners of all ages while maintaining high interest and achievement; articulate collaborator able to effectively interact with diverse populations at all academic levels

Professional Experience

Jackson County School System, 1660 Winder Hwy, Jefferson, GA 30549

Assistant Superintendent of Teaching and Learning, Jackson County Schools (2015-Present)

- Collaborate with the Superintendent, Directors, Principals and other district and site staff to develop and implement programs designed to ensure a high level of student achievement
- Analyze and interpret results of district, state, and local assessments to determine trends, identify needs, and develop instructional programs
- Facilitate the continuous improvement process by collaborating with district leaders and providing support to school leadership teams
- Oversee all K-12 core instructional programs including CTAE, ELL, Gifted, and Special Education, as well as state and federal programs such as Title I, Title II, Migrant, and Pre K.
- Manage the Teacher Keys Effectiveness System and Leader Keys Effectiveness System for the school district
- Work with District staff to establish a comprehensive professional development program aligned with district goals.
- Demonstrate fiscal responsibility through developing, managing, and monitoring teaching and learning budgets
- Plan and support professional learning communities for district and school leaders
- Serve in an advisory capacity to the Superintendent as related to the overall operation of the instructional program and the district in general
- Partner with the Superintendent and Assistant Superintendent of Operations to plan and prepare for Board of Education work sessions and meetings
- Provide K-12 math and science curriculum support
- Respond to principal, staff, parent and community concerns

Principal, South Jackson Elementary School (2013 – 2015)

- Ensure the delivery of a comprehensive, high quality education program to all students
- Establish and maintain positive relationships with students, teachers, parents, and community members
- Establish and manage financial systems in accordance with the state and system requirements

- Contribute to system-wide activities, including policy and strategic planning and development
- Effectively manage and integrate the resources available to the school
- Facilitate the involvement of staff, students and the community in the development, implementation and review of school policies, programs and operations
- Comply with regulatory and legislative requirements and state/system policies and procedures
- Hire, manage, and evaluate personnel

Oconee River Georgia Youth Science and Technology Center At Northeast Georgia RESA, 375 Winter Street, Winterville GA 30683

Director and Regional Coordinator (2008 – 2013)

- Plan and conduct Georgia Performance Standards (GPS) aligned science, technology, mathematics, and literacy professional learning for elementary and middle schools within the 13 system region
- Build capacity among a diverse range of educators through collaboration/planning of professional learning communities and modeling of standards-based instructional best practices
- Manage the daily operations of the center, including budget, personnel, and payroll
- Analyze regional and system data on a yearly basis to identify target areas for professional learning
- Collect, manage, and report professional learning and student program data to the state GYSTC office and Georgia Department of Education
- Analyze teacher and participant survey data to continuously improve the quality of professional learning and student programs
- Collaborate with other Regional Coordinators to plan and implement state-wide professional learning and student programs
- Enhance community involvement by sponsoring and supporting Family Science Nights throughout the Northeast Georgia region
- Develop and deliver GPS aligned student programs for the 112 schools within the region
- Applied for and received $40,000 in grants from the AT&T and Georgia Power Foundations

Northeast Georgia Regional Educational Service Agency
375 Winter Street, Winterville GA 30683

System Support Liaison (2009-2013)

- Support system-wide initiatives for Barrow County Schools, Jefferson City Schools, and Oconee County Schools by providing and coordinating professional learning, supporting system-level data analysis, preparing schools for GAPSS reviews, and arranging for Northeast Georgia RESA services as needed
- Serve as a RESA supervisor for GaTAPP candidates
- Facilitate the Regional Instructional Coaching Collaborative initiative

Howard B. Stroud Elementary School, 715 4th Street, Athens GA 30601

Math and Science Instructional Coach and Technology Integration Specialist (2006-2008)

- Directed the site-based implementation of the Math and Science GPS, modeled standards-based instruction, and served as the PRISM Lead Teacher
- Planned, implemented, and facilitated, weekly professional learning in regard to the Math and Science GPS and the Investigations © Resources
- Planned and facilitated district professional learning for Clarke County School District elementary school teachers
- Collected, organized, and shared assessment data with teachers and modeled the use of data to guide instruction
- Modeled technology-based instruction, planned and led technology professional learning sessions, and served as the Technology Coordinator
- Collaborated, planned, and co-taught math and science lessons on a daily basis
- Organized and maintained a science instructional lab for all grade levels
- Set agendas and facilitated Leadership Team meetings as the Chairperson for the Leadership Team
- Collaborated with other members of the Administrative Team to evaluate and execute school improvement initiatives

W.R. Coile Middle School, 110 Old Elberton Rd, Athens, GA 30601

Science and Social Studies Instructional Coach/Technology Integration Specialist (2004-2006)

- Created and managed the Integration Lab; an initiative for integrating reading comprehension strategies and technology into science and social studies classes
- Directed the site-based implementation of the GPS in science and social studies grades six through eight
- Planned and led professional learning sessions, staff development training, and Dinner Dialogues
- Collaborated, planned, and co-taught with science and social studies teachers
- Applied for and received two Twenty First Century Classroom grants, the Best Buy Te@ch Award, and the Technology Learning Partnership grant (Approximately $20,000 total in grant funds)
- Collaborated with other members of the Instructional Support Team to evaluate and execute school improvement initiatives and allocate funding
- Implemented technology initiatives and provided technology integration support
- Served as Technology Action Team chair, Steering Committee representative, and Coile Community Congress Facilitator

W.R Coile Middle School, Athens, GA

8th Grade Science Teacher (2001-2004)

- Managed the Coile Science Department and science budget as the science chair
- Headed the eighth grade team as grade level chair

- Planned and implemented professional learning and Dinner Dialogue sessions for all teachers
- Created and implemented a school-wide behavior management system
- Collaborated with school leaders to make school wide decisions as a member of the Steering Committee
- Planned and orchestrated school-wide team building activities as chairperson of the Climate Action Team
- Served as a member of the Technology Action Team

Marbut Traditional Theme School, 5776 Marbut R., Lithonia, GA 30058

Instructional Support Specialist (1998-1999)

- Developed an In-School Suspension Program and Detention Program
- Supported the Assistant Principal with discipline procedures
- Participated in Technology in Education training

Reading Specialist Assistant (1997-1998)

- Taught reading to grades one - six
- Tutored small groups of students in grades two – five as a member of the Reading First Initiative

Special Education Paraprofessional (1996-1997)

- Taught and co-taught multiple content areas in grades one-six
- Participated in Special Education training and Arts in Education training

Educational Experience

University of Georgia, Athens, GA

- Masters in Educational Leadership (2006)
- Masters in Middle Grades Education (2001)

Honors and Activities: Pi Lambda Theta – International Honor Society and Professional Association in Education; Professional Association of Georgia Educators Member (PAGE)

Furman University, Greenville, SC (1992-1996)

- Bachelor of Arts in Philosophy
- Minor in Science/Pre-Med

Honors and Activities: Graduated Magna Cum Laude; Phi Beta Kappa – National Honor Society; Vice President of Phi Sigma Tau – Philosophy Honor Society; Alpha Epsilon Delta – Pre Medical Honor Society; National Association for Outstanding Young Americans

North Georgia RESA

- Gifted Endorsement (2007)

International Experience

University of Veracruz, Xalapa, Mexico (1999)

- Visited Schools and Studied the Mexican Educational System

Arusha / Moshi, Tanzania, Africa (1998)

- Visited Tanzanian Schools
- Established student writing project with a Tanzanian Science Teacher
- Climbed Mt. Kilimanjaro

Publications and Presentations

Publications

Cited in: Fecho, B (2011) *Teaching for the Students: Habits of the Heart, Mind, and Practice in the Engaged Classroom*. Teacher College Press . New York, NY

Cited in: Stanulis, R.N & Manning, B.H. (2002). *K-8 Classroom Methods: From Teacher Reflection to Student Responsibility*. Upper Saddle River, NJ: Prentice-Hall, Inc.

Bryan, L., Nickelsen, T., & Foster, R. *Science Photoautobiographies: A tool for examining the development of a teacher's professional identity*. Electronic Journal of Science Education.

Edwards, E., Fecho, B., Nickelsen, T., and Pintone, A. (2001) *Shaping and Being Shaped by Critical Inquiry Literacy: Four autoethnographic journeys.*

Presentations

Georgia Science Teachers Association Conference (2012). Technology in the K-8 Science Classroom: Digital Performance Tasks, Free Software, Apps and More

Georgia Science Teachers Association Conference (2011). Bag of Math and Science Tricks and Science Lunch and Learn.

Georgia Science Teachers Association Conference (2010). Simple and Effective Formative Assessments; Technology Performance Tasks; Science Lunch and Learn.

Georgia Middle School Association Conference (2006). The Integration Lab-Using Technology to Facilitate Reading Comprehension in Science and Social Studies Classes.

North American Association for Environmental Educators (2005). Using Technology to Facilitate Reading Comprehension of the *Natural Inquirer*.

National Title I Conference (2004). Integrating Technology and Reading Comprehension into Your Science and Social Studies Classroom.

Conference on Interdisciplinary Qualitative Studies-QUIG (2001). Autoethnographic Inquiry.

Annual Ethnography in Education Research Forum, University of Pennsylvania (2001). Critical Inquiry Literacy.

American Educational Research Association – AERA, Seattle (2001). Shaping and Being Shaped by Critical Inquiry Literacy.

Kristina Brooks, Ed.D.

EXPERIENCE

Jasper County Charter System Monticello, Georgia June 2016 - Present
Executive Director of Instructional Support Services and Improvement

- Directed the $2,100,000 Innovative Approaches to Literacy grant
- Directed the MAP implementation K-10 for the district
- Led the implementation of the system's summer innovative STEAM camps
- Facilitated professional learning community for new administrators
- Developed system staffing plan and equity plan based on QBE system allotment sheet
- Increased QBE funds for special education over $280,000
- Monitored the Headstart and Ga PreK budget for program sustainability
- Aligned the required data for the annual charter report to the AdvancEd indicators of quality for cohesive reporting and completed the annual GaDOE annual charter report
- Worked extensively with each school governance team on input for the development of the five year facility plan, school system safety plan, and local school budget and created regular communication protocol with SGT
- Supported the Human Resource Division to include the development of procedures for classified evaluations, investigations including formal letters of direction, complaint processes, and regulatory compliance for FMLA and ADA statutes.
- Led implementation of system-wide performance database for payroll and time management to increase efficiency for payroll
- Supervised the district's summative assessment process for Georgia Alternative Assessment
- Served as system Title IX coordinator
- Managed $4.5 million federal budget at 100% compliance measures and reduced general budget requirements for maintenance of effort by $250,000
- Served as Superintendent designee for Georgia's school improvement leadership institute
- Led Executive Cabinet on the revision of the strategic plan
- Served as complaint officer for Title IX; Title VIB; and parent concerns

Curriculum Advantage, Inc. Peachtree Corners, Georgia 2013 – June 2016
Vice President of Curriculum and Instruction

- Supervised and evaluated department managers and provided coaching and development with quality ROI metrics
- Maintained consistent communication and accountability to Board of Directors for continuous improvement of product and training
- Chaired national superintendent's advisory committee to foster continuous improvement
- Partnered with Digital Promise to create Micro-Credential badges on Higher Order Thinking and Effective Use of Probing Questions
- Led superintendent panels focused on innovative strategies for system leaders with the Education Research and Development Institute (ERDI)
- Operated a $26 million budget to develop key objectives across 6 southeastern states (215 school districts)
- Implemented professional learning in over 225 Georgia schools on integrating technology into instruction

Oconee County School System Watkinsville, Georgia 2008 – 2013
Director of Special Services
- Managed system wide program for IDEA eligible, gifted eligible, and second language learners across 11 schools
- Maintained federal budget meeting compliance measures at 100% each year
- Supervised and evaluated GAA assessment process
- Served as a system data administrator for the GaDOE data portal and Consolidated Application for VIB
- Served as Coordinator of Section 504 of ADA resulting in no findings of non-compliance during investigations

Assistant Principal at Oconee County Middle School
- Created master schedule to offer accelerated and remedial classes
- Completed all required state reporting including the school improvement plan, staffing plan, and professional learning plan
- Evaluated math content, special education, ELL and gifted teachers
- Led professional learning communities on rigor and relevance, effective differentiation, co-teaching, and behavior strategies to increase student engagement
- Implemented safety protocols using GEMA emergency/crisis plan including all monthly required safety drills
- Managed administrative duties for athletics

Georgia Department of Education Atlanta, Georgia 2005 – 2008
Program Manager
- Led state wide school improvement efforts regarding assigned Focus and Priority Schools
- Provided direct support of all state and federal compliance requirements for the 14 school systems located within the Northeast Georgia RESA district (total of 72 schools)
- Implemented state level Reading First professional learning modules
- Collaborated with system administrators, attorneys, and parents in the capacity of Complaint Officer
- Created draft proposals for legislative consideration during the GaDOE State Board adoption of 2007 rules and regulations
- Approved federal budgets and monitored quarterly draws for all systems in the Northeast Georgia RESA district

Hall County School System Gainesville, Georgia 2000 – 2005
Support Coordinator
- Provided direct leadership to all schools (K-12) in west region of Hall County (8 schools- 90% poverty, 2 schools with 90% minority population, 1 school with 90% second language learners)
- Managed FTE process for IDEA and maximized funding to earn all allotted teachers in the west region of the system
- Organized various community and business organizations to design supports to enhance the overall effectiveness of school and system programs
- Served as Learning Specialist for Riverside Military Academy
- Provided school wide professional learning as indicated in school improvement plan
- Supervised formative and summative assessment process and IEP data collection for schools in region

Rockdale County School System Conyers, Georgia 1998 – 2000
Teacher at Memorial Middle School
- Worked as collaborative teacher in Language Arts, Mathematics, and Science for 8th grade
- Chaired the Student Support Team process
- Collaborated with local mental health department to develop a mentoring program for at risk youths
- Served as itinerant teacher for K-5 orthopedically impaired students
- Led after school Hospital/Homebound program (K-12) and managed the homebound system budget
- Implemented assessment process for caseload student and adhered to all testing procedure requirements

Georgia Department of Public Health Lawrenceville, Georgia 1995 –1998
Early Intervention Teacher

- Coordinated between multiple agencies to provide effective transitions of young children into the local public school system (across 3 metro school districts)
- Worked extensively with parents and service providers by modeling the use of evidence based practices to engage children at risk for learning delays
- Created Individual Family Service Plan (IFSP) for infants and toddlers with disabilities

EDUCATION

Regent University Virginia Beach, Virginia June 2010
Educational Doctorate, GPA 3.55

University of Georgia Athens, Georgia August 2003
Leadership and Administration Certification

University of North Georgia Dahlonega, Georgia August 2002
Masters of Education, GPA 4.0

State University of West Georgia Carrollton, Georgia August 1997
Bachelors of Education, GPA 3.69

PROFESSIONAL TRAINING

- Georgia School Superintendent's Association: Superintendent Professional Development Program: 2017-2019 (to complete May 2019)
- American Association of School Superintendents and Administrators: Aspiring Superintendent's Academy: 2018
- American Association of School Personnel Administration: Certified Human Capital Leader in Education: completed August 2018
- Georgia School Superintendent's Association: Digital Learning- Communicating Education: June 2018
- Georgia School Board Association Risk Management: Crisis Prevention and Safety 2017
- Georgia School Superintendent's Association: Planning, Funding and Budgeting Institute 2016
- Georgia School Superintendent's Association: Facilities and Capital Outlay Institute 2016
- Georgia School Superintendent's Association: Executive Coaching Clinic 2015
- National Association of State Directors of Special Education: Leading by Convening 2010
- Georgia Department of Education: Special Education Leadership Academy 2008
- Pioneer RESA: Ruby Payne's "A framework for understanding poverty": 2005
- National Board for Professional Teaching: National Board Certified Teacher 2002

PROFESSIONAL HONORS

- Published with Data Quality Campaign as a contributor with "Administrator Data Literacy": 2018
- Northwest Georgia RESA: curriculum designer for PSC Teacher Academy Preparation and Pedagogy 2018
- GASPA: Best in Class Gold Award for Employee Benefit Process and Retention Practices- May 2018
- GASPA: Best in Class Bronze Award for Strategic Partnerships and Employee Handbook – May 2018
- Northwest Educational Association: Using MAP to impact classroom performance session speaker 2018
- Georgia School Board Association: Data Driven Decision Making Breakout session speaker 2017
- Georgia Leadership Institute for School Improvement (GLISI): Lessons in Leadership co-moderator for 2017
- Charter System Foundation: Governance and Flexibility panel member 2017
- Oconee County Chamber of Commerce: Education Service Award recipient 2013
- Northeast Georgia RESA: Maximizing FTE session speaker 2012

- Georgia Department of Education Pace Setter Award for Outstanding Special Education Services- state award recipient in 2010, 2011, 2012
- Georgia Department of Education: Pyramid of Intervention (MTSS) statewide summit speaker 2007
- President's Scholarship recipient Regent University 2005-2009

COMMUNITY AND ORGANIZATIONAL LEADERSHIP

- Monticello Civic Club: member 2017-present
- Jasper County Mentoring Program: 2016-present (Board Chair 2017-present)
- AdvancEd Engagement Review Team: Georgia Member 2015-2017
- Parent to Parent of Georgia Board of Directors: served as Chair of Personnel Committee 2014-2015
- Georgia Vision for Public Education: served as Steering Committee partner member 2014-2016
- Youth Leadership Oconee: served as chair 2013-2014
- Leadership Oconee: 2012
- Oconee County Chamber of Commerce: served as Chair of Education Committee 2012-2015
- Extra Special People, INC.: served as Chair of Planning Committee 2010-2013
- Georgia Association of Educational Leaders: served on Board of Directors 2010-2012
- Oconee County Civitan Club: member 2009-2014
- Oconee County Youth Football League: served as By-Laws Chair 2008-2011
- Georgia Council of Administrators for Special Education: served as Legislative Liaison 2008-202

Michael W. Huneke II

250 Howard Street
Marietta, GA 30060

Phone: 678-695-7277
E-mail: mhuneke@marietta-city.k12.ga.us

Professional Experience

5/15-Present Marietta City Schools Marietta, GA

Director of Assessment (2015-Present)
Assessment Coordinator (2015)

- Manage state assessments for the district for all grades
- Manage Measures of Academic Progress (MAP) for the district
- Manage gifted testing for the district
- Work with the College and Career Ready Performance Index (CCRPI)
- Conduct trainings for district employees
- Work with school administrators to help utilize their assessment data for their school
- On the 501c3 committee of Marietta Reads
- Participated in the Cobb Education Consortium (CEC)
- Directed the Student Learning Objectives (SLO) and the development of SLO tests

6/11-5/15 Georgia Department of Education Atlanta, GA

Assessment Specialist (2011-2015)

- Technology Specialist for the Georgia Milestones Assessment System
- Program Manager for the Georgia Online Formative Assessment Resource (GOFAR)
- Program Manager for the Georgia High School Graduation Test (GHSGT)
- Program Manager for the Georgia Writing Assessments
- Program Manager for the Online Assessment System (OAS)
- Student Data Link Project with CELT and the Bill and Melinda Gates Foundation

8/00-5/11 Bartow County Schools Cartersville, GA

Coordinator for Testing and Assessment (2006-2011)

- Student Data Link Project with CELT and the Bill and Melinda Gates Foundation
- Calendar Committee
- Coordinator for all state assessments for grades K-12
- Ensured assessment training of all personnel
- Analyzed data for state assessments

Third Grade Teacher at Cloverleaf Elem. (2005-2006)

- SST School Coordinator
- SACS Peer Review Team for Walker County
- Georgia Performance Standards Training

Summer School Coordinator at Emerson Elem. (2006)

Cass Middle Cross Country Coach (2003-2005)

First Grade Teacher at Cloverleaf Elem. (2002-2005)

- Third Grade Reading Instructor for Summer School
- Instructor for Multi-Age Instructional Workshop
- Member of the Budget Committee
- Member of the Technology Committee
- Presenter for Multi-age Instruction
- Presenter for Differentiated Instruction
- Increasing Student Achievement Through LFS Strategies Training

First Grade Teacher at Hamilton Crossing Elem. (2000-2002)

- Program Facilitator and Instructor of the Instructional Extension Program and After School Program
- Member of the Superintendent's Advisory Committee

Michael W. Huneke II

250 Howard Street
Marietta, GA 30060

Phone: 678-695-7277
E-mail: mhuneke@marietta-city.k12.ga.us

- Cooperating teacher for student teacher
- Curriculum Mapping and Writers Workshop Training
- Differentiation of Instruction Training
- Reading First Training

8/99-11/01 Town Hills Community Church, PCA Kennesaw, GA
Children's Ministry Director

- Overseeing Sunday School activities and providing administrative oversight
- Writing and organizing the Sunday school curriculum for two year olds through fifth grade
- Organizing and training volunteers to teach Sunday school classes for two year olds through fifth grade

8/97-6/00 Berry College Elementary School Mt. Berry, GA
Multi-Age Kindergarten and First Grade Teacher

- Piloted the Multi-Age program
- Supervisor for college student workers
- Cooperating teacher for practicum students and student teachers
- Trained new librarian with the new computer system
- Organized, trained and coordinated parent volunteers and college student workers with the installation of the Library computer system
- Charter member of the Advisory Committee
- Presenter at the National Association of Laboratory Schools National Conference
- Presenter at the Northwest Georgia Child Care Practitioners Conference

8/95-6/97 Rome City Schools Rome, GA
Kindergarten Teacher at Main Elementary School

9/96-6-97 Boys and Girls Club Rome, GA
General Staff

- Tutor for children at the after school program
- Soccer coach for ages 7-8, 9-10, and 11-12

8/94-6/95 Central Consolidated School District #22 Naschitti, NM
First Grade Teacher at Naschitti Elementary School

- Coordinator of Chapter One After School Math Program
- Head of the Writing to Read Computer Lab

Education

8/03-8/04 Lincoln Memorial University Harrogate, TN
Educational Specialist in Educational Administration and Supervision

6/98-6/00 Berry College Mt. Berry, GA
Masters of Education in Early Childhood Education

8/90-5/94 Ball State University Muncie, IN
Bachelor of Science in Elementary Education with a Kindergarten Endorsement

KATHERINE MITCHELL THOMAS

SUMMARY OF QUALIFICATIONS

- Administratively experienced program director, coordinator and teacher.
- Enthusiastic educator with an excellent ability to relate and establish positive relationships with teachers, co-workers, and students in face-to-face, hybrid and online settings.
- Outgoing, energetic, creative, optimistic individual with the ability to successfully multi-task.
- Thorough, hard-working, disciplined, and reliable, with a serious attitude and career commitment to education and student success.
- Demonstrated ability to coordinate with existing public organizations and maintain professional relationships.
- Proven ability to deal effectively with students, parents, teachers, employers and community leaders establishing respect for work-based career programs.
- Effective public speaking skills and proven ability to manage community outreach.
- Experienced in program presentation and group facilitation.
- Proven ability to meet Federal/State Regulatory Compliance.
- Effective skills in team building, training, and management.
- Demonstrated ability to understand, relate to, communicate, and establish rapport with diverse individuals.
- Highly resourceful and proficient in obtaining pertinent information to facilitate assistance and organize task to achieve optimum productivity and timely and completion of assignments.
- Detailed and accurate in report writing/documentation; computer literate in Windows and Microsoft Suite.
- Cognizant of Career Development with a thorough knowledge of the field.

EDUCATOR LEADERSHIP

- Assistant Superintendent of Innovation and Learning. Oversee grades 6-12 curriculum, innovative programs, Polk County College and Career Academy and Career, Technical and Agricultural Education. Supervise the following departments: Elementary Curriculum, Assessment, Professional Learning, and Special Education.
- Chief Executive Officer and Career, Technical and Agricultural Education Director. Coordinate K-12 career awareness/development activities in an attempt to prepare all Polk School District students to enter post-secondary schooling and/or work with the skills and knowledge necessary to succeed. Supervise the daily activities of the Career, Technical, and Agricultural Education Departments (40 teachers) which includes the following programs: Agriculture, Automotive Technology, Business and Computer Science, Career Technical Instruction, Construction Technology, Education, Engineering and Technology, Family and Consumer Science, Healthcare Science, Marketing, Sales, and Service, Government and Public Safety, Welding Technology, Work-Based Learning and Youth Apprenticeship.
- Project SUCCESS Board of Director. Initiated and currently executing a partnership between the HON Company, Georgia Northwestern Technical College and Polk School District. This partnership is recognized as a 12 for Life Workplace and will assist students to stay in school by allowing them to work at HON, while earning both high school and college credit in manufacturing.
- College and Career Academy Leader. Currently working on planning and implementation of a College and Career Academy at both Polk School District high schools. Classes begin August 2013.
- Career, Technical and Agricultural Education Leader. Supports CTAE teachers and Career and Technical Student Organizations in Polk School District by emphasizing the importance of all

students completing a career pathway as part of their graduation requirements. This includes advisement based on a K-12 career development plan.

- Director of Counseling and Career Development. Coordinate efforts of all counselors K-12 to prepare students to make the best decisions regarding their future career choices. This includes meeting all post-high school readiness indicators on the CCRPI.
- Chairperson, Education and Workforce Development Committee. Current Chair for the Chamber of Commerce committee connecting business and industry with educational entities in the county.
- Career Technology Instructional Supervisor. Supervise day-to-day operations of Career Technology Department including employee communications, meetings, budget development and supervision. Foster cooperation and teamwork among teachers. Observe and assist teachers with implementing change.
- Senior Leader. Assisted in the development of Leadership POLK; an intense leadership training program for teachers planning to be future administrators in Polk School District.
- Leadership Team/Better-Seeking Team Chair. Lead, manage and collaborate with school leaders on promoting school unity and developing policy and procedures for school operations.
- School-Based Enterprise Founder. Established, designed, and currently facilitate and manage Hurricane Alley, an on-site retail store for students. Activities included: policy/procedure development, purchasing, display case/store setup and merchandising, information and communications disbursement, marketing, community involvement and budgeting.
- Business Program Certification Co-Chairperson. Organized and coordinated business department certification process.
- SACS Committee Chairperson. Developed School Improvement Plan.
- High School Mentor Coordinator. Implemented a mentoring program that allows high school students to mentor a child one-hour per week from local primary, elementary, and middle schools. Continually collaborate with counselors and administrators to address needs.
- Parent/Student Orientation. Implemented an orientation program for students and parents to understand and address needs and issues regarding various Work-Based Learning Programs.
- Career Service/Community Liaison. Collaborate with community leaders and employers to address workplace needs including skills, training, and education of students.
- Future Business Leaders of America Advisor. Rechartered student organization and implemented career development and leadership activities throughout the year. Established club membership with 150 members the first year and increased membership the following year to 250+ members.
- Student Government Advisor. Promote unity and cultural awareness throughout the school. Lead service projects and work aimed for the betterment of Cartersville High School and the surrounding community. Revamped Homecoming and Spirit Week activities. Organized daily activities, supervised Homecoming Float design and construction, coordinated school-wide voting, organized school-wide Pep Rallys, coordinated Homecoming Parade, Dance, Pre-game and Half-time activities. Implement and coordinate school-wide Winter Ball. Organize and coordinate school-wide elections.
- Tech Prep Coordinator. Liaison for Cartersville High School in working with the North Metro Consortium to promote student success and achievement.
- Student Career Advisor. Develop a career plan and counsel students on career pathways and class options for their four years of high school.
- Conference Presenter. Annual Presenter, by invitation, at the Georgia Business and Information Technology Convention. Speak/Instruct/Train on how to implement a successful Work-Based Learning Program.
- Conference Presenter: Annual Presenter, by invitation, at the Georgia Association of Career and Technical Education. Speak/Instruct/Train on how to effectively implement and conduct a Reality Fair at your school.
- Department of Labor Issuing Officer. Issue and certify students to work on behalf of Cartersville High School and in accordance with the Georgia Department of Labor standards.

WORK EXPERIENCE

July 2018 – Present **Polk School District** **Cedartown, GA**
Assistant Superintendent of Innovation and Learning
Responsibilities include:

- **Developing and Reviewing Curriculum:** Initiating, improving, expanding and modernizing quality 6-12 educational programs.
- **Developing and Implementing Effective Instructional Practices:** Leading a process for evaluating and selecting resources, equipment, textbooks, software, and other instructional materials to support instruction of technical education. Evaluating and identifying best instructional practices and programs for achievement of technical education. Providing and maintaining appropriate resources to schools and teachers for best instructional strategies.
- **Providing Effective Professional Development:** Developing and implementing a comprehensive and integrated model of professional development for teachers and administrators, based on district goals, research, data, and customer feedback. Identifying and evaluating current research, content knowledge, and trends in technical education and communicating to internal and external audiences as appropriate.
- **Communicating District, Department, and Program Direction:** Communicating goals, mission, and vision of the district as related to the overall academic program to various internal and external audiences.
- **Managing Program Area:** Preparing budgetary requests and recommendations for the overall academic program for annual budget development, including application for and oversight of federal and state grant funds. Supervising and evaluating personnel. Reviewing and proposing policies and procedures related to the overall academic program. Planning for continuous improvement. Monitoring program area progress through data-driven evaluation.
- **Direct Supervision:** Elementary Curriculum, Assessment, Professional Learning, and Special Education programs.

July 2006 – Present **Polk School District** **Cedartown, GA**
Chief Executive Officer **Polk County College and Career Academy**
Career, Technical and Agricultural Education Director
Responsibilities include:

- **Developing and Reviewing Curriculum:** Initiating, improving, expanding and modernizing quality vocational and technical education programs including career pathways.
- **Developing and Implementing Effective Instructional Practices:** Leading a process for evaluating and selecting resources, equipment, textbooks, software, and other instructional materials to support instruction of technical education. Evaluating and identifying best instructional practices and programs for achievement of technical education. Providing and maintaining appropriate resources to schools and teachers for best instructional strategies.
- **Providing Effective Professional Development:** Developing and implementing a comprehensive and integrated model of professional development in technical education for teachers and administrators, based on district goals, research, data, and customer feedback. Identifying and evaluating current research, content knowledge, and trends in technical education and communicating to internal and external audiences as appropriate.
- **Communicating District, Department, and Program Direction:** Communicating goals, mission, and vision of the district as related to the technical education program to various internal and external audiences. Serving as district liaison for the technical education program with key external bodies, such as the Polk County Chamber of Commerce, Department of Education, NWGA RESA, and professional and industry organizations.
- **Managing Program Area:** Preparing budgetary requests and recommendations for the technical education program for annual budget development. Managing the budget for the technical education program, including application for and oversight of federal and state grant funds. Supervising and evaluating personnel in the technical education office. Reviewing and proposing policies and procedures related to the technical education program. Planning for continuous improvement. Monitoring program area progress through data-driven evaluation.

August 2010 – Present **Georgia Northwestern Technical College** **Rome, GA**
Adjunct Instructor, School of Business
Responsibilities include:

- **Teaching the following Business and General Education courses:** Introduction to Computers, College Success, and Interpersonal Development and Employability Skills.

October 2008 – May 2009 **Chattahoochee Technical College** **Marietta, GA**
Adjunct Instructor, School of Business
Responsibilities include:

- **Teaching the following Business and Marketing courses:** Visual Merchandising, Database Fundamentals, Word Processing, and Intermediate Word Processing.

June 2001 – June 2006 **Cartersville High School** **Cartersville, GA**
Work-Based Learning Coordinator
Responsibilities include:

- Implementing Cooperative Business Education program. Creating standards, policies and procedures for program. Training students, parents, teachers and counselors on program requirements and benefits.
- Facilitating Youth Apprenticeship Program and collaborating with Northwest Georgia RESA on recruitment of students, job placement and supervision.
- Counseling and advising students on career interests and pathways.
- Administering Career Assessments.
- Coordinating jobsite placement, training, and supervision of 56 work-based learning students.
- Maintaining state and local database of student data and employment information.
- Creating and implementing lesson plans.
- Integrating interpersonal skills, self-esteem, goals, leadership, and career activities into daily classroom instruction.
- Coordinating and assisting students in development Career Portfolios including resumes, cover letters, and interviewing techniques.
- Contributing to the learning experience in education and social settings.
- Instructing a diverse student population.

EDUCATION

Liberty University — Lynchburg, VA
Doctor of Education, Administration — April, 2014

Jacksonville State University — Jacksonville, AL
Educational Specialist, Administration — June 2005
Master of Science, Administration — April 2004

State University of West Georgia — Carrollton, GA
Bachelor of Science, — December 2001
Business Education/ Training

Floyd College — Rome, GA
Associate of Science, General Studies — August 2000

PROFESSIONAL MEMBERSHIPS

Georgia Association of Educational Leaders
Association for Career and Technical Education
Georgia Association for Career and Technical Education
Professional Association of Georgia Educators
Board Member, Polk County Chamber of Commerce

KATHERINE M. THOMAS

612 SOUTH COLLEGE STREET CEDARTOWN, GEORGIA 30125
770-748-3821
kthomas@polk.k12.ga.us

Innovative Assessment Demonstration Authority Application Assurances for Georgia Pilot Districts

This form assures that each LEA participating in an approved Georgia innovative assessment pilot will:

(1) Continue use of statewide academic assessments in reading/language arts, mathematics, and science required under 34 CFR 200.2(a)(1) and section 111(b)(2) of the Act –
   (i) In all non-participating schools; and
   (ii) In all participating schools for which such assessments will be used in addition to innovative assessments for accountability purposes under section 111(c) of the Act consistent with paragraph (b)(1)(ii) of this section or for evaluation purposes consistent with 34 CFR 200.106(e) during the demonstration authority period;

(2) Ensure that all students and each subgroup of students described in section 111(c)(2) of the Act in participating schools are held to the same challenging State academic standards under section 111(b)(1) of the Act as all other students, except that students with the most significant cognitive disabilities may be assessed with alternate assessments aligned with alternate academic achievement standards consistent with 34 CFR 200.6 and section 111(b)(1)(E) and (b)(2)(D) of the Act, and receive the instructional support needed to meet such standards;

(3) Report the following annually to the GaDOE, for purposes of reporting to the Secretary of the U.S. Department of Education, at such time and in such manner as the GaDOE may reasonably require:
   (i) An update on implementation of the innovative assessment pilot, including –
   (A) The pilot's progress against its timeline under 34 CFR 200.106(c) and any outcomes or results from its evaluation and continuous improvement process under 34 CFR 200.106(e); and
   (B) A description of the pilot's progress in scaling up the system to additional LEAs within the consortium or schools within the LEA consistent with its strategies under 34 CFR 200.106(a)(3)(i), including updated assurances from participating LEAs consistent with paragraph (e)(2) of this section.
   (ii) The performance of students in participating schools at the consortium, LEA, and school level, for all students and disaggregated for each subgroup of students described in section 1111(c)(2) of the Act, on the innovative assessment, including academic achievement and participation data required to be reported consistent with section 1111(h) of the Act, except that such data may not reveal any personally identifiable information.
   (iii) School demographic information, including enrollment and student achievement information, for the subgroups of students described in section 1111(c)(2) of the Act, among participating schools and LEAs and for any schools or LEAs that will participate for the first time in the following year, and a description of how the participation of any additional schools or LEAs in that year contributed to progress toward achieving high-quality and consistent implementation across demographically diverse LEAs in the State consistent with the SEA's benchmarks described in 34 CFR 200.106(a)(3)(iii).
   (iv) Feedback from teachers, principals and other school leaders, and other stakeholders consulted under paragraph (a)(2) of this section, including parents and students, from participating schools and LEAs about their satisfaction with the innovative assessment system;

(4) Ensure that each participating LEA informs parents of all students in participating schools about the innovative assessment, including the grades and subjects in which the innovative assessment will be administered, and, consistent with section 1112(e)(2)(B) of the Act, at the

beginning of each school year during which an innovative assessment will be implemented. Such information must be –

(i) In an understandable and uniform format;

(ii) To the extent practicable, written in a language that parents can understand or, if it is not practicable to provide written translations to a parent with limited English proficiency, be orally translated for such parents; and

(iii) Upon request by a parent who is an individual with a disability as defined by the Americans with Disabilities Act, provided in an alternative format accessible to that parent; and

(5) Provide information to GaDOE, as applicable, so that GaDOE can coordinate with and provide information to, as applicable, the Institute of Education Sciences for purposes of the progress report described in section 1204(c) of the Act and ongoing dissemination of information under section 1204(m) of the Act.

(6) Cooperate with any evaluation that the GaDOE carries out, or arranges for, of the implementation of the pilot.

(7) Transition back to the regular assessment system (Georgia Milestones) if the LEA fails to meet requirements of section 1204 for the duration of the pilot timeline.

(8) Will comply with all requirements of this section for each year that the LEA is participating.

Authorized Representative (Printed Name):

Chris McMichael

LEA Name:

Barrow County School System

Signature:

Date: 12/10/2018

Innovative Assessment Demonstration Authority Application Assurances for Georgia Pilot Districts

This form assures that each LEA participating in an approved Georgia innovative assessment pilot will:

(1) Continue use of statewide academic assessments in reading/language arts, mathematics, and science required under 34 CFR 200.2(a)(1) and section 111(b)(2) of the Act –
   (i) In all non-participating schools; and
   (ii) In all participating schools for which such assessments will be used in addition to innovative assessments for accountability purposes under section 111(c) of the Act consistent with paragraph (b)(1)(ii) of this section or for evaluation purposes consistent with 34 CFR 200.106(e) during the demonstration authority period;

(2) Ensure that all students and each subgroup of students described in section 111(c)(2) of the Act in participating schools are held to the same challenging State academic standards under section 111(b)(1) of the Act as all other students, except that students with the most significant cognitive disabilities may be assessed with alternate assessments aligned with alternate academic achievement standards consistent with 34 CFR 200.6 and section 111(b)(1)(E) and (b)(2)(D) of the Act, and receive the instructional support needed to meet such standards;

(3) Report the following annually to the GaDOE, for purposes of reporting to the Secretary of the U.S. Department of Education, at such time and in such manner as the GaDOE may reasonably require:
   (i) An update on implementation of the innovative assessment pilot, including –
   (A) The pilot's progress against its timeline under 34 CFR 200.106(c) and any outcomes or results from its evaluation and continuous improvement process under 34 CFR 200.106(e); and
   (B) A description of the pilot's progress in scaling up the system to additional LEAs within the consortium or schools within the LEA consistent with its strategies under 34 CFR 200.106(a)(3)(i), including updated assurances from participating LEAs consistent with paragraph (e)(2) of this section.
   (ii) The performance of students in participating schools at the consortium, LEA, and school level, for all students and disaggregated for each subgroup of students described in section 1111(c)(2) of the Act, on the innovative assessment, including academic achievement and participation data required to be reported consistent with section 1111(h) of the Act, except that such data may not reveal any personally identifiable information.
   (iii) School demographic information, including enrollment and student achievement information, for the subgroups of students described in section 1111(c)(2) of the Act, among participating schools and LEAs and for any schools or LEAs that will participate for the first time in the following year, and a description of how the participation of any additional schools or LEAs in that year contributed to progress toward achieving high-quality and consistent implementation across demographically diverse LEAs in the State consistent with the SEA's benchmarks described in 34 CFR 200.106(a)(3)(iii).
   (iv) Feedback from teachers, principals and other school leaders, and other stakeholders consulted under paragraph (a)(2) of this section, including parents and students, from participating schools and LEAs about their satisfaction with the innovative assessment system;

(4) Ensure that each participating LEA informs parents of all students in participating schools about the innovative assessment, including the grades and subjects in which the innovative assessment will be administered, and, consistent with section 1112(e)(2)(B) of the Act, at the

beginning of each school year during which an innovative assessment will be implemented. Such information must be –

(i) In an understandable and uniform format;

(ii) To the extent practicable, written in a language that parents can understand or, if it is not practicable to provide written translations to a parent with limited English proficiency, be orally translated for such parents; and

(iii) Upon request by a parent who is an individual with a disability as defined by the Americans with Disabilities Act, provided in an alternative format accessible to that parent; and

(5) Provide information to GaDOE, as applicable, so that GaDOE can coordinate with and provide information to, as applicable, the Institute of Education Sciences for purposes of the progress report described in section 1204(c) of the Act and ongoing dissemination of information under section 1204(m) of the Act.

(6) Cooperate with any evaluation that the GaDOE carries out, or arranges for, of the implementation of the pilot.

(7) Transition back to the regular assessment system (Georgia Milestones) if the LEA fails to meet requirements of section 1204 for the duration of the pilot timeline.

(8) Will comply with all requirements of this section for each year that the LEA is participating.

Authorized Representative (Printed Name): Michael Tuppler	
LEA Name: Clayton County Public Schools	
Signature:	**Date:** 12/12/18

Innovative Assessment Demonstration Authority Application Assurances for Georgia Pilot Districts

This form assures that each LEA participating in an approved Georgia innovative assessment pilot **will:**

(1) Continue use of statewide academic assessments in reading/language arts, mathematics, and science required under 34 CFR 200.2(a)(1) and section 111(b)(2) of the Act –
   (i) In all non-participating schools; and
   (ii) In all participating schools for which such assessments will be used in addition to innovative assessments for accountability purposes under section 111(c) of the Act consistent with paragraph (b)(1)(ii) of this section or for evaluation purposes consistent with 34 CFR 200.106(e) during the demonstration authority period;

(2) Ensure that all students and each subgroup of students described in section 111(c)(2) of the Act in participating schools are held to the same challenging State academic standards under section 111(b)(1) of the Act as all other students, except that students with the most significant cognitive disabilities may be assessed with alternate assessments aligned with alternate academic achievement standards consistent with 34 CFR 200.6 and section 111(b)(1)(E) and (b)(2)(D) of the Act, and receive the instructional support needed to meet such standards;

(3) Report the following annually to the GaDOE, for purposes of reporting to the Secretary of the U.S. Department of Education, at such time and in such manner as the GaDOE may reasonably require:
   (i) An update on implementation of the innovative assessment pilot, including –
   (A) The pilot's progress against its timeline under 34 CFR 200.106(c) and any outcomes or results from its evaluation and continuous improvement process under 34 CFR 200.106(e); and
   (B) A description of the pilot's progress in scaling up the system to additional LEAs within the consortium or schools within the LEA consistent with its strategies under 34 CFR 200.106(a)(3)(i), including updated assurances from participating LEAs consistent with paragraph (e)(2) of this section.
   (ii) The performance of students in participating schools at the consortium, LEA, and school level, for all students and disaggregated for each subgroup of students described in section 1111(c)(2) of the Act, on the innovative assessment, including academic achievement and participation data required to be reported consistent with section 1111(h) of the Act, except that such data may not reveal any personally identifiable information.
   (iii) School demographic information, including enrollment and student achievement information, for the subgroups of students described in section 1111(c)(2) of the Act, among participating schools and LEAs and for any schools or LEAs that will participate for the first time in the following year, and a description of how the participation of any additional schools or LEAs in that year contributed to progress toward achieving high-quality and consistent implementation across demographically diverse LEAs in the State consistent with the SEA's benchmarks described in 34 CFR 200.106(a)(3)(iii).
   (iv) Feedback from teachers, principals and other school leaders, and other stakeholders consulted under paragraph (a)(2) of this section, including parents and students, from participating schools and LEAs about their satisfaction with the innovative assessment system;

(4) Ensure that each participating LEA informs parents of all students in participating schools about the innovative assessment, including the grades and subjects in which the innovative assessment will be administered, and, consistent with section 1112(e)(2)(B) of the Act, at the

beginning of each school year during which an innovative assessment will be implemented. Such information must be –

(i) In an understandable and uniform format;

(ii) To the extent practicable, written in a language that parents can understand or, if it is not practicable to provide written translations to a parent with limited English proficiency, be orally translated for such parents; and

(iii) Upon request by a parent who is an individual with a disability as defined by the Americans with Disabilities Act, provided in an alternative format accessible to that parent; and

(5) Provide information to GaDOE, as applicable, so that GaDOE can coordinate with and provide information to, as applicable, the Institute of Education Sciences for purposes of the progress report described in section 1204(c) of the Act and ongoing dissemination of information under section 1204(m) of the Act.

(6) Cooperate with any evaluation that the GaDOE carries out, or arranges for, of the implementation of the pilot.

(7) Transition back to the regular assessment system (Georgia Milestones) if the LEA fails to meet requirements of section 1204 for the duration of the pilot timeline.

(8) Will comply with all requirements of this section for each year that the LEA is participating.

Authorized Representative (Printed Name):

Dr. Tim Scott

LEA Name:

Dalton Public Schools

Signature:

Date: 12/10/18

Innovative Assessment Demonstration Authority Application Assurances for Georgia Pilot Districts

This form assures that each LEA participating in an approved Georgia innovative assessment pilot will:

(1) Continue use of statewide academic assessments in reading/language arts, mathematics, and science required under 34 CFR 200.2(a)(1) and section 111(b)(2) of the Act –
   (i) In all non-participating schools; and
   (ii) In all participating schools for which such assessments will be used in addition to innovative assessments for accountability purposes under section 111(c) of the Act consistent with paragraph (b)(1)(ii) of this section or for evaluation purposes consistent with 34 CFR 200.106(e) during the demonstration authority period;

(2) Ensure that all students and each subgroup of students described in section 111(c)(2) of the Act in participating schools are held to the same challenging State academic standards under section 111(b)(1) of the Act as all other students, except that students with the most significant cognitive disabilities may be assessed with alternate assessments aligned with alternate academic achievement standards consistent with 34 CFR 200.6 and section 111(b)(1)(E) and (b)(2)(D) of the Act, and receive the instructional support needed to meet such standards;

(3) Report the following annually to the GaDOE, for purposes of reporting to the Secretary of the U.S. Department of Education, at such time and in such manner as the GaDOE may reasonably require:
   (i) An update on implementation of the innovative assessment pilot, including –
   (A) The pilot's progress against its timeline under 34 CFR 200.106(c) and any outcomes or results from its evaluation and continuous improvement process under 34 CFR 200.106(e); and
   (B) A description of the pilot's progress in scaling up the system to additional LEAs within the consortium or schools within the LEA consistent with its strategies under 34 CFR 200.106(a)(3)(i), including updated assurances from participating LEAs consistent with paragraph (e)(2) of this section.
   (ii) The performance of students in participating schools at the consortium, LEA, and school level, for all students and disaggregated for each subgroup of students described in section 1111(c)(2) of the Act, on the innovative assessment, including academic achievement and participation data required to be reported consistent with section 1111(h) of the Act, except that such data may not reveal any personally identifiable information.
   (iii) School demographic information, including enrollment and student achievement information, for the subgroups of students described in section 1111(c)(2) of the Act, among participating schools and LEAs and for any schools or LEAs that will participate for the first time in the following year, and a description of how the participation of any additional schools or LEAs in that year contributed to progress toward achieving high-quality and consistent implementation across demographically diverse LEAs in the State consistent with the SEA's benchmarks described in 34 CFR 200.106(a)(3)(iii).
   (iv) Feedback from teachers, principals and other school leaders, and other stakeholders consulted under paragraph (a)(2) of this section, including parents and students, from participating schools and LEAs about their satisfaction with the innovative assessment system;

(4) Ensure that each participating LEA informs parents of all students in participating schools about the innovative assessment, including the grades and subjects in which the innovative assessment will be administered, and, consistent with section 1112(e)(2)(B) of the Act, at the

beginning of each school year during which an innovative assessment will be implemented. Such information must be –

(i) In an understandable and uniform format;

(ii) To the extent practicable, written in a language that parents can understand or, if it is not practicable to provide written translations to a parent with limited English proficiency, be orally translated for such parents; and

(iii) Upon request by a parent who is an individual with a disability as defined by the Americans with Disabilities Act, provided in an alternative format accessible to that parent; and

(5) Provide information to GaDOE, as applicable, so that GaDOE can coordinate with and provide information to, as applicable, the Institute of Education Sciences for purposes of the progress report described in section 1204(c) of the Act and ongoing dissemination of information under section 1204(m) of the Act.

(6) Cooperate with any evaluation that the GaDOE carries out, or arranges for, of the implementation of the pilot.

(7) Transition back to the regular assessment system (Georgia Milestones) if the LEA fails to meet requirements of section 1204 for the duration of the pilot timeline.

(8) Will comply with all requirements of this section for each year that the LEA is participating.

Authorized Representative (Printed Name): John Parker	
LEA Name: Floyd County Schools	
Signature:	**Date: 12/7/18**

Innovative Assessment Demonstration Authority Application Assurances for Georgia Pilot Districts

This form assures that each LEA participating in an approved Georgia innovative assessment pilot will:

(1) Continue use of statewide academic assessments in reading/language arts, mathematics, and science required under 34 CFR 200.2(a)(1) and section 111(b)(2) of the Act –
   (i) In all non-participating schools; and
   (ii) In all participating schools for which such assessments will be used in addition to innovative assessments for accountability purposes under section 111(c) of the Act consistent with paragraph (b)(1)(ii) of this section or for evaluation purposes consistent with 34 CFR 200.106(e) during the demonstration authority period;

(2) Ensure that all students and each subgroup of students described in section 111(c)(2) of the Act in participating schools are held to the same challenging State academic standards under section 111(b)(1) of the Act as all other students, except that students with the most significant cognitive disabilities may be assessed with alternate assessments aligned with alternate academic achievement standards consistent with 34 CFR 200.6 and section 111(b)(1)(E) and (b)(2)(D) of the Act, and receive the instructional support needed to meet such standards;

(3) Report the following annually to the GaDOE, for purposes of reporting to the Secretary of the U.S. Department of Education, at such time and in such manner as the GaDOE may reasonably require:
   (i) An update on implementation of the innovative assessment pilot, including –
   (A) The pilot's progress against its timeline under 34 CFR 200.106(c) and any outcomes or results from its evaluation and continuous improvement process under 34 CFR 200.106(e); and
   (B) A description of the pilot's progress in scaling up the system to additional LEAs within the consortium or schools within the LEA consistent with its strategies under 34 CFR 200.106(a)(3)(i), including updated assurances from participating LEAs consistent with paragraph (e)(2) of this section.
   (ii) The performance of students in participating schools at the consortium, LEA, and school level, for all students and disaggregated for each subgroup of students described in section 1111(c)(2) of the Act, on the innovative assessment, including academic achievement and participation data required to be reported consistent with section 1111(h) of the Act, except that such data may not reveal any personally identifiable information.
   (iii) School demographic information, including enrollment and student achievement information, for the subgroups of students described in section 1111(c)(2) of the Act, among participating schools and LEAs and for any schools or LEAs that will participate for the first time in the following year, and a description of how the participation of any additional schools or LEAs in that year contributed to progress toward achieving high-quality and consistent implementation across demographically diverse LEAs in the State consistent with the SEA's benchmarks described in 34 CFR 200.106(a)(3)(iii).
   (iv) Feedback from teachers, principals and other school leaders, and other stakeholders consulted under paragraph (a)(2) of this section, including parents and students, from participating schools and LEAs about their satisfaction with the innovative assessment system;

(4) Ensure that each participating LEA informs parents of all students in participating schools about the innovative assessment, including the grades and subjects in which the innovative assessment will be administered, and, consistent with section 1112(e)(2)(B) of the Act, at the

beginning of each school year during which an innovative assessment will be implemented. Such information must be –

(i) In an understandable and uniform format;

(ii) To the extent practicable, written in a language that parents can understand or, if it is not practicable to provide written translations to a parent with limited English proficiency, be orally translated for such parents; and

(iii) Upon request by a parent who is an individual with a disability as defined by the Americans with Disabilities Act, provided in an alternative format accessible to that parent; and

(5) Provide information to GaDOE, as applicable, so that GaDOE can coordinate with and provide information to, as applicable, the Institute of Education Sciences for purposes of the progress report described in section 1204(c) of the Act and ongoing dissemination of information under section 1204(m) of the Act.

(6) Cooperate with any evaluation that the GaDOE carries out, or arranges for, of the implementation of the pilot.

(7) Transition back to the regular assessment system (Georgia Milestones) if the LEA fails to meet requirements of section 1204 for the duration of the pilot timeline.

(8) Will comply with all requirements of this section for each year that the LEA is participating.

Authorized Representative (Printed Name): Dr. Jerry Bell	
LEA Name: Haralson County School District	
Signature:	**Date:** **12/11/2018**

Innovative Assessment Demonstration Authority Application Assurances for Georgia Pilot Districts

This form assures that each LEA participating in an approved Georgia innovative assessment pilot will:

(1) Continue use of statewide academic assessments in reading/language arts, mathematics, and science required under 34 CFR 200.2(a)(1) and section 111(b)(2) of the Act –
   (i) In all non-participating schools; and
   (ii) In all participating schools for which such assessments will be used in addition to innovative assessments for accountability purposes under section 111(c) of the Act consistent with paragraph (b)(1)(ii) of this section or for evaluation purposes consistent with 34 CFR 200.106(e) during the demonstration authority period;

(2) Ensure that all students and each subgroup of students described in section 111(c)(2) of the Act in participating schools are held to the same challenging State academic standards under section 111(b)(1) of the Act as all other students, except that students with the most significant cognitive disabilities may be assessed with alternate assessments aligned with alternate academic achievement standards consistent with 34 CFR 200.6 and section 111(b)(1)(E) and (b)(2)(D) of the Act, and receive the instructional support needed to meet such standards;

(3) Report the following annually to the GaDOE, for purposes of reporting to the Secretary of the U.S. Department of Education, at such time and in such manner as the GaDOE may reasonably require:
   (i) An update on implementation of the innovative assessment pilot, including –
   (A) The pilot's progress against its timeline under 34 CFR 200.106(c) and any outcomes or results from its evaluation and continuous improvement process under 34 CFR 200.106(e); and
   (B) A description of the pilot's progress in scaling up the system to additional LEAs within the consortium or schools within the LEA consistent with its strategies under 34 CFR 200.106(a)(3)(i), including updated assurances from participating LEAs consistent with paragraph (e)(2) of this section.
   (ii) The performance of students in participating schools at the consortium, LEA, and school level, for all students and disaggregated for each subgroup of students described in section 1111(c)(2) of the Act, on the innovative assessment, including academic achievement and participation data required to be reported consistent with section 1111(h) of the Act, except that such data may not reveal any personally identifiable information.
   (iii) School demographic information, including enrollment and student achievement information, for the subgroups of students described in section 1111(c)(2) of the Act, among participating schools and LEAs and for any schools or LEAs that will participate for the first time in the following year, and a description of how the participation of any additional schools or LEAs in that year contributed to progress toward achieving high-quality and consistent implementation across demographically diverse LEAs in the State consistent with the SEA's benchmarks described in 34 CFR 200.106(a)(3)(iii).
   (iv) Feedback from teachers, principals and other school leaders, and other stakeholders consulted under paragraph (a)(2) of this section, including parents and students, from participating schools and LEAs about their satisfaction with the innovative assessment system;

(4) Ensure that each participating LEA informs parents of all students in participating schools about the innovative assessment, including the grades and subjects in which the innovative assessment will be administered, and, consistent with section 1112(e)(2)(B) of the Act, at the

beginning of each school year during which an innovative assessment will be implemented. Such information must be –

(i) In an understandable and uniform format;

(ii) To the extent practicable, written in a language that parents can understand or, if it is not practicable to provide written translations to a parent with limited English proficiency, be orally translated for such parents; and

(iii) Upon request by a parent who is an individual with a disability as defined by the Americans with Disabilities Act, provided in an alternative format accessible to that parent; and

(5) Provide information to GaDOE, as applicable, so that GaDOE can coordinate with and provide information to, as applicable, the Institute of Education Sciences for purposes of the progress report described in section 1204(c) of the Act and ongoing dissemination of information under section 1204(m) of the Act.

(6) Cooperate with any evaluation that the GaDOE carries out, or arranges for, of the implementation of the pilot.

(7) Transition back to the regular assessment system (Georgia Milestones) if the LEA fails to meet requirements of section 1204 for the duration of the pilot timeline.

(8) Will comply with all requirements of this section for each year that the LEA is participating.

Authorized Representative (Printed Name):	
Troy Johnson	
LEA Name:	
Jackson County Schools	
Signature:	**Date:**
	12-12-2018

Innovative Assessment Demonstration Authority Application Assurances for Georgia Pilot Districts

This form assures that each LEA participating in an approved Georgia innovative assessment pilot will:

(1) Continue use of statewide academic assessments in reading/language arts, mathematics, and science required under 34 CFR 200.2(a)(1) and section 111(b)(2) of the Act –
   (i) In all non-participating schools; and
   (ii) In all participating schools for which such assessments will be used in addition to innovative assessments for accountability purposes under section 111(c) of the Act consistent with paragraph (b)(1)(ii) of this section or for evaluation purposes consistent with 34 CFR 200.106(e) during the demonstration authority period;

(2) Ensure that all students and each subgroup of students described in section 111(c)(2) of the Act in participating schools are held to the same challenging State academic standards under section 111(b)(1) of the Act as all other students, except that students with the most significant cognitive disabilities may be assessed with alternate assessments aligned with alternate academic achievement standards consistent with 34 CFR 200.6 and section 111(b)(1)(E) and (b)(2)(D) of the Act, and receive the instructional support needed to meet such standards;

(3) Report the following annually to the GaDOE, for purposes of reporting to the Secretary of the U.S. Department of Education, at such time and in such manner as the GaDOE may reasonably require:
   (i) An update on implementation of the innovative assessment pilot, including –
   (A) The pilot's progress against its timeline under 34 CFR 200.106(c) and any outcomes or results from its evaluation and continuous improvement process under 34 CFR 200.106(e); and
   (B) A description of the pilot's progress in scaling up the system to additional LEAs within the consortium or schools within the LEA consistent with its strategies under 34 CFR 200.106(a)(3)(i), including updated assurances from participating LEAs consistent with paragraph (e)(2) of this section.
   (ii) The performance of students in participating schools at the consortium, LEA, and school level, for all students and disaggregated for each subgroup of students described in section 1111(c)(2) of the Act, on the innovative assessment, including academic achievement and participation data required to be reported consistent with section 1111(h) of the Act, except that such data may not reveal any personally identifiable information.
   (iii) School demographic information, including enrollment and student achievement information, for the subgroups of students described in section 1111(c)(2) of the Act, among participating schools and LEAs and for any schools or LEAs that will participate for the first time in the following year, and a description of how the participation of any additional schools or LEAs in that year contributed to progress toward achieving high-quality and consistent implementation across demographically diverse LEAs in the State consistent with the SEA's benchmarks described in 34 CFR 200.106(a)(3)(iii).
   (iv) Feedback from teachers, principals and other school leaders, and other stakeholders consulted under paragraph (a)(2) of this section, including parents and students, from participating schools and LEAs about their satisfaction with the innovative assessment system;

(4) Ensure that each participating LEA informs parents of all students in participating schools about the innovative assessment, including the grades and subjects in which the innovative assessment will be administered, and, consistent with section 1112(e)(2)(B) of the Act, at the

beginning of each school year during which an innovative assessment will be implemented. Such information must be –

(i) In an understandable and uniform format;

(ii) To the extent practicable, written in a language that parents can understand or, if it is not practicable to provide written translations to a parent with limited English proficiency, be orally translated for such parents; and

(iii) Upon request by a parent who is an individual with a disability as defined by the Americans with Disabilities Act, provided in an alternative format accessible to that parent; and

(5) Provide information to GaDOE, as applicable, so that GaDOE can coordinate with and provide information to, as applicable, the Institute of Education Sciences for purposes of the progress report described in section 1204(c) of the Act and ongoing dissemination of information under section 1204(m) of the Act.

(6) Cooperate with any evaluation that the GaDOE carries out, or arranges for, of the implementation of the pilot.

(7) Transition back to the regular assessment system (Georgia Milestones) if the LEA fails to meet requirements of section 1204 for the duration of the pilot timeline.

(8) Will comply with all requirements of this section for each year that the LEA is participating.

Authorized Representative (Printed Name):	
LEA Name: Kristina Brooks Jasper Co Charter	
Signature: Kristina Brooks	**Date:** 12-12-18

Innovative Assessment Demonstration Authority Application Assurances for Georgia Pilot Districts

This form assures that each LEA participating in an approved Georgia innovative assessment pilot will:

(1) Continue use of statewide academic assessments in reading/language arts, mathematics, and science required under 34 CFR 200.2(a)(1) and section 111(b)(2) of the Act –
   (i) In all non-participating schools; and
   (ii) In all participating schools for which such assessments will be used in addition to innovative assessments for accountability purposes under section 111(c) of the Act consistent with paragraph (b)(1)(ii) of this section or for evaluation purposes consistent with 34 CFR 200.106(e) during the demonstration authority period;

(2) Ensure that all students and each subgroup of students described in section 111(c)(2) of the Act in participating schools are held to the same challenging State academic standards under section 111(b)(1) of the Act as all other students, except that students with the most significant cognitive disabilities may be assessed with alternate assessments aligned with alternate academic achievement standards consistent with 34 CFR 200.6 and section 111(b)(1)(E) and (b)(2)(D) of the Act, and receive the instructional support needed to meet such standards;

(3) Report the following annually to the GaDOE, for purposes of reporting to the Secretary of the U.S. Department of Education, at such time and in such manner as the GaDOE may reasonably require:
   (i) An update on implementation of the innovative assessment pilot, including –
   (A) The pilot's progress against its timeline under 34 CFR 200.106(c) and any outcomes or results from its evaluation and continuous improvement process under 34 CFR 200.106(e); and
   (B) A description of the pilot's progress in scaling up the system to additional LEAs within the consortium or schools within the LEA consistent with its strategies under 34 CFR 200.106(a)(3)(i), including updated assurances from participating LEAs consistent with paragraph (e)(2) of this section.
   (ii) The performance of students in participating schools at the consortium, LEA, and school level, for all students and disaggregated for each subgroup of students described in section 1111(c)(2) of the Act, on the innovative assessment, including academic achievement and participation data required to be reported consistent with section 1111(h) of the Act, except that such data may not reveal any personally identifiable information.
   (iii) School demographic information, including enrollment and student achievement information, for the subgroups of students described in section 1111(c)(2) of the Act, among participating schools and LEAs and for any schools or LEAs that will participate for the first time in the following year, and a description of how the participation of any additional schools or LEAs in that year contributed to progress toward achieving high-quality and consistent implementation across demographically diverse LEAs in the State consistent with the SEA's benchmarks described in 34 CFR 200.106(a)(3)(iii).
   (iv) Feedback from teachers, principals and other school leaders, and other stakeholders consulted under paragraph (a)(2) of this section, including parents and students, from participating schools and LEAs about their satisfaction with the innovative assessment system;

(4) Ensure that each participating LEA informs parents of all students in participating schools about the innovative assessment, including the grades and subjects in which the innovative assessment will be administered, and, consistent with section 1112(e)(2)(B) of the Act, at the

beginning of each school year during which an innovative assessment will be implemented. Such information must be –

(i) In an understandable and uniform format;

(ii) To the extent practicable, written in a language that parents can understand or, if it is not practicable to provide written translations to a parent with limited English proficiency, be orally translated for such parents; and

(iii) Upon request by a parent who is an individual with a disability as defined by the Americans with Disabilities Act, provided in an alternative format accessible to that parent; and

(5) Provide information to GaDOE, as applicable, so that GaDOE can coordinate with and provide information to, as applicable, the Institute of Education Sciences for purposes of the progress report described in section 1204(c) of the Act and ongoing dissemination of information under section 1204(m) of the Act.

(6) Cooperate with any evaluation that the GaDOE carries out, or arranges for, of the implementation of the pilot.

(7) Transition back to the regular assessment system (Georgia Milestones) if the LEA fails to meet requirements of section 1204 for the duration of the pilot timeline.

(8) Will comply with all requirements of this section for each year that the LEA is participating.

Authorized Representative (Printed Name): **Michael W. Huneke II**	
LEA Name: **Marietta City Schools**	
Signature:	**Date:** **12/11/2018**

Innovative Assessment Demonstration Authority Application Assurances for Georgia Pilot Districts

This form assures that each LEA participating in an approved Georgia innovative assessment pilot will:

(1) Continue use of statewide academic assessments in reading/language arts, mathematics, and science required under 34 CFR 200.2(a)(1) and section 111(b)(2) of the Act –
   (i) In all non-participating schools; and
   (ii) In all participating schools for which such assessments will be used in addition to innovative assessments for accountability purposes under section 111(c) of the Act consistent with paragraph (b)(1)(ii) of this section or for evaluation purposes consistent with 34 CFR 200.106(e) during the demonstration authority period;

(2) Ensure that all students and each subgroup of students described in section 111(c)(2) of the Act in participating schools are held to the same challenging State academic standards under section 111(b)(1) of the Act as all other students, except that students with the most significant cognitive disabilities may be assessed with alternate assessments aligned with alternate academic achievement standards consistent with 34 CFR 200.6 and section 111(b)(1)(E) and (b)(2)(D) of the Act, and receive the instructional support needed to meet such standards;

(3) Report the following annually to the GaDOE, for purposes of reporting to the Secretary of the U.S. Department of Education, at such time and in such manner as the GaDOE may reasonably require:
   (i) An update on implementation of the innovative assessment pilot, including –
   (A) The pilot's progress against its timeline under 34 CFR 200.106(c) and any outcomes or results from its evaluation and continuous improvement process under 34 CFR 200.106(e); and
   (B) A description of the pilot's progress in scaling up the system to additional LEAs within the consortium or schools within the LEA consistent with its strategies under 34 CFR 200.106(a)(3)(i), including updated assurances from participating LEAs consistent with paragraph (e)(2) of this section.
   (ii) The performance of students in participating schools at the consortium, LEA, and school level, for all students and disaggregated for each subgroup of students described in section 1111(c)(2) of the Act, on the innovative assessment, including academic achievement and participation data required to be reported consistent with section 1111(h) of the Act, except that such data may not reveal any personally identifiable information.
   (iii) School demographic information, including enrollment and student achievement information, for the subgroups of students described in section 1111(c)(2) of the Act, among participating schools and LEAs and for any schools or LEAs that will participate for the first time in the following year, and a description of how the participation of any additional schools or LEAs in that year contributed to progress toward achieving high-quality and consistent implementation across demographically diverse LEAs in the State consistent with the SEA's benchmarks described in 34 CFR 200.106(a)(3)(iii).
   (iv) Feedback from teachers, principals and other school leaders, and other stakeholders consulted under paragraph (a)(2) of this section, including parents and students, from participating schools and LEAs about their satisfaction with the innovative assessment system;

(4) Ensure that each participating LEA informs parents of all students in participating schools about the innovative assessment, including the grades and subjects in which the innovative assessment will be administered, and, consistent with section 1112(e)(2)(B) of the Act, at the

beginning of each school year during which an innovative assessment will be implemented. Such information must be –

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(iii) Upon request by a parent who is an individual with a disability as defined by the Americans with Disabilities Act, provided in an alternative format accessible to that parent; and

(5) Provide information to GaDOE, as applicable, so that GaDOE can coordinate with and provide information to, as applicable, the Institute of Education Sciences for purposes of the progress report described in section 1204(c) of the Act and ongoing dissemination of information under section 1204(m) of the Act.

(6) Cooperate with any evaluation that the GaDOE carries out, or arranges for, of the implementation of the pilot.

(7) Transition back to the regular assessment system (Georgia Milestones) if the LEA fails to meet requirements of section 1204 for the duration of the pilot timeline.

(8) Will comply with all requirements of this section for each year that the LEA is participating.

Authorized Representative (Printed Name): Dr. Katherine M. Thomas	
LEA Name: Polk School District	
Signature: Katherine M. Thomas	**Date:** **December 10, 2018**

Barrow County School System

Boldly Committed to Student Success

Chris McMichael, Ed. D.
Superintendent

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District 8
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Mark Still
District 9
At Large

October 25, 2018

Secretary Betsy DeVos
U.S. Department of Education
Office of Elementary and Secondary Education
Innovative Assessment Demonstration Authority
Georgia GMAP Application

Dear Secretary DeVos:

On behalf of Barrow County School System, the board and I extend full support to the Georgia MAP Assessment Partnership application as participants in the Innovative Assessment Demonstration Authority under Section 1204 of the Every Student Succeeds Act. Leading the way as an adaptive, personalized measure of individual student growth, GMAP is an innovative assessment system that supports teachers in better understanding the individual learning profiles of all students. It provides students the opportunity to engage in a rigorous examination of college and career ready aptitudes using the national norming psychometrics and predictive capabilities of the assessment.

In Barrow County, MAP has allowed our school system to personalize learning through an assessment that helps us provide targeted instruction on rigorous standards. With timely feedback using an adaptive assessment, the culture of our schools and the classroom instruction continue to reach high levels of engagement and deeper understanding.

Georgia students deserve the opportunity to have assessments that can be used to bring a common sense approach into the classroom because those assessments allow more time for instruction, align to needed standards for academic success, and measure growth throughout the school year. GMAP has this capability.

Sincerely,

Dr. Chris McMichael
Superintendent

Mark Still
Board Chair

179 West Athens Street • Winder, GA • 770-867-4527

Clayton County Public Schools
Office of the Superintendent

1058 Fifth Avenue • Jonesboro, Georgia 30236 • (770) 473-2712

DR. MORCEASE J. BEASLEY
Superintendent of Schools

October 3, 2018

Secretary Betsy DeVos
U.S. Department of Education
Office of Elementary and Secondary Education
Innovative Assessment Demonstration Authority
Georgia GMAP Application

Dear Secretary DeVos:

On behalf of Clayton County Public Schools, the Board and Superintendent extend full support to the Georgia MAP Assessment Partnership application as participants in the Innovative Assessment Demonstration Authority under Section 1204 of the Every Student Succeeds Act. Leading the way as an adaptive, personalized measure of individual student growth, GMAP is an innovative assessment system that supports teachers to better understanding the individual learning profiles of all students. GMAP is transforming classroom instruction and resulting in more students becoming college and career ready.

In Clayton County Public Schools, MAP will allow our system to personalize learning through an assessment that will helps us provide targeted instruction on rigorous standards. With timely feedback using an adaptive assessment, our teachers will meet individual student needs and maximize classroom instructional time. With the alignment to critical Georgia Standards of Excellence, MAP not only allows teachers to teach to mastery of content standards, but it also provides nationally normed data to Clayton County Public Schools, so we may continue to increase expectations for a diverse learning population.

Georgia students deserve the opportunity to have assessments that can be used to bring a common sense approach into the classroom because those assessments allow more time for instruction, align to needed standards for academic success, and measure growth throughout the school year. Innovation is critical in the classroom, and Clayton County Public Schools realizes the need to merge innovation into assessment practices.

Sincerely,

Dr. Pam Adamson
Board Chair

Dr. Morcease Beasley
Superintendent/CEO

Dalton Public Schools

November 1, 2018

Secretary Betsy DeVos
U.S. Department of Education
Office of Elementary and Secondary Education
Innovative Assessment Demonstration Authority
Georgia GMAP Application

Richard Fromm
Chair
rick.fromm@dalton.k12.ga.us

Matt Evans
Vice-Chair
matt.evans@dalton.k12.ga.us

John T. (Tulley) Johnson
Treasurer
tulley.johnson@dalton.k12.ga.ua

Pablo Perez
pablo.perez@dalton.k12.ga.us

Palmer Griffin
palmer.griffin@dalton.k12.ga.us

Tim Scott
Secretary/Superintendent
tim.scott@dalton.k12.ga.us

Dear Secretary DeVos:

On behalf of Dalton Public Schools, the board and I extend full support to the Georgia MAP Assessment Partnership application as participants in the Innovative Assessment Demonstration Authority under Section 1204 of the Every Student Succeeds Act. Leading the way as an adaptive, personalized measure of individual student growth, GMAP is an innovative assessment system that supports teachers in better understanding the individual learning profiles of all students. It provides students the opportunity to engage in a rigorous examination of college and career ready aptitudes using the national norming psychometrics and predictive capabilities of the assessment.

In Dalton Public Schools, MAP has allowed our system to personalize learning through an assessment that helps us provide targeted instruction on rigorous standards. With timely feedback using an adaptive assessment, the culture of our schools and the classroom instruction continue to reach high levels of engagement and deeper understanding.

Georgia students deserve the opportunity to have assessments that can be used to bring a common sense approach into the classroom because those assessments allow more time for instruction, align to needed standards for academic success, and measure growth throughout the school year. GMAP has this capability.

Sincerely,

Dr. Rick Fromm, Board Chair

Dr. Tim Scott, Superintendent

PO Box 1408
300 West Waugh Street
Dalton, GA 30722

daltonpublicschools.com
Phone 706.876.4000
Fax 706.226.4583

FLOYD COUNTY SCHOOLS
Destination GRADUATION for every child!

A Georgia Charter System

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SUPERINTENDENT: JEFFREY R. WILSON, Ed.D.

October 25, 2018

Secretary Betsy DeVos
U.S. Department of Education
Office of Elementary and Secondary Education
Innovative Assessment Demonstration Authority
Georgia GMAP Application

Dear Secretary DeVos:

On behalf of Floyd County School District, the board and I extend full support to the Georgia MAP Assessment Partnership application as participants in the Innovative Assessment Demonstration Authority under Section 1204 of the Every Student Succeeds Act. Leading the way as an adaptive, personalized measure of individual student growth, GMAP is an innovative assessment system that supports teachers in better understanding the individual learning profiles of all students. It provides students the opportunity to engage in a rigorous examination of college and career ready aptitudes using the national norming psychometrics and predictive capabilities of the assessment.

In Floyd County School District, MAP has allowed our system to personalize learning through an assessment that helps us provide targeted instruction on rigorous standards. With timely feedback using an adaptive assessment, the culture of our schools and the classroom instruction continue to reach high levels of engagement and deeper understanding.

Georgia students deserve the opportunity to have assessments that can be used to bring a common sense approach into the classroom because those assessments allow more time for instruction, align to needed standards for academic success, and measure growth throughout the school year. GMAP has this capability.

Sincerely,

Jeff Wilson, Ed.D.
Superintendent

Chip Hood
Board Chair

600 Riverside Parkway, N.E. • Rome, Georgia 30161-2938 • (706) 234-1031 • www.floydboe.net

Board of Education
Chair Dr. Martha Smith
Vice Chair – Bill Johnston
Brenda Henderson
Mike Benefield
James Watson

Dr. Jerry Bell, Superintendent

Haralson County Schools will be recognized as a leader in improving student achievement for ALL students.

November 6th, 2018

Secretary Betsy DeVos
U.S. Department of Education
Office of Elementary and Secondary Education
Innovative Assessment Demonstration Authority
Georgia GMAP Application

Dear Secretary DeVos:

On behalf of the Haralson County School District, the Board and I extend full support to the Georgia MAP Assessment Partnership application as participants in the Innovative Assessment Demonstration Authority under Section 1204 of the ***Every Student Succeeds Act***. Leading the way as an adaptive, personalized measure of individual student growth, GMAP is an innovative assessment system that supports teachers to better understanding the individual learning profiles of all students. GMAP is transforming classroom instruction and resulting in more students becoming college and career ready.

In the Haralson County School District, MAP has allowed our system to personalize learning through an assessment that helps us provide targeted instruction on rigorous standards. With timely feedback using an adaptive assessment, our teachers are meeting individual student needs and maximizing classroom instructional time. With the alignment to critical Georgia Standards of Excellence, MAP not only allows teachers to teach to mastery of content standards, but it also provides nationally normed data that will allow us to continue to increase expectations for a diverse learning population.

Georgia students deserve the opportunity to have assessments that can be used to bring a common sense approach into the classroom because those assessments allow more time for instruction, align to needed standards for academic success, and measure growth throughout the school year. Innovation is critical in the classroom, and the Haralson County School District realizes the need to merge innovation, and common sense, into assessment practices.

Sincerely,

Dr. Jerry Bell, Superintendent
The Haralson County School District

Martha G. Smith

Dr. Martha Smith, Chair
Haralson County Board of Education

299 Robertson Ave. Tallapoosa, GA 30176 • Phone (770) 574-2500 • Fax (770) 574-2225
Accredited by the Southern Association of Colleges and Schools

Jackson County Schools

Dr. April Howard, Superintendent
Mr. Steve Bryant, Chairperson

1660 Winder Highway
Jefferson, Georgia 30549
Phone (706) 367-5151 Fax (706)367-9457

October 25, 2018

Secretary Betsy DeVos
U.S. Department of Education
Office of Elementary and Secondary Education
Innovative Assessment Demonstration Authority
Georgia GMAP Application

Dear Secretary DeVos:

On behalf of Jackson County Schools, the Board and I extend full support to the Georgia MAP Assessment Partnership application as participants in the Innovative Assessment Demonstration Authority under Section 1204 of the Every Student Succeeds Act. Leading the way as an adaptive, personalized measure of individual student growth, GMAP is an innovative assessment system that supports teachers to better understanding the individual learning profiles of all students. GMAP is transforming classroom instruction and resulting in more students becoming college and career ready.

In Jackson County Schools, MAP has allowed our system to personalize learning through an assessment that helps us provide targeted instruction on rigorous standards. With timely feedback using an adaptive assessment, our teachers are meeting individual student needs and maximizing classroom instructional time. With the alignment to critical Georgia Standards of Excellence, MAP not only allows teachers to teach to mastery of content standards, but it also provides nationally normed data to Jackson County Schools. We are thrilled that this data opens the door to explore new opportunities of deeper learning for all students.

We believe that assessment should be used to guide instructional practices and inform classroom decisions. GMAP will allow us to do this even for summative assessments used for accountability. Georgia students deserve the opportunity to have assessments that can be used to bring a common sense approach into the classroom because those assessments allow more time for instruction, align to needed standards for academic success, and measure growth throughout the school year.

Sincerely,

Mr. Steve Bryant
Board of Education, Chair

April Howard
Superintendent

Jasper County Charter System
1411 College Street • Monticello, GA 31064
706.468.6350 (P) • 706.468.0045 (F)
www.jasper.k12.ga.us

October 25, 2018

Secretary Betsy DeVos
U.S. Department of Education
Office of Elementary and Secondary Education
Innovative Assessment Demonstration Authority
Georgia GMAP Application

Dear Secretary DeVos:
On behalf of Jasper County Charter System, the Board of Education and I extend full support to the Georgia MAP Assessment Partnership application as participants in the Innovative Assessment Demonstration Authority under Section 1204 of the Every Student Succeeds Act. Leading the way as an adaptive, personalized measure of individual student growth, GMAP is an innovative assessment system that supports teachers in better understanding the individual learning profiles of all students. It provides students the opportunity to engage in a rigorous examination of college and career ready aptitudes using the national norming psychometrics and predictive capabilities of the assessment. The use of GMAP has transformed the work in our classrooms allowing our system to better instruct and have children graduate from school.

MAP has allowed our system to personalize learning through an assessment that helps us provide targeted instruction on rigorous standards. With timely feedback using an adaptive assessment, the culture of our schools and the classroom instruction continue to reach high levels of engagement and deeper understanding. As stated, OUR graduation rate has increased from 66% to 85%, and we attribute this to more personalized instruction to support students.

Georgia students deserve the opportunity to have assessments that can be used to bring a common sense approach into the classroom because those assessments allow more time for instruction, align to needed standards for academic success, and measure growth throughout the school year. GMAP has this capability.

Sincerely,

L. Michael Newton, Ed.D.
Superintendent

William Schilling
Chairperson, Board of Education

Marietta city schools
A Georgia Charter System

Grant Rivera, Ed.D.
Superintendent

October 25, 2018

Secretary Betsy DeVos
U.S. Department of Education
Office of Elementary and Secondary Education
Innovative Assessment Demonstration Authority
Georgia GMAP Application

Dear Secretary DeVos:

On behalf of Marietta City Schools, the Board and I extend full support to the Georgia MAP Assessment Partnership application as participants in the Innovative Assessment Demonstration Authority under Section 1204 of the Every Student Succeeds Act. Leading the way as an adaptive, personalized measure of individual student growth, GMAP is an innovative assessment system that supports teachers to better understanding the individual learning profiles of all students. GMAP is transforming classroom instruction and resulting in more students becoming college and career ready.

In Marietta City Schools, MAP has allowed our system to personalize learning through an assessment that helps us provide targeted instruction on rigorous standards. With timely feedback using an adaptive assessment, our teachers are meeting individual student needs and maximizing classroom instructional time. With the alignment to critical Georgia Standards of Excellence, MAP not only allows teachers to teach to mastery of content standards, but it also provides nationally normed data to Marietta City Schools so we may continue to increase expectations for a diverse learning population.

Georgia students deserve the opportunity to have assessments that can be used to bring a common sense approach into the classroom because those assessments allow more time for instruction, align to needed standards for academic success, and measure growth throughout the school year. Innovation is critical in the classroom, and Marietta City Schools realizes the need to merge innovation into assessment practices.

Sincerely,

Grant Rivera, Superintendent

Jason Waters, Board Chair

250 Howard Street • Marietta, GA 30060 • Phone 770.422.3500 • Fax 770.425.4095 • ***www.marietta-city.org***

POLK SCHOOL DISTRICT

October 26, 2018

Secretary Betsy DeVos U.S. Department of Education
Office of Elementary and Secondary Education
Innovative Assessment Demonstration Authority
Georgia GMAP Application

Dear Secretary DeVos:

On behalf of Polk County School District, the board and I extend full support to the Georgia MAP Assessment Partnership application as participants in the Innovative Assessment Demonstration Authority under Section 1204 of the Every Student Succeeds Act. Leading the way as an adaptive, personalized measure of individual student growth, GMAP is an innovative assessment system that supports teachers in better understanding the individual learning profiles of all students. It provides students the opportunity to engage in a rigorous examination of college and career ready aptitudes using the national norming psychometrics and predictive capabilities of the assessment.

In Polk County School District, MAP has allowed our system to personalize learning through an assessment that helps us provide targeted instruction on rigorous standards. With timely feedback using an adaptive assessment, the culture of our schools and the classroom instruction continue to reach high levels of engagement and deeper understanding.

Georgia students deserve the opportunity to have assessments that can be used to bring a common sense approach into the classroom because those assessments allow more time for instruction, align to needed standards for academic success, and measure growth throughout the school year. GMAP has this capability.

Sincerely,

Laurie Atkins
Superintendent

Tommy Sanders
Polk School District Board Chairman

612 S. College Street • Cedartown, GA 30125 • 770-748-3821

Appendix D:
Putnam Consortium

Georgia's Current Statewide Assessment System Achievement Levels

The four achievement levels on Georgia Milestones are *Beginning Learner, Developing Learner, Proficient Learner,* and *Distinguished Learner.* The general meaning of each of the four levels is provided below:

Beginning Learners **do not yet demonstrate proficiency** in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students ***need substantial academic support*** to be prepared for the next grade level or course and to be on track for college and career readiness.

Developing Learners **demonstrate partial proficiency** in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students ***need additional academic support*** to ensure success in the next grade level or course and to be on track for college and career readiness.

Proficient Learners **demonstrate proficiency** in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students ***are prepared*** for the next grade level or course and are on track for college and career readiness.

Distinguished Learners **demonstrate advanced proficiency** in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students ***are well prepared*** for the next grade level or course and are well prepared for college and career readiness.

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Cohorts. *In recognizing the tight timeframe and amount of work to complete the application for the first cohort of applicants, there is a commitment to provide multiple opportunities in the future for LEAs to apply for the Innovative Assessment Pilot.*

*Cohort 1**

- *Application Due: August 1, 2018*
- *Review/Approval by the State Board of Education: August 22-23, 2018*

*Cohort 2**

- *Application Due: September 1, 2018*
- *Review/Approval by the State Board of Education: September 26-27, 2018*

**Additional cohorts will be added.*

Process. *If approved by the State Board of Education, the Georgia Department of Education will work with participating LEAs to initiate the performance contract amendment process. Per SB 362, the LEA must utilize the performance contract as the means for participating in the pilot.*

Submission. *Please submit the completed application along with labeled supporting documents to Debbie Caputo (dcaputo@doe.k12.ga.us).*

Description of Assessment Pilot

___ *LEA* EA ___ *Consortium of LEAs*

FILL OUT ONLY IF APPLYING AS A CONSORTIUM. Describe the proposed participants in the consortium, how the consortium will be managed and operated, and how all participants will comply with the Innovative Assessment Pilot Program Assurances.

Narrative:

Members of the Putnam County consortium will use the innovative diagnostic assessment system created by Navvy Education, LLC ("Navvy"; rhymes with savvy) in collaboration with Putnam County. The consortium has participating and affiliate members. The only participating member for 2018-2019 will be Putnam County.

Affiliate members for 2018-2019 are Calhoun City Schools, Dougherty County, Evans County, Fayette County, Floyd County, Liberty County, McIntosh County, Oglethorpe County, and Pike County. Affiliate members are likely to transition to participating members in a near-future school year.

All members will use Navvy to provide real-time, actionable feedback about students' competencies of individual standards. All members agree to implement Navvy assessments with fidelity to have the greatest impact on teaching and learning and to produce valid data for assessing the validity and reliability of the Navvy assessments.

As a participating member, Putnam will use Navvy for accountability purposes for grades 3-8 and high school beginning in 2018-2019 in lieu of administering Milestones. It is critical to the success of Navvy that the weeks of instructional time that otherwise would be dedicated to review and administration of Milestones, along with the post-Milestones instructional time, be

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freed up for student learning. Additionally, students will be given additional time to demonstrate competencies by taking advantage of summer instruction (up to July 30, 2019) prior to reporting summative results. Putnam will report Navvy summative results as of August 7, 2019 to show the percentage of standards for which each student demonstrated competency. Over the course of the pilot, comparability between Navvy and Milestones results will be established.

Affiliate members will use Navvy in 2018-2019 and will also administer Milestones as required to students for accountability purposes. The Affiliate members will likely transition to participating status beginning the second year; the benefit of being an affiliate for the first year is to allow students, teachers, and school leaders to learn the Navvy system and shift to the educational mindset that is required to leverage the benefits of the information Navvy provides. This mindset includes a commitment to on-going assessment that informs teaching practices to customize learning to meet specific needs of individual students and a commitment to re-assessing and continuing to differentiate instruction to help the student reach the level of competency the standard requires.

The Navvy consortium will be led by Putnam County, Dr. Laine Bradshaw, and the DOE. All members will commit, at the least, to a joint monthly telephone conference and an in-person meeting at least once a quarter.

All members request a waiver under SB 362 of state-imposed testing, reporting, intervention and evaluation requirements.

Participating members will require changes to their contract because they seek to use Navvy in lieu of Milestones in 2018-2019. Affiliate districts will use Milestones in the 2018-2019 school year and thus may not need changes to their contracts this year. When they transition to participating districts, they will need changes to their contracts.

Each affiliate member of the consortium has signed an MOU that is attached to this application. The MOU indicates the district's commitments as an affiliate member of the consortium.

Describe the proposed assessment system, including:

1. *o description of the system,*
2. *the type of assessment (i.e., single summative assessment, series of interim assessments, computer adaptive, etc.)*
3. *administration mode (i.e., technology-based, paper/pencil, etc.),*
4. *grades and content areas and/or courses to be included,*
5. *purpose of the assessments, and*
6. *intended interpretations and uses of the results.*

Narrative:

Overview: We will use the Navvy assessment system. It is a web-based, through-year assessment system that provides real-time feedback on student competencies of the Georgia Standards of Excellence. For the current school year, members of the consortia will use Navvy assessments for grades 3-8 and high school mathematics and English Language Arts (ELA).

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Narrative: With permission from Dr. Bradshaw, the narratives in this application contain text or adapted text from Dr. Bradshaw's scholarly writings and from Navvy Education's writings. These narratives are being shared with the state review team and the Georgia Board of Education for purposes of reviewing this application. The narratives may not be shared or distributed with additional parties or for additional purposes without permission from Dr. Bradshaw. Please contact Dr. Laine Bradshaw from permission to share, distribute, or cite information in the narratives of this application: lainebradshaw@gmail.com.

Please see attached Narrative in document entitled: *Proposed Assessment System_Putnam County Consortium Narrative.*

Describe the innovative nature of the piloted assessments and need for participation in this pilot, including anticipated benefits for the LEA, schools, and for student learning.

Narrative:

Overview: The Navvy system was designed specifically to meet the assessment needs of students, teachers, and educational leaders in Georgia. We anticipate improved student learning of key concepts delineated by state academic standards for all students by implementing Navvy as an on-demand, web-based diagnostic assessment system.

Narrative: Please see attached narrative in document entitled: *Anticipated Benefits Putnam County Consoritum Narrative*. Please contact Dr. Laine Bradshaw from permission to share, distribute, or cite information in the attached narrative: lainebradshaw@gmail.com.

Describe the duration of your Innovative Assessment Pilot Program (up to 5 years). Note: The State Board of Education will renew your contract amendment on o yeorly basis based on progress and effectiveness of your program.

Narrative:

An outline for major steps in our 5-year plan for the pilot is given below. Steps include actions taken by the members of consortium as well as data sharing and cooperation from the state Department of Education. In addition to this outline, we have a commitment to iterative refinement of assessment plans, processes, and designs based on input and feedback from member districts in the consortium and key stakeholders.

Year 1: Fall 2018- Spring 2019

--Field test: math and ELA items for grades 3-8, High School EOC courses
--Pilot: Writing rubrics
--Develop: Grades 1-2 math and ELA assessments (formative purposes only, not accountability)

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--Receive Milestones item files to perform technical programming to embed items into Navvy for comparability (*See note below)
--Receive data files from state that summarize the demographics of students within and across school districts statewide (required for identifying target for making student sample within consortium a representative sample of the students in the state)
--Finalize: Assessment sampling plan for comparability (*See note below)

Summer Year 1:
--Conduct psychometric analyses and data reviews, as applicable to assessment stage
--Conduct preliminary comparability analyses from Milestones and Navvy data using Milestones scaled scores (data Affiliate districts have this data and can share with Navvy Education and the consortium)
--Receive item-level Milestones data from the state for Navvy Education and the consortium to conduct in-depth, preliminary comparability analyses (both item-level student response data from Milestones and Milestones item-level alignment to standards)
--Receive state-wide data on Milestones results from state for Navvy Education and the consortium to conduct quasi-experimental research to quantify the impact of Navvy assessments on student learning for all students and for sub-groups of students
--Finalize target sample of representative students

Year 2: Fall 2019- Spring 2020
--Operational: math and ELA grades 3-8, High School
--Field test: Grades 1-2 math and ELA (formative purposes only, not accountability); Writing 5, 8, and 11
--Expand as needed to more districts, with target for representative sample set of districts in mind
--Conduct in-depth preliminary comparability analyses with data provided by state in Year 1 summer
--Conduct analyses for quasi-experimental research with data provided by state in Year 1 summer
--Develop: Science grades 4 and 7
--Have some Milestones questions embedded into Navvy (*For comparability; administer to smaller sample as try-out)

Summer Year 2:
--Conduct psychometric analyses and data reviews, as applicable to assessment stage
--Conduct additional comparability analyses from Milestones and Navvy data using 2019-2020 data shared by consortium members
--Receive analogous data from state for 2019-2010 school year for in-depth comparability analyses and quasi-experimental research (see details under Summer Year 1)

Year 3: Fall 2020- Spring 2021
--Operational: math and ELA grades 1-8, High school EOC courses; Writing 5, 8, 11
--Field test: Science grades 4 and 7; Writing 3,4,6,9
--Expand as needed to more districts to meet representative student sample target
--Have needed Milestones questions embedded into Navvy (*For comparability)

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--Conduct additional in-depth comparability analyses with data provided by state, now using both in Year 1 and Year 2 data
--Conduct analyses for quasi-experimental research with data provided by state in Year 1 summer, now using both in Year 1 and Year 2 data

Summer Year 3:
--Conduct psychometric analyses and data reviews, as applicable to assessment stage
--Conduct additional comparability analyses from Milestones and Navvy data using 2020-2021 data shared by consortium members
--Receive analogous data from state for 2020-2021 school year for in-depth comparability analyses and quasi-experimental research (see details under Summer Year 1)

Year 4: Fall 2021- Spring 2022
--Operational: math and ELA grades 1-8, High school EOC courses; science grades 4 and 7; writing 3-9,11
--Representative sample target expected to be reached
--Implement assessment sampling plan for full comparability study (*For comparability)
--Conduct additional in-depth comparability analyses with data provided by state, now using Year 1-3 data
--Conduct analyses for quasi-experimental research with data provided by state in Year 1 summer, now using Year 1-3 data

Summer Year 4:
--Conduct psychometric analyses and data reviews, as applicable to assessment stage
--Conduct full comparability study using Milestones and Navvy data shared by consortium members
--Receive analogous data from state for 2021-2022 school year for in-depth comparability analyses and quasi-experimental research (see details under Summer Year 1)

Year 5: Fall 2022- Spring 2023
--Make any final adjustments as needed
--Conduct final in-depth comparability analyses with data provided by state, now using Year 1-4 data
--Conduct analyses for quasi-experimental research with data provided by state in Year 1 summer, now using Year 1-4 data

*There are a number of assessment sampling schemes that may establish comparability. Each requires some level of double testing. We will seek to minimize double testing as much as possible, while still effectively establishing comparability.

Because Navvy cannot be implemented with fidelity in only 75% of the school year, we do not propose using Navvy throughout the year and then taking Milestones at the end of the year. We plan to use the following sampling method described by the federal innovative assessment

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pilot: "(C) Including, as a significant portion of the innovative assessment system in each required grade and subject in which both an innovative and statewide assessment are administered, items or performance tasks from the statewide assessment system that, at a minimum, have been previously pilot tested or field tested for use in the statewide assessment system."

We plan to embed Milestones questions into Navvy. Milestones has 40-70 questions per subject that measure the standards, and those questions would need to be taken by students. We plan to embed these questions on the appropriate standards assessment throughout the year, and neither students nor teachers will be told which questions are Milestones questions. So, across the year, students would take the Milestones questions without realizing it.

Using this method, we will not disrupt the formative assessment/learning process that Navvy supports, and it would allow teaching up until the end of the school year, while still collecting the needed data.

Statistically, there are some important considerations when analyzing the data, and we will collaborate with Dr. Bradshaw and other technical experts as needed to analyze the data appropriately to establish comparability.

While this is our initial plan, we anticipate working with the members of the consortium, key stakeholders, and the state DOE to discuss, review, and revise a comparability plan as needed.

Assurance: *LEA/Consortium has met its performance contract goals for the last year.*

Superintendent's Initials: EA

Narrative:

The only Participating district in Year 1 is Putnam County. The Putnam County Charter Schools System previous performance is described below:

Schools that Beat the Odds are those with a higher CCRPI (without Challenge points) than similar schools serving similar students in Georgia. The Beating the Odds analysis predicts a range within which each school's CCRPI is statistically expected to fall, given the school's size, grade cluster, student demographics (including race/ethnicity, disability, English Learners, and poverty), and student mobility. The Putnam County Charter School System has "Beat the Odds" (BTO) 14 out of 17 (82%) times since 2012. Likewise, the previous two years our school scores, as well as the District score have demonstrated improvement on the average CCRPI Single Score without Challenge points.

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Self-Assessment

Description of Rating Categories. *For each category below, provide a rating for each element based on where the LEA/consortium is on the fidelity continuum. Provide a narrative describing what efforts support your ratings. Provide labeled artifacts of documentation as evidence for your rotings as attachments.*

Not Yet Addressed	*LEA/consortium has not begun to address this issue.*
Planning	*LEA/consortium is researching and developing this issue with key stakeholders and technical experts. The LEA/consortium has some evidence of planning (agendas, meeting notes, etc.).*
Implementing	*LEA/consortium is piloting this issue and anticipates revisions based on the pilot process with input from stakeholders and technical experts. The LEA/consortium has ample evidence of planning and some evidence of implementation.*
Operational	*LEA/consortium has implemented this issue in some but not all applicable schools and does not anticipate major revisions. The LEA/consortium has ample evidence of planning and implementation with stakeholders and technical experts.*
Scaled	*This issue is fully operational in all applicable schools and does not anticipate major revisions. The LEA/consortium has ample evidence of planning and successful implementation with stakeholders and technical experts.*

Assurance: *The LEA/Consortium has read USED's New Peer Review Guidance (https://www2.ed.gov/admins/lead/account/saa.html#Standards_and_Assessments_Peer_Review) and Application for the Innovative Demonstration Authority (https://www2.ed.gov/admins/lead/account/iada/index.html) understanding that its efforts to the best of its ability be in alignment with a peer review and/or demonstrotion authority submission.*

Superintendent's Initials: ED

A. Alignment & Comparability

Assurance: *The LEA/Consortium will assess students as necessary to establish comparability per ESSA statute and USED regulations.*

Superintendent's Initials: ED

Per Senate Bill 362, the State Board of Education and Georgia Department of Education will pursue maximum flexibility from USED via waiver requests and/or participation in the Innovative Demonstration Authority to reduce double testing to the fullest extent possible while establishing comparability between the innovative assessments and state Georgia Milestones

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assessments. The LEA acknowledges that the Georgia Department of Education will communicate progress on the status of the federal waiver requests. The LEA further acknowledges that flexibility from state laws and regulations ***shall not be construed as a waiver*** *of federal laws and regulations unless notified by the Georgia Department of Education.*

The state will contract with an external, independent third-party evaluator to evaluate comparability.

	Not Yet Addressed	*Planning*	*Implementing*	*Operational*	*Scaled*
1. Aligns with Georgia's academic content standards (breadth and depth of those standards for all grade-levels and content areas or courses assessed)					•
2. Identifies which students are not making progress toward Georgia's academic content standards					•
3. Produces results that are comparable to the Georgia Milestones assessments (include methods in the narrative or as attached evidence)		•			

Narrative:

1. Key to Navvy is the quality of items and the sharp alignment of items to Georgia Standards of Excellence. Experienced, top-notch educators across Georgia who are experts in both content and pedagogy served on item authoring and review teams for Navvy. Dr. Bradshaw led the team of item writers. Items were written according to assessment best practices which included utilizing Universal Design for Learning principles, ensuring construct representation, minimizing construct irrelevant variance, and collecting validity evidence based on test content through expert review (Messick, 1989). The team of educators was comprised of master classroom teachers and of experts who have served in roles such as curriculum administrators in the State Department of Education and presidents of teacher organizations in Georgia. Reviewers sought to identify (a) systematic influences on the item response outside of the target construct, (b) ambiguities in wording or context that would confuse students or obfuscate the item's intent, (c) item content or context features that introduce bias for or are culturally insensitive to a subgroup of students (evidence related to the fairness of the test), and (d) inappropriate levels of item difficulty for the target population. Items with any of these features were revised and reviewed again until consensus was reached on the quality of the final version of the item.

2. As described above, Navvy is uniquely designed to identify which students have competency of each standard and which students still need additional support to learn the standard(s).

3. In the previous section, we described our plan to implement and conduct a full comparability study in Year 4 of the pilot. In Years 1-3, we will conduct on-going analysis

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with data available to that point, refine the design of the plan, coordinate with the DOE to implement the plan, expand the use of Navvy to include a representative sample of students, and prepare for implementation of the plan.
Evidence *(please provide labeled attachments)*

B. Technical Quality

	Not Yet Addressed	*Planning*	*Implementing*	*Operational*	*Scaled*
1.Works with expert(s) (external partner or in-house) to ensure technical quality, validity, reliability, and psychometric soundness of the innovative assessment			●		
2. Establishes validity and reliability evidence consistent with nationally recognized testing standards			●		
3. Assesses student achievement based on state academic content standards in terms of content and cognitive processes, including higher-order thinking skills, and adequately measures student performance across the full performance continuum					●
4. Produces individual and aggregate reports that allow parents, educators, and school leaders to understand and address the specific needs of students					●
5. Provides reports in an easily understandable ond timely manner to students, parents, educators, and school leoders					●
6.Developed, to the extent practicable, consistent with the principles of universal design for learning			●		
Narrative:					

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1. Dr. Bradshaw, a leading expert in psychometrics and diagnostic assessment, is leading the effort to ensure technical quality of the assessment. Her research has demonstrated the successful design of similar assessments. Both her practical and theoretical work guided the assessment design and will guide the evaluation of the technical properties of the assessment once field test data is collect with a large enough sample.

2. As described in the previous section, validity evidence based on expert review has been established for all questions. Via the field test data, further evidence of item quality and internal test structure will be evaluated.

3. As described in the previous section, the item quality is a strength of Navvy. Items are written with appropriate rigor and requires a range of depth of knowledge to demonstrate competency, as required by the standard.

4. The system produces aggregate reports that are available for all users. Students, teachers, and school leaders have log-ins to the website and have permissions commensurate with their ranks to view all data collected by the system. Students, teachers, and leaders may share these results with parents by exporting results from the system. Our consortium will discuss developing a parent portal during the pilot years, but have not yet to date. While we have these reports scaled, we will continue to make refinements to the reports to help users interpret them accurately and to display data in additional useful ways to stakeholders.

5. Reports are design to be easy to understand. Dr. Bradshaw has conducted research on designing diagnostic reports and used results of that research to inform the design of the reports. Throughout the pilot, we will implement efforts to help users interpret results accurately, as appropriate use of the results depends on first accurately interpreting the results. Results are provided in real-time (within seconds of the student submitting a new assessment), and all reports are updated in real-time when new assessments are completed.

6. Items were written, to the extent practicable, according to principles of UDL. As part of the pilot, we plan to seek partners who are experts in UDL to conduct further review of items and the system to minimize barriers any students may have to successfully using the system.

Evidence *(please provide labeled attachments)*

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C. Accessibility and Accommodations

Assurance: *The LEA/Consortium agrees to complete and comply with the provisions of the annual GAA Survey provided by GaDOE.*

Superintendent's Initials: EA

While students with the most significant cognitive disabilities can continue to participate in the GAA as opposed to the local assessment, all other students with disabilities (and English Learners) must be able to participate in the local assessment, with accommodations as needed and appropriate.

Assurance: *All students (except those with the most significant cognitive disabilities) in any grade and subject for which the innovative assessment is given in a participating school will be given access to the innovative assessment.*

Superintendent's Initials: EA

	Not Yet Addressed	Planning	Implementing	Operational	Scaled
1.Appropriate accommodations will be provided for students with disabilities as defined via their IEP or IAP (provide list of available accommodations as an attachment)			•		
2.Appropriate accommodations will be provided for English Learners as defined via their EL/TPC (provide list of available accommodations as an attachment)			•		

Narrative:

The following accommodations are scaled:

The Navvy platform has the following Accessibility options: Adjust font size, adjust color scheme (e.g., Yellow on navy, White on black, Black on violet), and adjust zoom. Navvy assessments can be used with regular or braille keyboards and a touch screen or a mouse. Navvy assessments use an accessible color palette that meets the minimum color contrast ratio of 4.5:1 for the vision impaired. Navvy assessments support free screen readers (e.g., Google Read and Write). Navvy also provide an export of assessments as required for the district then printing the assessment in Braille. Navvy provides a highlighter tool for all students for ELA passages.

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In addition to these platform designs that support accessibility, districts are allowed to provide additional accommodations that are not dependent upon the Navvy technology but are detailed in the state's Accommodations Manual. For example, districts may provide seating accommodations (e.g., administer the assessments individually to students or in small groups or using adaptive furniture), presentation accommodations (print assessments in Braille, sign assessments and materials, or read assessment aloud), response accommodations (e.g., Braille keyboard, students point to answers), and scheduling accommodations (e.g., frequent breaks, extended time, optimal time of day for testing).

We self-rated as implementing because we plan to seek additional experts in accessibility and accommodations to review our efforts, to advise on improvements to existing accessibility options, and to identify any gaps in accessibility options.

Evidence *(please provide labeled attachments)*

D. Test Administration and Security

Assurance: *LEA/Consortium will deliver the innovative assessment in line with the state adopted guidelines for test security and integrity. LEA/Consortium agrees to allow the Governor's Office of Student Achievement (GOSA) to monitor test administration and will provide GOSA with data needed for audits to ensure test security and integrity.*

Superintendent's Initials: EA

	Not Yet Addressed	Planning	Implementing	Operational	Scaled
1. Develops and implements policies and procedures to ensure standardized test administration (i.e., test coordinator manuals, test administration manuals, accommodations manuals, test preparation materials for students and parents, and/or other key documents provided to schools and teachers that address standardized test administration and any accessibility tools and features available for the assessments)			●		
2. Delivers training for educators and school leaders to ensure a standardized test administration			●		
3. Develops and implements a monitoring process to ensure standardized test administration			●		

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4. Develops and implements policies and procedures to prevent test irregularities and ensure the integrity of test results			•		
5. Develops and implements policies and procedures to protect the integrity and confidentiality of test materials, test-related data, and personally identifiable information			•		

Narrative:

For statements 1-5: Please see attached excerpts from Educator and Student Assessment Handbooks (the "Handbooks") for the Navvy policies and procedures on test administration and test security. The Handbooks were designed after the corresponding manuals for Milestones testing. Each user (student, teacher, and administrator) actively agrees to abide by the Handbook prior to activating their Navvy account. Districts are responsible for ensuring the Navvy assessments are administered and kept secure as detailed in the Handbook by providing necessary training to district users.

While these policies are currently fully scaled in Navvy, we indicated Implementing on the self-rating because over the pilot year, we will continue to be open to ways to improve our policies and security to ensure fairness for all students and validity for all results.

Evidence *(please provide labeled attachments)*

E. Stakeholder Engagement

	Not Yet Addressed	*Planning*	*Implementing*	*Operational*	*Scaled*
1. Develops assessment in collaboration with stakeholders representing the interests of students with disabilities, English learners, and other vulnerable populations; teachers, principals, and other school leaders; parents; and civil rights organizations			•		
2. Develops capacity for educators and school and district leaders to implement the assessment, interpret results and communicate with stakeholders			•		

Narrative:

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1. Navvy is a grass-roots effort that has been led by stakeholders in Georgia. The item writing and review teams consist of about 30 educators across Georgia. Last year, pilot districts Putnam, Glascock, and Floyd provided input to the design of the system, the quality of the items, and the design of the reports and website. As part of the pilot, we plan to partner with stakeholders representing the interest of students with disabilities, English language learners, and other vulnerable populations to provide feedback on the system and to conduct fairness and sensitivity reviews of items.

2. These components are scaled: We currently provide an initial training on the system that includes how to use the website, how to administer the assessments, how to interpret results on the score reports, and how to use results to inform instruction. The training also overviews the sharp focus of the assessments on standards and the design of the items.

   We self-rated as Implementing because we are additionally building how-to videos that will be made available through Navvy to help redeliver training and successfully build capacity across the district to all users to successfully implement the system. In addition, as part of the pilot, we plan to create communication materials specifically written in easy-to-understand language for parents and community stakeholders.

Evidence *(please provide labeled attachments)*

F. Accountability

Assurance. *LEA/Consortium ensures that the percentage of all students (and the percentage of students in each subgroup) assessed is at least as high as the percentage assessed using the Georgia Milestones assessments in the year previous to the start of the pilot.*

Superintendent's Initials: EA

	Not Yet Addressed	Planning	Implementing	Operational	Scaled
1.Produces a single, summative score for every student			•		
2. Produces a comparable growth measurement that can be used for the Progress CCRPI component		•			
3. Produces a comparable achievement measurement that can be used for the Content Mastery and Closing Gaps CCRPI components (alignment to Beginning, Developing, Proficient, and		•			

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Distinguished Learner achievement levels)					
4. Produces a comparable literacy (Lexile) measurement that can be used for the Readiness CCRPI component	•				
5. Produces subgroup results consistent with federal accountability and reporting requirements (e.g., race/ethnicity, gender, English Learners, students with disabilities, migrant, homeless, foster, parent on active military duty)		•			

Narrative:

1. Currently the system reports two aggregate results: (a) It reports the overall percentage of standards for which the student demonstrated competency (e.g., Mallory demonstrated competency on 22 of the 29 standards in 6th grade math, so her overall competency percentage is 76% (i.e., 22/29); (b) It also reports the overall percentage of standards for which the student demonstrated competency, given the student was assigned the assessment over the standard (e.g., Mallory was assigned 27 of the 29 assessments for 6th grade math standards and demonstrated mastery on 22 of them, so this percentage is 22/27 or 81%). We self-rate as implementing because we will be discussing with stakeholders in our consortium the degree to which standards should or should not be equally weighted when aggregating mastery results across standards.

2. We have a plan to establish comparability. We will continue to discuss and refine this plan with members in the consortium and key stakeholders. Once the final is finalized and implemented, we will have a summative score that results in achievement levels that are comparable to achievement levels produced by a Milestones scaled score. Then, we have a plan to report the transitions between the four achievement levels as a discrete measure of growth that syncs with a standards-competency accountability system.

3. Once we are able to establish comparability based on our plan, these components will naturally follow.

4. Research does not yet exist to support positive impacts on student learning from providing a Lexile measure. Thus, we have not yet invested in a comparable measure. We do not seek this as a component of our accountability system.
5. As part of the pilot, subgroup reports will be created by the end of Year 1, but they are not currently provided.

Evidence *(please provide labeled attachments)*

Per Senate Bill 362, negative consequences for participating innovative LEAs/consortiums that are in the purview of the State Board of Education, Georgia Department of Education, and Governor's Office of Student Achievement will not be pursued or

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enforced (ex: turnaround school selection, traditional SWSS/charter system accountability, etc.) as long as the LEA/consortium adheres to its amended performance contract. Federal law and requirements (ex: Comprehensive Support and Improvement and Targeted Support and Improvement identification and services, etc.) will be enforced unless granted flexibility from USED. The Georgia Department of Education will communicate progress on federal waivers to districts as needed.

G. Conflict of Interest

Assurance: *There is no conflict of interest (financial or otherwise) for the interested parties in participating in the pilot program. All activities that are related to this pilot shall abide by local procurement requirements.*

Superintendent's Initials: EA

Goals & Deliverables (2018-2019 School Year)

Narrative:

In year 1 of the pilot, we have 10 member districts who will be administering Navvy assessments for on-going, real-time feedback about standards competencies. During this year, we will be field testing math and ELA items for grades 3-8 and for high school courses that complete a Milestones test at the end of the course. We will use the field test data to calibrate the diagnostic psychometric models, a necessary step to provide validity and reliability to results starting in year 2 of the pilot.

Leaders of the member districts of the consortium will meet monthly about Navvy assessments and about designing an accountability system that centers on data collected through Navvy. We expect for these collaborations to yield useful feedback to improve the system and rich ideas to further advance the system.

During year 1, we will also continue to develop other components of Navvy. With input from curriculum experts and teachers, we will develop, evaluate, and iteratively refine writing rubrics for grades 3-8 and high school. Then in Year 2, we will release writing prompts for select grade levels to add a writing component to the Navvy assessment system.

During year 1 we will also develop Grades 1 and 2 math and ELA standards-level assessments for a selection of standards. These assessments will be field tested in Year 2. These assessments will be used solely for formative/diagnostic feedback. We see these assessments as an important piece to a robust assessment system to support student learning in the early grades.

During year 1, we will also finalize our plans for establishing comparability by working with DOE and Dr. Bradshaw to embed Milestones questions into Navvy and to finalize a sampling plan that will meet technical requirements for conducting comparability analyses.

During the summer of year 1, we will begin conducting preliminary comparability analyses using data that the member districts have available to them. We will require data to be given to us by the state to conduct more in-depth comparability studies and conduct additional research using Year 1 data. These analyses will be conducted in Years 2-5: Results from Years 1-3 data

Innovative Assessment Pilot Application

will be used to guide decision-making throughout the pilot, and results from Year 4 data will serve as the final comparability study.

DOUGHERTY COUNTY SCHOOL SYSTEM
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Albany, Georgia 31702-1470
(229) 431-1285 FAX (229) 431-1276
kenneth.dyer@docoschools.org

KENNETH DYER
SUPERINTENDENT

MEMORANDUM

TO: Georgia State Board of Education

FR: Kenneth Dyer, Superintendent
Dougherty County School System "Affiliate District"

RE: Georgia State Innovative Assessment Pilot

DATE: July 26, 2018

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A. Introduction

This Memo sets forth a commitment for the Affiliate District to participate in the Georgia Innovative Assessment Pilot as an 2018-2019 *affiliate* member of the consortia of districts who will use the assessment system created by Navvy Education, LLC ("Navvy") in collaboration with Putnam County and other districts who piloted the system in the 2017-2018 school year. This Memo is an attachment to the Innovative Assessment Pilot Application for the Navvy consortia which is being submitted by Putnam County Charter School System.

B. Affiliate Member Status and Commitments

As an affiliate member of the consortia, we commit to administering Navvy assessments in the 2018-2019 school year to provide diagnostic feedback on students' understandings of the Georgia Standards of Excellence in mathematics and English Language Arts for grades 3-8 and high school courses that are required to be assessed by Milestones. In the 2018-2019 school year, we will also administer Milestones to all students for accountability purposes.

C. Affiliate Commitments

As an affiliate member, we are committed to:

(a) Implementing the Navvy assessment system to assess mathematics and English Language Arts for grades 3-8 and high school courses in the 2018-2019 school year with fidelity. We will provide necessary training to our leaders and teachers on how to administer the assessments, how to keep the assessments secure, how to interpret results from the assessments, and how to use assessment results to inform instruction and support personalized learning for our students. As part of this implementation, we will emphasize a transition to the educational mindset and practices that best leverage

the benefits of the information Navvy provides. We are committed to transitioning to on-going assessments that inform teaching practices to customize learning to meet specific needs of individual students and to re-assessing and continuing to differentiate instruction to help the student reach the level of competency the standard requires.

(b) Working with Putnam County, Dr. Laine Bradshaw, and the other affiliate districts in the Navvy consortia to provide input and feedback on the assessment system and to collaborate on creating a robust accountability system that centers around aggregated data collected by Navvy. We commit to being a collaborative member of the consortia and to being a partner in innovating assessment and accountability solutions that will best support our common goal of helping students learn and excel.

(c) Sharing data to demonstrate the technical properties of the Navvy system. Specifically, we:

(i) Give permission to Navvy Education, LLC to use the data collected by the Navvy system for Dr. Bradshaw's research, psychometric analyses and evaluation, and for comparability studies.

(ii) Will provide Navvy Education, LLC files that contain our students' Milestones results for Dr. Bradshaw's research, psychometric analyses and evaluation, and for comparability studies.

D. Transitioning to Participating Status

We will likely transition to *participating* status in a near-future school year. For this 2018-2019 school year, we will focus on successfully implementing the new system and allowing our students, teachers, and school leaders to learn and become familiar with the Navvy system. Once we successfully implement the use of Navvy for these formative purposes, we see great value in basing accountability on Navvy results instead of re-testing at the end of the year with Milestones.

When we decide to transition to participating status, we will follow the state's procedures to submit a modification to the Georgia Innovative Assessment Pilot Application to apply for participating status to be able to use Navvy in lieu of Milestones for accountability. At the time of this modification, we will respond to components of the application required for participating districts and will commit to the Innovative Assessment Pilot Program Assurances.

By signing below, the Superintendent of the Affiliate District acknowledges understanding of this Memorandum.

Kenneth Dyer	Kenneth Dyer	July 27, 2018
Superintendent	Signature	Date

MEMORANDUM

TO: Georgia State Board of Education

FR: Beverley Levine, Superintendent, Oglethorpe County School System "Affiliate District"

RE: Georgia State Innovative Assessment Pilot

DATE: July 30, 2018

****

A. Introduction

This Memo sets forth a commitment for the Affiliate District to participate in the Georgia Innovative Assessment Pilot as an 2018-2019 *affiliate* member of the consortia of districts who will use the assessment system created by Navvy Education, LLC ("Navvy") in collaboration with Putnam County and other districts who piloted the system in the 2017-2018 school year. This Memo is an attachment to the Innovative Assessment Pilot Application for the Navvy consortia which is being submitted by Putnam County Charter School System.

B. Affiliate Member Status and Commitments

As an affiliate member of the consortia, we commit to administering Navvy assessments in the 2018-2019 school year to provide diagnostic feedback on students' understandings of the Georgia Standards of Excellence in mathematics and English Language Arts for grades 3-8. In the 2018-2019 school year, we will also administer Milestones to all students for accountability purposes.

C. Affiliate Commitments

As an affiliate member, we are committed to:

(a) Implementing the Navvy assessment system to assess mathematics and English Language Arts for grades 3 - 8 in the 2018-2019 school year with fidelity. We will provide necessary training to our leaders and teachers on how to administer the assessments, how to keep the assessments secure, how to interpret results from the assessments, and how to use assessment results to inform instruction and support personalized learning for our students. As part of this implementation, we will emphasize a transition to the educational mindset and practices that best leverage the benefits of the information Navvy provides. We are committed to transitioning to on-going assessments that inform teaching practices to customize learning to meet specific

needs of individual students and to re-assessing and continuing to differentiate instruction to help the student reach the level of competency the standard requires.

(b) Working with Putnam County, Dr. Laine Bradshaw, and the other affiliate districts in the Navvy consortia to provide input and feedback on the assessment system and to collaborate on creating a robust accountability system that centers around aggregated data collected by Navvy. We commit to being a collaborative member of the consortia and to being a partner in innovating assessment and accountability solutions that will best support our common goal of helping students learn and excel.

(c) Sharing data to demonstrate the technical properties of the Navvy system. Specifically, we:

(i) Give permission to Navvy Education, LLC to use the data collected by the Navvy system for Dr. Bradshaw's research, psychometric analyses and evaluation, and for comparability studies.

(ii) Will provide Navvy Education, LLC files that contain our students' Milestones results for Dr. Bradshaw's research, psychometric analyses and evaluation, and for comparability studies.

D. Transitioning to Participating Status

We will likely transition to *participating* status in a near-future school year. For this 2018-2019 school year, we will focus on successfully implementing the new system and allowing our students, teachers, and school leaders to learn and become familiar with the Navvy system. Once we successfully implement the use of Navvy for these formative purposes, we see great value in basing accountability on Navvy results instead of re-testing at the end of the year with Milestones.

When we decide to transition to participating status, we will follow the state's procedures to submit a modification to the Georgia Innovative Assessment Pilot Application to apply for participating status to be able to use Navvy in lieu of Milestones for accountability. At the time of this modification, we will respond to components of the application required for participating districts and will commit to the Innovative Assessment Pilot Program Assurances.

By signing below, the Superintendent of the Affiliate District acknowledges understanding of this Memorandum.

Beverley Levine	Beverly Levine	7-30 2018
Superintendent	Signature	Date

MEMORANDUM

TO: Georgia State Board of Education

FR: Dr. John D. Barge, Superintendent, McIntosh County School District

RE: Georgia State Innovative Assessment Pilot

DATE: July 26, 2018

****

A. Introduction

This Memo sets forth a commitment for the Affiliate District to participate in the Georgia Innovative Assessment Pilot as an 2018-2019 *affiliate* member of the consortia of districts who will use the assessment system created by Navvy Education, LLC ("Navvy") in collaboration with Putnam County and other districts who piloted the system in the 2017-2018 school year. This Memo is an attachment to the Innovative Assessment Pilot Application for the Navvy consortia which is being submitted by Putnam County Charter School System.

B. Affiliate Member Status and Commitments

As an affiliate member of the consortia, we commit to administering Navvy assessments in the 2018-2019 school year to provide diagnostic feedback on students' understandings of the Georgia Standards of Excellence in mathematics and English Language Arts for grades 3 and 7; and, high school courses that are required to be assessed by Milestones. In the 2018-2019 school year, we will also administer Milestones to all students for accountability purposes.

C. Affiliate Commitments

As an affiliate member, we are committed to:

(a) Implementing the Navvy assessment system to assess mathematics and English Language Arts for grades 3 and 7 and high school courses in the 2018-2019 school year with fidelity. We will provide necessary training to our leaders and teachers on how to administer the assessments, how to keep the assessments secure, how to interpret results from the assessments, and how to use assessment results to inform instruction and support personalized learning for our students. As part of this implementation, we will emphasize a transition to the educational mindset and practices that best leverage the benefits of the information Navvy provides. We are committed to transitioning to on-going assessments that inform teaching practices to customize learning to meet specific

needs of individual students and to re-assessing and continuing to differentiate instruction to help the student reach the level of competency the standard requires.

(b) Working with Putnam County, Dr. Laine Bradshaw, and the other affiliate districts in the Navvy consortia to provide input and feedback on the assessment system and to collaborate on creating a robust accountability system that centers around aggregated data collected by Navvy. We commit to being a collaborative member of the consortia and to being a partner in innovating assessment and accountability solutions that will best support our common goal of helping students learn and excel.

(c) Sharing data to demonstrate the technical properties of the Navvy system. Specifically, we:

(i) Give permission to Navvy Education, LLC to use the data collected by the Navvy system for Dr. Bradshaw's research, psychometric analyses and evaluation, and for comparability studies.

(ii) Will provide Navvy Education, LLC files that contain our students' Milestones results for Dr. Bradshaw's research, psychometric analyses and evaluation, and for comparability studies.

D. Transitioning to Participating Status

We will likely transition to *participating* status in a near-future school year. For this 2018-2019 school year, we will focus on successfully implementing the new system and allowing our students, teachers, and school leaders to learn and become familiar with the Navvy system. Once we successfully implement the use of Navvy for these formative purposes, we see great value in basing accountability on Navvy results instead of re-testing at the end of the year with Milestones.

When we decide to transition to participating status, we will follow the state's procedures to submit a modification to the Georgia Innovative Assessment Pilot Application to apply for participating status to be able to use Navvy in lieu of Milestones for accountability. At the time of this modification, we will respond to components of the application required for participating districts and will commit to the Innovative Assessment Pilot Program Assurances.

By signing below, the Superintendent of the Affiliate District acknowledges understanding of this Memorandum.

John D. Barge	John D. Barge	7/28/18
Superintendent	Signature	Date

MEMORANDUM

TO: Georgia State Board of Education

FR: Dr. Martin G. Waters, Superintendent,

Evans County Schools"Affiliate District"

RE: Georgia State Innovative Assessment Pilot

DATE: July 30, 2018

****

A. Introduction

This Memo sets forth a commitment for the Affiliate District to participate in the Georgia Innovative Assessment Pilot as an 2018-2019 *affiliate* member of the consortia of districts who will use the assessment system created by Navvy Education, LLC ("Navvy") in collaboration with Putnam County and other districts who piloted the system in the 2017-2018 school year. This Memo is an attachment to the Innovative Assessment Pilot Application for the Navvy consortia which is being submitted by Putnam County Charter School System.

B. Affiliate Member Status and Commitments

As an affiliate member of the consortia, we commit to administering Navvy assessments in the 2018-2019 school year to provide diagnostic feedback on students' understandings of the Georgia Standards of Excellence in mathematics and English Language Arts for [grades 3-8 and high school courses that are required to be assessed by Milestones]. In the 2018-2019 school year, we will also administer Milestones to all students for accountability purposes.

C. Affiliate Commitments

As an affiliate member, we are committed to:

(a) Implementing the Navvy assessment system to assess mathematics and English Language Arts for [grades 3-8 and high school courses] in the 2018-2019 school year with fidelity. We will provide necessary training to our leaders and teachers on how to administer the assessments, how to keep the assessments secure, how to interpret results from the assessments, and how to use assessment results to inform instruction and support personalized learning for our students. As part of this implementation, we will emphasize a transition to the educational mindset and practices that best leverage the benefits of the information Navvy provides. We are committed to transitioning to on-going assessments that inform teaching practices to customize learning to meet specific

needs of individual students and to re-assessing and continuing to differentiate instruction to help the student reach the level of competency the standard requires.

(b) Working with Putnam County, Dr. Laine Bradshaw, and the other affiliate districts in the Navvy consortia to provide input and feedback on the assessment system and to collaborate on creating a robust accountability system that centers around aggregated data collected by Navvy. We commit to being a collaborative member of the consortia and to being a partner in innovating assessment and accountability solutions that will best support our common goal of helping students learn and excel.

(c) Sharing data to demonstrate the technical properties of the Navvy system. Specifically, we:

(i) Give permission to Navvy Education, LLC to use the data collected by the Navvy system for Dr. Bradshaw's research, psychometric analyses and evaluation, and for comparability studies.

(ii) Will provide Navvy Education, LLC files that contain our students' Milestones results for Dr. Bradshaw's research, psychometric analyses and evaluation, and for comparability studies.

D. Transitioning to Participating Status

We will likely transition to *participating* status in a near-future school year. For this 2018-2019 school year, we will focus on successfully implementing the new system and allowing our students, teachers, and school leaders to learn and become familiar with the Navvy system. Once we successfully implement the use of Navvy for these formative purposes, we see great value in basing accountability on Navvy results instead of re-testing at the end of the year with Milestones.

When we decide to transition to participating status, we will follow the state's procedures to submit a modification to the Georgia Innovative Assessment Pilot Application to apply for participating status to be able to use Navvy in lieu of Milestones for accountability. At the time of this modification, we will respond to components of the application required for participating districts and will commit to the Innovative Assessment Pilot Program Assurances.

By signing below, the Superintendent of the Affiliate District acknowledges understanding of this Memorandum.

Martin G. Waters		7/30/18
Superintendent	Signature	Date

MEMORANDUM

TO: Georgia State Board of Education

FR: Michael Duncan, Superintendent, Pike County "Affiliate District"

RE: Georgia State Innovative Assessment Pilot

DATE: July 26, 2018

****

A. Introduction

This Memo sets forth a commitment for the Affiliate District to participate in the Georgia Innovative Assessment Pilot as an 2018-2019 *affiliate* member of the consortia of districts who will use the assessment system created by Navvy Education, LLC ("Navvy") in collaboration with Putnam County and other districts who piloted the system in the 2017-2018 school year. This Memo is an attachment to the Innovative Assessment Pilot Application for the Navvy consortia which is being submitted by Putnam County Charter School System.

B. Affiliate Member Status and Commitments

As an affiliate member of the consortia, we commit to administering Navvy assessments in the 2018-2019 school year to provide diagnostic feedback on students' understandings of the Georgia Standards of Excellence in mathematics and English Language Arts for grade 7. In the 2018-2019 school year, we will also administer Milestones to all students for accountability purposes.

C. Affiliate Commitments

As an affiliate member, we are committed to:

(a) Implementing the Navvy assessment system to assess mathematics and English Language Arts for Grade 7 in the 2018-2019 school year with fidelity. We will provide necessary training to our leaders and teachers on how to administer the assessments, how to keep the assessments secure, how to interpret results from the assessments, and how to use assessment results to inform instruction and support personalized learning for our students. As part of this implementation, we will emphasize a transition to the educational mindset and practices that best leverage the benefits of the information Navvy provides. We are committed to transitioning to on-going assessments that inform teaching practices to customize learning to meet specific needs of individual students and to re-assessing and continuing to differentiate instruction to help the student reach the level of competency the standard requires.

(b) Working with Putnam County, Dr. Laine Bradshaw, and the other affiliate districts in the Navvy consortia to provide input and feedback on the assessment system and to collaborate on creating a robust accountability system that centers around aggregated data collected by Navvy. We commit to being a collaborative member of the consortia and to being a partner in innovating assessment and accountability solutions that will best support our common goal of helping students learn and excel.

(c) Sharing data to demonstrate the technical properties of the Navvy system. Specifically, we:

(i) Give permission to Navvy Education, LLC to use the data collected by the Navvy system for Dr. Bradshaw's research, psychometric analyses and evaluation, and for comparability studies.

(ii) Will provide Navvy Education, LLC files that contain our students' Milestones results for Dr. Bradshaw's research, psychometric analyses and evaluation, and for comparability studies.

D. Transitioning to Participating Status

We will likely transition to *participating* status in a near-future school year. For this 2018-2019 school year, we will focus on successfully implementing the new system and allowing our students, teachers, and school leaders to learn and become familiar with the Navvy system. Once we successfully implement the use of Navvy for these formative purposes, we see great value in basing accountability on Navvy results instead of re-testing at the end of the year with Milestones.

When we decide to transition to participating status, we will follow the state's procedures to submit a modification to the Georgia Innovative Assessment Pilot Application to apply for participating status to be able to use Navvy in lieu of Milestones for accountability. At the time of this modification, we will respond to components of the application required for participating districts and will commit to the Innovative Assessment Pilot Program Assurances.

By signing below, the Superintendent of the Affiliate District acknowledges understanding of this Memorandum.

Michael Duncan		July 30, 2018
Superintendent	Signature	Date

MEMORANDUM

TO: Georgia State Board of Education

FR: Dr. Franklin Perry, Superintendent,
Liberty County School System "Affiliate District"

RE: Georgia State Innovative Assessment Pilot

DATE: July 26, 2018

****

A. Introduction

This Memo sets forth a commitment for the Affiliate District to participate in the Georgia Innovative Assessment Pilot as an 2018-2019 *affiliate* member of the consortia of districts who will use the assessment system created by Navvy Education, LLC ("Navvy") in collaboration with Putnam County and other districts who piloted the system in the 2017-2018 school year. This Memo is an attachment to the Innovative Assessment Pilot Application for the Navvy consortia which is being submitted by Putnam County Charter School System.

B. Affiliate Member Status and Commitments

As an affiliate member of the consortia, we commit to administering Navvy assessments in the 2018-2019 school year to provide diagnostic feedback on students' understandings of the Georgia Standards of Excellence in mathematics and English Language Arts for grades 3-8. In the 2018-2019 school year, we will also administer Milestones to all students for accountability purposes.

C. Affiliate Commitments

As an affiliate member, we are committed to:

(a) Implementing the Navvy assessment system to assess mathematics and English Language Arts for grades 3-8 in the 2018-2019 school year with fidelity. We will provide necessary training to our leaders and teachers on how to administer the assessments, how to keep the assessments secure, how to interpret results from the assessments, and how to use assessment results to inform instruction and support personalized learning for our students. As part of this implementation, we will emphasize a transition to the educational mindset and practices that best leverage the benefits of the information Navvy provides. We are committed to transitioning to on-going assessments that inform teaching practices to customize learning to meet specific needs of individual

students and to re-assessing and continuing to differentiate instruction to help the student reach the level of competency the standard requires.

(b) Working with Putnam County, Dr. Laine Bradshaw, and the other affiliate districts in the Navvy consortia to provide input and feedback on the assessment system and to collaborate on creating a robust accountability system that centers around aggregated data collected by Navvy. We commit to being a collaborative member of the consortia and to being a partner in innovating assessment and accountability solutions that will best support our common goal of helping students learn and excel.

(c) Sharing data to demonstrate the technical properties of the Navvy system. Specifically, we:

(i) Give permission to Navvy Education, LLC to use the data collected by the Navvy system for Dr. Bradshaw's research, psychometric analyses and evaluation, and for comparability studies.

(ii) Will provide Navvy Education, LLC files that contain our students' Milestones results for Dr. Bradshaw's research, psychometric analyses and evaluation, and for comparability studies.

D. Transitioning to Participating Status

We will likely transition to *participating* status in a near-future school year. For this 2018-2019 school year, we will focus on successfully implementing the new system and allowing our students, teachers, and school leaders to learn and become familiar with the Navvy system. Once we successfully implement the use of Navvy for these formative purposes, we see great value in basing accountability on Navvy results instead of re-testing at the end of the year with Milestones.

When we decide to transition to participating status, we will follow the state's procedures to submit a modification to the Georgia Innovative Assessment Pilot Application to apply for participating status to be able to use Navvy in lieu of Milestones for accountability. At the time of this modification, we will respond to components of the application required for participating districts and will commit to the Innovative Assessment Pilot Program Assurances.

By signing below, the Superintendent of the Affiliate District acknowledges understanding of this Memorandum.

Franklin Perry	Franklin Perry	07/30/18
Superintendent	Signature	Date

MEMORANDUM

TO: Georgia State Board of Education

FR: Dr. Michele Taylor, Superintendent, Calhoun City Schools "Affiliate District"

RE: Georgia State Innovative Assessment Pilot

DATE: July 26, 2018

****

A. Introduction

This Memo sets forth a commitment for the Affiliate District to participate in the Georgia Innovative Assessment Pilot as an 2018-2019 *affiliate* member of the consortia of districts who will use the assessment system created by Navvy Education, LLC ("Navvy") in collaboration with Putnam County and other districts who piloted the system in the 2017-2018 school year. This Memo is an attachment to the Innovative Assessment Pilot Application for the Navvy consortia which is being submitted by Putnam County Charter School System.

B. Affiliate Member Status and Commitments

As an affiliate member of the consortia, we commit to administering Navvy assessments in the 2018-2019 school year to provide diagnostic feedback on students' understandings of the Georgia Standards of Excellence in mathematics and English Language Arts for grades 3-8 and high school courses that are required to be assessed by Milestones. In the 2018-2019 school year, we will also administer Milestones to all students for accountability purposes.

C. Affiliate Commitments

As an affiliate member, we are committed to:

(a) Implementing the Navvy assessment system to assess mathematics and English Language Arts for grades 3-8 and high school courses in the 2018-2019 school year with fidelity. We will provide necessary training to our leaders and teachers on how to administer the assessments, how to keep the assessments secure, how to interpret results from the assessments, and how to use assessment results to inform instruction and support personalized learning for our students. As part of this implementation, we will emphasize a transition to the educational mindset and practices that best leverage the benefits of the information Navvy provides. We are committed to transitioning to on-going assessments that inform teaching practices to customize learning to meet specific

needs of individual students and to re-assessing and continuing to differentiate instruction to help the student reach the level of competency the standard requires.

(b) Working with Putnam County, Dr. Laine Bradshaw, and the other affiliate districts in the Navvy consortia to provide input and feedback on the assessment system and to collaborate on creating a robust accountability system that centers around aggregated data collected by Navvy. We commit to being a collaborative member of the consortia and to being a partner in innovating assessment and accountability solutions that will best support our common goal of helping students learn and excel.

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D. Transitioning to Participating Status

We will likely transition to *participating* status in a near-future school year. For this 2018-2019 school year, we will focus on successfully implementing the new system and allowing our students, teachers, and school leaders to learn and become familiar with the Navvy system. Once we successfully implement the use of Navvy for these formative purposes, we see great value in basing accountability on Navvy results instead of re-testing at the end of the year with Milestones.

When we decide to transition to participating status, we will follow the state's procedures to submit a modification to the Georgia Innovative Assessment Pilot Application to apply for participating status to be able to use Navvy in lieu of Milestones for accountability. At the time of this modification, we will respond to components of the application required for participating districts and will commit to the Innovative Assessment Pilot Program Assurances.

By signing below, the Superintendent of the Affiliate District acknowledges understanding of this Memorandum.

MICHELE TAYLOR	Michele Taylor	30 JULY 2018
Superintendent	Signature	Date

MEMORANDUM

TO: Georgia State Board of Education

FR: Dr. Joseph Barrow, Superintendent, Fayette County Public Schools, "Affiliate District"

RE: Georgia State Innovative Assessment Pilot

DATE: July 31, 2018

****

A. Introduction

This Memo sets forth a commitment for the Affiliate District to participate in the Georgia Innovative Assessment Pilot as an 2018-2019 *affiliate* member of the consortia of districts who will use the assessment system created by Navvy Education, LLC ("Navvy") in collaboration with Putnam County and other districts who piloted the system in the 2017-2018 school year. This Memo is an attachment to the Innovative Assessment Pilot Application for the Navvy consortia which is being submitted by Putnam County Charter School System.

B. Affiliate Member Status and Commitments

As an affiliate member of the consortia, we commit to administering Navvy assessments in the 2018-2019 school year to provide diagnostic feedback on students' understandings of the Georgia Standards of Excellence in mathematics and English Language Arts for grade 4 in selected schools. In the 2018-2019 school year, we will also administer Milestones to all students for accountability purposes.

C. Affiliate Commitments

As an affiliate member, we are committed to:

(a) Implementing the Navvy assessment system to assess mathematics and English Language Arts for grade 4 in selected schools in the 2018-2019 school year with fidelity. We will provide necessary training to our leaders and teachers on how to administer the assessments, how to keep the assessments secure, how to interpret results from the assessments, and how to use assessment results to inform instruction and support personalized learning for our students. As part of this implementation, we will emphasize a transition to the educational mindset and practices that best leverage the benefits of the information Navvy provides. We are committed to transitioning to on-going assessments that inform teaching practices to customize learning to meet specific

needs of individual students and to re-assessing and continuing to differentiate instruction to help the student reach the level of competency the standard requires.

(b) Working with Putnam County, Dr. Laine Bradshaw, and the other affiliate districts in the Navvy consortia to provide input and feedback on the assessment system and to collaborate on creating a robust accountability system that centers around aggregated data collected by Navvy. We commit to being a collaborative member of the consortia and to being a partner in innovating assessment and accountability solutions that will best support our common goal of helping students learn and excel.

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(i) Give permission to Navvy Education, LLC to use the data collected by the Navvy system for Dr. Bradshaw's research, psychometric analyses and evaluation, and for comparability studies.

(ii) Will provide Navvy Education, LLC files that contain our students' Milestones results for Dr. Bradshaw's research, psychometric analyses and evaluation, and for comparability studies.

D. Transitioning to Participating Status

We will likely transition to *participating* status in a near-future school year. For this 2018-2019 school year, we will focus on successfully implementing the new system and allowing our students, teachers, and school leaders to learn and become familiar with the Navvy system. Once we successfully implement the use of Navvy for these formative purposes, we see great value in basing accountability on Navvy results instead of re-testing at the end of the year with Milestones.

When we decide to transition to participating status, we will follow the state's procedures to submit a modification to the Georgia Innovative Assessment Pilot Application to apply for participating status to be able to use Navvy in lieu of Milestones for accountability. At the time of this modification, we will respond to components of the application required for participating districts and will commit to the Innovative Assessment Pilot Program Assurances.

By signing below, the Superintendent of the Affiliate District acknowledges understanding of this Memorandum.

	Joseph C. Barnard, Jr.	7-31-18
Superintendent	Signature	Date

MEMORANDUM

TO: Georgia State Board of Education

FR: Dr. Jeff Wilson, Superintendent, Floyd County Schools "Affiliate District"

RE: Georgia State Innovative Assessment Pilot

DATE: July 26, 2018

****

A. Introduction

This Memo sets forth a commitment for the Affiliate District to participate in the Georgia Innovative Assessment Pilot as an 2018-2019 *affiliate* member of the consortia of districts who will use the assessment system created by Navvy Education, LLC ("Navvy") in collaboration with Putnam County and other districts who piloted the system in the 2017-2018 school year. This Memo is an attachment to the Innovative Assessment Pilot Application for the Navvy consortia which is being submitted by Putnam County Charter School System.

B. Affiliate Member Status and Commitments

As an affiliate member of the consortia, we commit to administering Navvy assessments in the 2018-2019 school year to provide diagnostic feedback on students' understandings of the Georgia Standards of Excellence in mathematics and English Language Arts for [grades 3-8 and high school courses that are required to be assessed by Milestones]. In the 2018-2019 school year, we will also administer Milestones to all students for accountability purposes.

C. Affiliate Commitments

As an affiliate member, we are committed to:

(a) Implementing the Navvy assessment system to assess mathematics and English Language Arts for [grades 3-8 and high school courses] in the 2018-2019 school year with fidelity. We will provide necessary training to our leaders and teachers on how to administer the assessments, how to keep the assessments secure, how to interpret results from the assessments, and how to use assessment results to inform instruction and support personalized learning for our students. As part of this implementation, we will emphasize a transition to the educational mindset and practices that best leverage the benefits of the information Navvy provides. We are committed to transitioning to on-going assessments that inform teaching practices to customize learning to meet specific

needs of individual students and to re-assessing and continuing to differentiate instruction to help the student reach the level of competency the standard requires.

(b) Working with Putnam County, Dr. Laine Bradshaw, and the other affiliate districts in the Navvy consortia to provide input and feedback on the assessment system and to collaborate on creating a robust accountability system that centers around aggregated data collected by Navvy. We commit to being a collaborative member of the consortia and to being a partner in innovating assessment and accountability solutions that will best support our common goal of helping students learn and excel.

(c) Sharing data to demonstrate the technical properties of the Navvy system. Specifically, we:

(i) Give permission to Navvy Education, LLC to use the data collected by the Navvy system for Dr. Bradshaw's research, psychometric analyses and evaluation, and for comparability studies.

(ii) Will provide Navvy Education, LLC files that contain our students' Milestones results for Dr. Bradshaw's research, psychometric analyses and evaluation, and for comparability studies.

D. Transitioning to Participating Status

We will likely transition to *participating* status in a near-future school year. For this 2018-2019 school year, we will focus on successfully implementing the new system and allowing our students, teachers, and school leaders to learn and become familiar with the Navvy system. Once we successfully implement the use of Navvy for these formative purposes, we see great value in basing accountability on Navvy results instead of re-testing at the end of the year with Milestones.

When we decide to transition to participating status, we will follow the state's procedures to submit a modification to the Georgia Innovative Assessment Pilot Application to apply for participating status to be able to use Navvy in lieu of Milestones for accountability. At the time of this modification, we will respond to components of the application required for participating districts and will commit to the Innovative Assessment Pilot Program Assurances.

By signing below, the Superintendent of the Affiliate District acknowledges understanding of this Memorandum.

Jeffrey R. Wilson		7/31/18
Superintendent	Signature	Date

Administration and Security Excerpts from Navvy Education's Handbooks

Part I of this document (pages 2-8) provides an excerpt about assessment administration and security from Navvy Education's Educator Assessment Handbook for Navvy 1.1. Part II of this document (pages 9-10) contain an excerpt about assessment administration and security from Navvy Education's Student Assessment Handbook for Navvy 1.1.

These excerpts contain confidential information. The excerpt may not be shared with additional parties or for additional purposes without permission from Navvy Education. Please contact Dr. Laine Bradshaw for permission to share or distribute this document beyond the intended recipients: laine@navvyeducation.com.

Part I: Excerpt from Navvy Education's Educator Assessment Handbook

VII. SECURITY and CONFIDENTIALITY STATEMENT

All materials associated with Navvy 1.1 are confidential and secure. The only exceptions are with sample assessments described in Section V and practice assessments described in Section VI. You may not reproduce or otherwise transmit any part of the assessment by any method, including, but not limited to by printing, photocopying, scanning or screen capturing the assessment or by verbally describing the assessment. Navvy 1.1 mastery checks must remain secure at all times and cannot be viewed by users other than students. To do so would violate Navvy's copyright protections and violate the terms of use of the software.

VIII. ASSESSMENT ADMINISTRATION

The security of the assessment is of utmost importance. The validity of the feedback the assessment provides relies on the security of the assessment. Some students having prior knowledge of questions or having teachers who have prior knowledge of questions make the assessment unfair. This unfair knowledge also makes the assessment results invalid as a measure of the student's understanding of the standard.

In this section, we spell out many of the best practices of administering assessments that teachers already know. We reiterate the best practices here because the integrity of the assessment relies on the assessments being administered the same way to all students and the questions being secure.

The following procedures must be followed to maintain the security and the integrity of the assessments:

A. General Responsibility

i. All individuals who handle printed assessment materials are accountable for these materials before, during, and after test administration.

ii. Any breaches of security or incidences of cheating must be reported to Navvy Education within 48 hours.

B. Assessment Coordinators:

i. Each district will assign a District Assessment Coordinator. This coordinator will oversee the administration of the assessments and use of the software for the district and will communicate all district information to Navvy Education. This coordinator is responsible for securely handling user login/password information for the district.

ii. Each school will assign a School Assessment Coordinator. This coordinator will oversee the administration of the assessments and use of the software for the school and will communicate all school information to the District Assessment Coordinator. This coordinator is responsible for securely handling user login/password information for the school.

C. Assigning Windows for Completing the Mastery Checks

i. The windows for completing the mastery checks must be assigned during a period of time where the students will be supervised by a certified educator during the entire window. Assigning windows after before or school is only allowed when the student will be supervised. Assigning windows at night or for homework is not allowed.

ii. The windows may be specified to be as long as the district sees fit for the student to complete the assessment.

D. Viewing Content on the Assessments:

i. The student user is the only user allowed to view the content of the questions on the assessments.

ii. All other users are prohibited from viewing the assessments at any time, with the only exception being when a student requires a read-aloud accommodation according to his or her IEP, IAP, EL/TPC. See Section E.

iii. We have released practice questions (see Section VI) and will continue to release questions to demonstrate, through examples, the quality of the content on the assessments. The content was created, reviewed, and vetted by educators who work across the state of Georgia.

iv. If you would like to have someone from your district review content, please submit a request to Navvy Education. We welcome your input!

E. Providing Read Aloud Accommodations

i. Personnel providing a read-aloud accommodation for a student is allowed to the read the questions aloud for the student, but is not allowed to:

a. communicate any aspect of the assessment materials to another person in any way, with the sole exception being communication with the District Assessment Coordinator if they have a concern about the assessment materials.
b. record, copy, reproduce or capture any assessment materials.
c. share or distribute any assessment materials.

ii. The School Assessment Coordinator will track all personnel who provided an accommodation for a student and will track for which student(s) the assessment was read-aloud and the date it was administered. They will communicate this report to the District Assessment Coordinator quarterly or upon request. The District Assessment Coordinator will report this to Navvy Education at the end of each semester or upon request.

F. Paper Copies of Assessments

i. District Assessment Coordinators may request one paper copy of a mastery check as needed for providing an accommodation in a special case. Upon approval of the request, the District Assessment Coordinator may print the required number of copies for authorized users to take the assessments using paper and pencil. No other user may print or create a copy of the assessment.

ii. Only the required number of copies may be made. A record must kept for which student(s) the assessment was printed.

iii. A record must be made of every assessment printed. Each copy should be given an Assessment Copy ID (AC ID). It can simply be written or typed on the assessment.

vii. District and School Assessment Coordinators are directly responsible for the security of any paper versions of the assessments that are created.

iv. A record must kept for which student(s) completed the assessments, and the date is was administered.

v. Any printed copies of assessments must be stored in a locked, secure location when not in use.

vi. Appropriate steps to maintain security of copies must be taken. We recommend including the following steps: Make records of who is transporting assessment copies. This can be done with sign out sheets on boxes or envelopes in which the copies are stored. Keep copies in the containers until immediately prior to use. Return copies to container immediately after students complete the assessment. Carefully count copies before and after assessments are given.

v. Printed copies must be distributed as close to the actual assessment time as is reasonable to achieve.

v. At the end of a testing session with a paper copy, teachers or other educators proctoring the assessment will take inventory of the paper copies and answer sheets, carefully counting the number of copies and answer sheets to ensure the correct number have been returned from students, and then return all paper copies and answer sheets to the School Assessment Coordinator.

vi. The School Assessment Coordinator is responsible for returning all paper copies and answer sheets back to the District Assessment Coordinator.

vii. The District Coordinator is responsible for taking inventory of all paper copies and answer sheets and taking immediate action to uncover any lost paper copies. In the event a paper copy is lost more than 48 hours, the District Assessment Coordinator must report the missing copy to Navvy Education.

viii. Loss of a paper copy is a breach of test security that may cause significant damage to Navvy Education.

G. Test Administration Conditions

i. In this section, we use the term teacher to mean test examiner. More broadly the test examiner may be any certified educator who is administering the assessments to the students.

ii. The teacher must be present while a student is taking any part of an assessment.

iii. To maintain the integrity of the results and the security of the assessments, the teacher should take best efforts to prevent students from cheating on the assessments. These efforts include each of the following:

a. Not allowing students to look at other students' work, paper, or screen.
b. Not allowing students to talk with each other during the assessment.
c. Not allowing students to access their cell phones or other electronic devices during the assessment.
d. Not allowing students to use hand-held calculators during the assessment.
e. Not allowing students to have anything on their desks besides two sheets of scratch paper and the assessment materials.
f. Removing or covering any content materials displayed in the classroom if the materials could provide assistance to the student during the assessment.

iv. Students may have two pieces of scratch paper on their desk during the assessments. We recommend encouraging students to use the paper to organize their thoughts, to do calculations, or to make sketches that will help them visualize a scenario or problem. Teachers must collect scratch paper at the end of the assessment and destroy the scratch paper or securely deliver it to the School Assessment Coordinator so that they can destroy it.

v. Students may use the grade-appropriate level of the state-approved formula sheet for the mathematics assessments.

vi. Copies of assessment materials for paper-based testing must be kept secure until they are distributed to the students. The teacher must ensure students turn in all copies of the assessments and their answer sheets before they are dismissed.

vii. If a student is suspected of cheating or if any testing irregularities occur, the teacher will report this to the School Assessment Coordinator, who will report it to the District Assessment Coordinator, who will then report it to Navvy Education. Cheating invalidates assessment results for the student, and data from this testing incident will not be used.

H. Breaches of Security: Inappropriate Assistance on Assessment

The following actions are examples of breaches of test security that involve giving a student inappropriate assistance on the assessment:

i. Giving students questions, passages, or other materials that appear on the assessments before, during, or after the assessment.

ii. Giving students direct instruction on passages somehow known to be on the assessment before, during, or after the assessment.

iii. Coaching a student on the assessment or giving them hints for interpreting and understanding the questions and/or answers.

iv. Giving students answers to assessment questions before, during, or after the assessment.

v. Interfering with the student's responses in any way.

vi. Marking, changing, or altering student responses in any way.

vii. Asking the student about assessment materials during or after the assessment; if a student has concerns about the assessment, they may come to a teacher or report this directly to the School Assessment Coordinator. Teachers should report any concerns to the School Assessment Coordinator. The School Assessment Coordinator can evaluate the concern and report it to the District Assessment Coordinator as needed. The District Assessment Coordinator can in turn evaluate the concern and contact Navvy Education as needed to discuss the concern. Communication around concerns must be kept confidential between the student, educator, School Assessment Coordinator, District Assessment Coordinator, and Superintendent.

viii. Altering teaching practices to provide instruction on specific questions or specific reading passages thought to be on the assessments. This does not prohibit best teaching practices for teaching the standards nor the appropriate use of *sample* or *practice* assessment materials (described in Section V and VI) that were released specifically for use with educators and students.

I. Breaches of Security: Inappropriate Duplicating or Distributing of Assessment Materials

The following actions are breaches of test security that include inappropriate duplicating or distributing of materials:

i. Creating a copy or reproducing using any means, including but not limited to paper printing, electronic printing, screen capture, or photographs, of any assessment materials for any purpose other than to administer a paper and pencil version of the assessment to a student in a manner consistent with the use of the software and as approved by Navvy Education. ***Only the District Assessment Coordinator may print copies of the assessments for appropriated, approved uses.***
i. Duplicating an authorized or unauthorized copy of any assessment materials.
ii. Making notes about any assessment materials during or after assessment occasions.
iii. Reading assessment materials and attempting to duplicate materials by paraphrasing viewed questions or pulling passages from selected texts that were viewed on the assessment and using these materials in instruction.
iv. Saving paper or electronic copies of an authorized or unauthorized copy of an assessment materials.
v. Distributing an authorized or unauthorized copy of any assessment materials via any electronic or physical means.

J. Breaches of Security: Inappropriate Handling of Materials

The following actions are breaches of test security that include inappropriate handling of materials:

i. Any handling of paper copies for a purpose other than creating the copy, storing it securely, or delivering it to a school or classroom for the purposes of administering the assessment to a student.
ii. Any handling of answer sheets for a purpose of delivering it to the School Assessment Administrator, entering the data into the software, or securely storing it.
iii. Any insecure handling of login/password information.

K. Breaches of Security: Assisting Others or Failure to report

It is a breach of test security to participate in, help, direct or encourage any actions that are breaches of test security. It is a breach of test security to fail to report any breaches of security within 2 days.

It is not a breach of security for an educator to report a concern they have heard directly from a student, who was not prompted by the educator to discuss the assessments, to their School Assessment Coordinator who can evaluate the concern and report it to the District Assessment Coordinator as needed. The District Assessment Coordinator can in turn evaluate the concern and contact Navvy Education as needed to discuss the concern. Communication around concerns must be kept confidential between the educator, the School Assessment Coordinator, the District Assessment Coordinator, and the Superintendent.

IX. AGREEMENT TO TERMS to INITIALIZE ACCOUNTS

Each user will be prompted to agree to the terms of this handbook prior to having full access to the software. Each educator user will be asked to indicate "I Agree" to the following:

I received a copy of the Educator Assessment Handbook for Navvy 1.1, and I understand that I am required to be aware of its contents and to share the Handbook information with anyone who assists me in testing.

I will not read, review, or reproduce the contents of the questions on the assessment. In the event I am required to provide a read-aloud accommodation for a student, I will not discuss, share, or reproduce any contents of the assessment in any way. I understand violating this agreement will constitute a breach of the software's terms of use and entitle Navvy to pursue its remedies under the applicable software license contract with the school district, including, without limitation, suspending access to the software, reporting such violations to appropriate personnel at the school district, or even terminating the software license agreement. I also understand that if I have concerns about the assessment that I can talk confidentially to my School Assessment Coordinator who can take appropriate action to investigate my concern.

Each student user will be asked to indicate "I Agree" to the following:

Welcome to Navvy!

To get started, we need to make sure you understand the rules! Following the rules help everyone out.

Please read these statements below and click "I agree" if you agree. If you have any questions, let your teacher know.

I was given a copy of the Student Assessment Handbook for Navvy. I understand that I need to follow these rules. I understand if I have a question about the rules, I can ask my teacher to help me understand before I check "I Agree" below.

If I have questions or concerns on one of the mastery checks, I will talk with my teacher. I will not talk with anyone else about the questions.

I will be sure to hand in any copies of questions or assessment materials that I find. I will also be sure to tell my teacher if I know of anyone making copies of questions or materials that they should not be making. I will be sure to hand in any scratch paper I use on the mastery checks. If I do find any copies that I forgot to hand in, I will be sure to give them to my teacher as soon as I can. I understand this is very important.

I will not make a copy of any questions I see or any passages I read. This means I will not take any notes about the questions. It also means I will not take a picture, screen shot, or video of any questions or any part of the website that provide me the questions.

Part II: Excerpt from Navvy Education's Student Assessment Handbook

2. Work independently!

What does independently mean? It means to work by yourself and not with the help of other people or other resources. To earn your mastery badges, you must answer your own questions! The checks are your chance to show what **you** have learned.

Working with other people is a good skill to learn. Using resources to help you find answers is also a good skill to learn. On the mastery checks, you will not use either of those particular skills. The mastery checks are designed to help you figure out what you know, understand, and are able to do with your brain.

On the mastery checks, you will **NOT** be allowed to:

- Look at your neighbor's work.
- Talk to anyone while you are working.
- Use your books, notes, or information on the internet to help you find the answers.
- Use your phone, computer, or other device to help you find the answers.
- Work on a mastery check without being told by your teacher to do so.
- Work on a mastery check without a teacher being in the classroom.

You will be allowed to have 2 pieces of scratch paper while you work on the mastery check. Taking small notes as you read or writing down steps of a math problem may help you keep track of what you're working on. We encourage you to use the scratch paper to help you work on the mastery checks.

For the math tests, you will have formulas sheets in Navvy that you can use on your mastery checks. Your teacher will show you where to find them. On some mastery checks, an online calculator will be available to use during the mastery check. You may **not** use formulas or calculators on a mastery check **unless** they are provided to you by Navvy.

If you have a question while you are working on your mastery check, you can raise your hand and ask your teacher. Your teachers can help you with the directions on the mastery check, but they cannot help you figure out the questions and answers.

3. Keep the mastery check questions secure!

How will you keep the mastery checks secure? You will keep the mastery checks secure by not sharing the questions or the reading material on the mastery checks with anyone else. Sharing the questions or any materials on the mastery checks is a form of cheating.

To keep the mastery checks secure, you are **NOT** allowed to:

- Keep any paper copies of mastery check materials that someone gives you.
- Keep any scratch paper that you use on the mastery checks.
- Make a copy of the questions you see by taking notes about the questions.

- Make a copy of the questions you see by taking a picture, screen shot, video, or other digital capture of the questions or the website.
- Make a copy of the question using any means you can think of.
- Talk about the questions or the passages with anyone, **unless** you have a concern about the **quality** of a specific question and then you can privately ask your teacher about the specific question.

APPENDIX: Diagnostic Methodology Primer

Diagnostic psychometric methodology is designed to categorize examinees according to proficiency or mastery levels for a set of hypothesized latent skills or abilities. These classification-based models, collectively termed cognitive diagnosis models (CDMs), can be organized into four major frameworks: Rule Space Methodology (RSM; Tatsuoka, 1983), the Attribute Hierarchy Method (AHM; Leighton, Gierl & Hunka, 2004), diagnostic classification models (DCMs; e.g., Rupp, Templin & Henson, 2010), and Bayesian networks (BNs; e.g., Almond, Mislevy, Steinberg, Williamson & Yan, 2015).

Diagnostic classification models and Bayesian networks define attributes as categorical latent variables that represent latent characteristics, e.g., knowledge components, skills, abilities, competencies, beliefs, attributes. A categorical attribute has m levels. A binary attribute has $m = 2$ levels and follows a Bernoulli distribution. Attributes that have more than two levels and follow a categorical distribution.

A diagnostic assessment measures A binary attributes which yields m^A combinations of attribute levels. Each combination represents a unique attribute pattern, or latent class, into which examinees can be classified. The attribute patterns, also known as attribute profiles, are denoted by $\boldsymbol{\alpha}_\mathbf{c} = [\alpha_{c1}\alpha_{c2} \dots \alpha_{cA}]$, where $c \in \{1,2,\dots,m^A\}$; $\alpha_{ca} = 1$ if Attribute a is mastered in attribute pattern c; and $\alpha_{ca} = 0$ if Attribute a is not mastered in profile c. As an example, with three attributes, there are 2^3 or 8 possible attribute patterns: [000], [001], [010], [011], [100], [101], [110], and [111].

For diagnostic psychometric methods that take a parametric approach, the general latent class model often forms the basis of diagnostic methodology where the probability of a scored item response vector for examinee *e* (denoted $\mathbf{x}_e$) is defined as a function of the attribute profile c of the examinee ($\boldsymbol{\alpha}_e = \boldsymbol{\alpha}_c$) as

$$P(\mathbf{X_e} = \mathbf{x}_e) = \sum_{c=1}^{2^A} \upsilon_c \prod_{i=1}^{I} \pi_{i|\boldsymbol{\alpha}_e}^{x_{ei}} (1 - \pi_{i|\boldsymbol{\alpha}_e})^{1-x_{ei}}. \qquad (1)$$

The structural parameter υ_c represents the proportion of examinees who are members of latent class c. The measurement parameter $\pi_{i|\boldsymbol{\alpha}_e}$ represents the probability that examinee e provides the correct response for Item i ($x_{ei} = 1$) given his or her attribute pattern ($\boldsymbol{\alpha}_e$).

A number of parametric diagnostic psychometric models exist and differ in how they model item-attribute relationships, expressed by how the models parameterize $\pi_{i|\boldsymbol{\alpha}_e}$ as a function of the attributes. When the relationship of attributes as predictors of item responses is expressed in a generalized linear mixed model (GLMM) form, the relationship between diagnostic psychometric models and commonly-used item response theory (IRT) models can be seen. To explain diagnostic methodology in light of more familiar IRT methodology, the log-linear cognitive diagnosis model (LCDM; Henson, Templin, & Willse, 2009) which uses a GLMM form is explained in the following section.

Example of Item Response Function Characterization in GLMM Form

For dichotomously scored response data, the LCDM models the item response function using logistic regression where the log-odds of correct response is equal to a linear predictor k:

$$\log\left(\frac{\pi_{i|\boldsymbol{\alpha}_e}}{1-\pi_{i|\boldsymbol{\alpha}_e}}\right) = \log\left(\frac{P(x_{ei}=1|\boldsymbol{\alpha}_e)}{P(x_{ei}=0|\boldsymbol{\alpha}_e)}\right) = k. \quad (2)$$

The inverse logit function expressed the conditional probability of a correct response:

$$P(x_{ei}=1|\boldsymbol{\alpha}_e) = \frac{\exp(\mathrm{k})}{1+\exp(\mathrm{k})}. \quad (3)$$

The LCDM can be generally expressed as:

$$k = \lambda_{i,0} + \boldsymbol{\lambda}_i^T \boldsymbol{h}(\boldsymbol{\alpha}_e, \boldsymbol{q}_i). \quad (4)$$

Where the intercept $\lambda_{i,0}$ is the log-odds of a correct response for examinees who have not learned any of the attributes measured by item i. The term $\boldsymbol{\lambda}_i^T \boldsymbol{h}(\boldsymbol{\alpha}_e, \boldsymbol{q}_i)$ is condensed notation to express a sum of main and interaction effects that are interpreted analogously to an analysis of variance model. The row vector $\boldsymbol{\lambda}_i^T$ contains the main effects and interactions, where T represents the transpose of the vector. The term $\boldsymbol{h}(\boldsymbol{\alpha}_e, \boldsymbol{q}_i)$ is a column vector of 0s and 1s that correspond to the terms in $\boldsymbol{\lambda}_i^T$, where 1s indicate the parameter in $\boldsymbol{\lambda}_i^T$ is present in the linear predictor for a given examinee and item and 0s indicate the parameter is not. Entries of the vector $\boldsymbol{q}_i = [q_{i1}, q_{i2}, \dots, q_{iA}]^T$ equal 1 when item i measures attribute a, such that an element of $\boldsymbol{h}(\boldsymbol{\alpha}_e, \boldsymbol{q}_i)$ equals 1 when (a) the item measures the attribute(s) corresponding to the effect $(q_{ia}'s = 1)$, *and* (b) the examinee possesses the attribute(s) corresponding to the effect $(\alpha_{ea}'s = 1)$. Otherwise the element equals 0. The term is expanded as:

$$\boldsymbol{\lambda}_i^T \boldsymbol{h}(\boldsymbol{\alpha}_e, \boldsymbol{q}_i) = \sum_{a=1}^{A} \lambda_{i,1(a)}\,(\alpha_{ea} q_{ia}) + \sum_{a=1}^{A-1} \sum_{b=a+1}^{A} \lambda_{i,2(ab)}\,(\alpha_{ea}\alpha_{eb} q_{ia} q_{ib}) + \dots \quad (5)$$

where $\lambda_{i,1(a)}$ is the main effect for attribute a on item i and $\lambda_{i,2(ab)}$ is the two-way interaction effect between attributes a and b for item i. Note the second subscript for these terms indicate the level of the effect, where the intercept level is 0, the main effect level is 1, and the two-way interaction level is 2. The ellipses indicate the equation continues for three-way through A-way interactions to allow for items that measure any combination of attributes.

Comparison to Common Psychometric Approaching in Educational Assessment

Item response theory (IRT) is ubiquitously used in education for statewide assessment. IRT uses an item response function like Equation 2 where $\boldsymbol{\alpha}_e$ is replace by $\boldsymbol{\theta}_e$, where θ is a continuous latent variable that represents a latent characteristic (usually termed examinee ability) and follows a standard normal distribution. In statewide assessments, one latent, normally-distributed characteristic is assumed to predict the item responses to all of the assessment items, (i.e., $\boldsymbol{\theta}_e = [\theta_{\mathrm{e}1}]$). The linear predictor k for IRT analogously contains parameters to describe the relationship between the latent examinee ability $\theta_{\mathrm{e}1}$ and the item response x_{ei}.

References

Almond, R., Mislevy, R. J., Steinberg, L.S., Williamson, D. M., & Yan, D. (2015). *Bayesian Networks in Educational Assessment*. Springer.

Leighton, J. P., Gierl, M. J., & Hunka, S. M. (2004). The attribute hierarchy model for cognitive assessment: a variation on Tatsuoka's rule-space approach. *Journal of Educational Measurement*, 41, 205-237.

Rupp, A. A., Templin, J., & Henson, R. (2010). *Diagnostic measurement: Theory, methods, and applications.* New York: Guilford.

Tatsuoka, K. K. (1983). Rule space: An approach for dealing with misconceptions based on item response theory. *Journal of Educational Measurement*, 20, 345–354.

Unit	Domain	Standard #	2017-18 Pacing Guide with EOG	Instructional Days	2018-19 Pacing Guide with NAVVY and without EOG	Instructional Days
1	Number and Operation	NBT1 NBT2 NBT3 NBT4	July 31 – Sept 1	25	Aug 1 – Sept 7	27
2	Multiplication and Division	OA 4 NBT 5 NBT 6	Sept 5 – Sept 29	19	Sept 10 – Oct 19	25
		OA 1 OA 2 OA 3	Oct 10 – Nov 3	19	Oct 22 – Nov 30	25
3	Geometry	G 1 G 2 G 3 OA 5	Nov 6 – Nov 17	10	Dec 3 – Jan 11	18
4	Fractions	NF 1 NF 2 NF 3	Nov 27 – Dec 15	15	Jan 14 – Feb 14	23
		NF 4 NF 5 NF 6 NF 7	Jan 4 – Jan 26	16	Feb 20 – Mar 22	22
5	Measurement and Data	MD 1 MD 2 MD 3 MD 4	Jan 29 – Feb 15	14	Mar 25 – Apr 26	20
		MD 5 MD 6 MD 7 MD 8	Feb 2 – Mar 15	17	Apr 29 – May 23	20
Review of Standards and Assessment Administration			Mar 19 – Apr 27		45 Additional Days for Targeted instruction to Re-Teach or Extend Learning Opportunities	
Non Targeted Instructional Time			Apr 30 – May 23			

THE INSTITUTE FOR PERFORMANCE IMPROVEMENT

LAUNCH!™ Learning and Performance Development

The Institute for Performance Improvement is a sole-source provider of the Certified School Improvement Specialist™ performance standards, the related fully-evidence based CSIS™ job certification and the aligned *LAUNCH!*™, national, evidence-based Learning and Performance Development program. The CSIS™ standards, certification and training program were developed and the standards and certification were validated based on a study by Dr. Judith Hale, CPT, an international expert in evidence-based certification and evaluation in 2010.

LAUNCH!™ is an intensive development program for state, regional and local education agency staff, including school and district leaders, academic coaches and teacher leaders. The series is composed of ten courses with in-class and on-the-job practice, aligned to the CSIS™ standards and delivered via blended-learning:

1. Analyze and Apply Critical Judgement
2. Facilitate Deriving Meaning and Engagement
3. Focus on Systemic Factors
4. Plan and Record the Work
5. Organize and Manage Efforts and Resources
6. Guide and Focus Collaborative Improvement
7. Build Capacity
8. Demonstrate Organizational Sensitivity
9. Monitor Accountability and Adoption
10. Implement for Sustainability

Participants work on their real work in schools facilitating systemic school improvement, and provide evidence of proficiency in practice, using the practices, processes, and tools provided. Working through the Promote™ Learning and Performance Platform, participants engage in social learning, peer review and peer-to-peer coaching, and receive instructor coaching and assessment against clear, preset criteria. Successful participants receive final sign-off from their instructors and supervisors, and receive a verifiable digital badge, a micro-credential with meta-data reflecting the proficiency in practice demonstrated.

The development program is developed and delivered by Institute instructors who hold global. Evidence-based certifications in adult learning that transfers to practice and achieves targeted results. The CSIS™ standards and the development program are also aligned to the Performance Standards of the International Society for Performance Improvement. (www.ISPI.org) and focus on identifying and addressing factors in the marketplace, workplace, work, and workers that impact teaching and learning.

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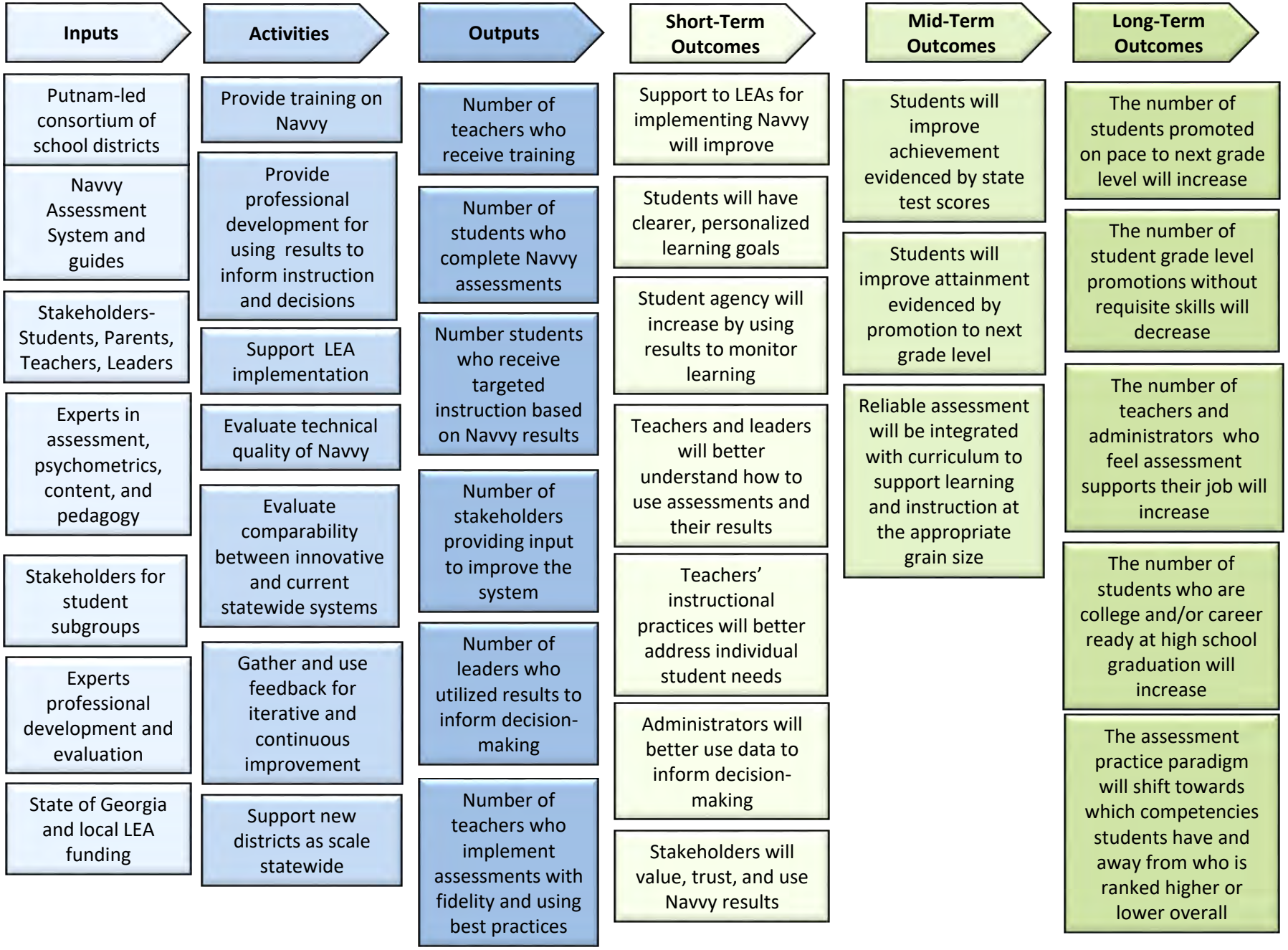
Inputs
Putnam-led consortium of school districts
Navvy Assessment System and guides
Stakeholders- Students, Parents, Teachers, Leaders
Experts in assessment, psychometrics, content, and pedagogy
Stakeholders for student subgroups
Experts professional development and evaluation
State of Georgia and local LEA funding
Activities
Provide training on Navvy
Provide professional development for using results to inform instruction and decisions
Support LEA implementation
Evaluate technical quality of Navvy
Evaluate comparability between innovative and current statewide systems
Gather and use feedback for iterative and continuous improvement
Support new districts as scale statewide
Outputs
Number of teachers who receive training
Number of students who complete Navvy assessments
Number students who receive targeted instruction based on Navvy results
Number of stakeholders providing input to improve the system
Number of leaders who utilized results to inform decision-making
Number of teachers who implement assessments with fidelity and using best practices
Short-Term Outcomes
Support to LEAs for implementing Navvy will improve
Students will have clearer, personalized learning goals
Student agency will increase by using results to monitor learning
Teachers and leaders will better understand how to use assessments and their results
Teachers' instructional practices will better address individual student needs
Administrators will better use data to inform decision-making
Stakeholders will value, trust, and use Navvy results
Mid-Term Outcomes
Students will improve achievement evidenced by state test scores
Students will improve attainment evidenced by promotion to next grade level
Reliable assessment will be integrated with curriculum to support learning and instruction at the appropriate grain size
Long-Term Outcomes
The number of students promoted on pace to next grade level will increase
The number of student grade level promotions without requisite skills will decrease
The number of teachers and administrators who feel assessment supports their job will increase
The number of students who are college and/or career ready at high school graduation will increase
The assessment practice paradigm will shift towards which competencies students have and away from who is ranked higher or lower overall

Georgia School Systems	# of Students	# Primary	# Elementary	# Middle	# High	% English Learners	% Economically Disadvantage	% Students with Disabilities	% Asian	% Black	% Hispanic	% White	% Multi-Racial
Calhoun City	4,102	0	1	1	1	18	57.66	9	2	6	37	51	3
Cook County	3,134	1	1	1	1	4	78.51	12	1	34	10	52	3
Dougherty County	14,133	0	14	4	3	2	95.00	10	1	89	3	5	2
Evans County	1,897	0	1	1	1	14	95.00	9	0	35	26	35	3
Fayette County	20,315	0	14	5	5	5	24.53	10	7	28	12	47	6
Floyd County	9,653	3	7	4	4	5	68.34	14	1	7	10	79	4
Liberty County	10,111	0	7	3	2	1	68.81	13	1	53	13	23	9
McIntosh County	1,323	0	1	1	1	0	85.52	14	0	42	2	49	6
Oglethorpe County	2,102	1	1	1	1	5	60.08	12	2	18	10	65	4
Pike County	3,286	1	1	1	2	0	36.30	9	0	8	2	88	2
Putnam County	2,949	1	1	1	1	5	80.00	15	1	36	15	45	4
Vidalia City	2,577	1	1	1	1	2	80.52	12	0	49	7	39	4

School District	School Name	Content Mastery	Progress	Closing Gaps	Readiness	Graduation Rate	CCRPI	Single Score
Calhoun City	All Schools Elementary	65	98.1	76.7	82.5	NA	81.8	76.4
Calhoun City	Calhoun Primary School	71.9	94.3	100	82	NA	82.9	82.9
Calhoun City	Calhoun Elementary School	65	98.1	76.7	82.8	NA	81.9	81.9
Calhoun City	All Schools Middle	58.1	73.1	61.7	80.6	NA	68.4	76.4
Calhoun City	Calhoun Middle School	58.1	73.1	61.7	80.6	NA	68.4	68.4
Calhoun City	All Schools High	64.2	67.5	83.9	80.8	97.6	74.7	76.4
Calhoun City	Calhoun High School	64.2	67.5	83.9	80.8	97.6	74.7	74.7
Cook County	All Schools High	48	74.2	44.6	74	NA	61.9	65.6

School District	School Name	Content Mastery	Progress	Closing Gaps	Readiness	Graduation Rate	CCRPI	Single Score
Cook County	Cook Primary School	46.1	84.5	28.6	70.9	NA	50.5	50.5
Cook County	Cook Elementary School	48	74.2	44.6	74.8	NA	62	62
Cook County	All Schools Middle	55.9	92.1	42.3	79.1	NA	71.2	65.6
Cook County	Cook County Middle School	55.9	92.1	42.3	79.1	NA	71.2	71.2
Cook County	All Schools High	54.7	76.9	44.2	67.1	88.7	67.3	65.6
Cook County	Cook High School	54.7	76.9	44.2	67.1	88.7	67.3	67.3
Dougherty County	All Schools Elementary	49	79.5	88.2	74.9	NA	47.5	47.5
Dougherty County	Live Oak Elementary School	51.9	60.8	100	76.7	NA	67.2	67.2
Dougherty County	Robert H Harvey Elementary School	33	75.5	78.6	70.4	NA	62.2	62.2
Dougherty County	Lamar Reese School of the Arts	51.8	78.9	100	76.8	NA	73.5	73.5
Dougherty County	Lincoln Elementary Magnet School	74.1	81.8	100	86.6	NA	83.2	83.2
Dougherty County	Alice Coachman Elementary School	27.9	62.2	25	68.1	NA	47.5	47.5
Dougherty County	Martin Luther King, Jr. Elementary School	30.5	60.2	46.4	69	NA	51	51
Dougherty County	Morningside Elementary School	32.8	87.4	78.6	63.7	NA	65	65
Dougherty County	Northside Elementary School	33.7	69.7	71.4	67.9	NA	58.8	58.8
Dougherty County	Turner Elementary School	37.5	90.7	96.4	62.8	NA	70	70
Dougherty County	Lake Park Elementary School	76.6	98.2	94.4	86.4	NA	88.8	88.8
Dougherty County	Sherwood Acres Elementary School	56	66.2	86.1	79.6	NA	68.8	68.8
Dougherty County	International Studies Elementary Charter School	71	84.6	100	83.3	NA	82.6	82.6
Dougherty County	Radium Springs Elementary School	43.8	90.7	58.3	71.4	NA	67.9	67.9
Dougherty County	West Town Elementary School	48.9	87.3	82.1	73.4	NA	72.2	72.2

School District	School Name	Content Mastery	Progress	Closing Gaps	Readiness	Graduation Rate	CCRPI	Single Score
Dougherty County	All Schools Middle	45.4	75.6	50	75.2	NA	62.6	68.4
Dougherty County	Albany Middle School	35.3	71.2	25	70.9	NA	53.4	53.4
Dougherty County	Robert A. Cross Middle Magnet	85.9	90	57.1	92	NA	84.2	84.2
Dougherty County	Radium Springs Middle School	28.2	61.2	38.6	67.6	NA	49.2	49.2
Dougherty County	Merry Acres Middle School	44.2	83.9	56.3	74.7	NA	66	66
Dougherty County	All Schools	46.1	79.1	82.1	66.1	86.2	68.6	68.4
Dougherty County	Monroe High School	35.1	76.7	66.7	60.3	86.3	62.2	62.2
Dougherty County	Dougherty Comprehensive High School	45.9	87.2	100	59.5	84.6	71.5	71.5
Dougherty County	Westover High School	54.3	73.4	55	73.2	89.9	68.3	68.3
Evans County	All Schools Elementary	48.8	78.1	57.1	56.9	NA	61.9	65.3
Evans County	Claxton Elementary School	48.8	78.1	57.1	56.9	NA	61.9	61.9
Evans County	All Schools Middle	54.9	86.6	26.9	68.6	NA	64.5	65.3
Evans County	Claxton Middle School	55.2	90.8	34.6	68.9	NA	67.3	67.3
Evans County	Second Chance Middle	Too Few Students	NA	NA	50	NA	NA	NA
Evans County	All Schools High	61.8	72.2	91.3	71.1	80.6	72.1	65.3
Evans County	Second Chance High	NA	NA	NA	28.6	Too Few Students	NA	NA
Evans County	Claxton High School	61.8	72.2	91.3	73	80.6	72.4	72.4
Fayette County	All Schools Elementary	86.8	85.7	75	87.8	NA	84.8	87.3
Fayette County	Braelinn Elementary School	98.1	90.2	92.9	93.9	NA	93.7	93.7
Fayette County	Cleveland Elementary School	67.8	72.6	47.5	81.8	NA	69.2	69.2
Fayette County	Crabapple Lane Elementary School	91.4	78.3	41.7	88.9	NA	78.9	78.9
Fayette County	Fayetteville Elementary School	67.1	83.5	13.6	83.9	NA	68.2	68.2
Fayette County	Huddleston Elementary School	88.3	83.3	65.9	87.6	NA	83.1	83.1
Fayette County	Inman Elementary	79.5	90.6	93.8	85.1	NA	86.7	86.7

School District	School Name	Content Mastery	Progress	Closing Gaps	Readiness	Graduation Rate	CCRPI	Single Score
Fayette County	Kedron Elementary School	100	91.4	100	92.4	NA	95.5	95.5
Fayette County	North Fayette Elementary School	72.2	85.2	97.7	83.4	NA	82.8	82.8
Fayette County	Oak Grove Elementary School	87	94.6	43.2	88.3	NA	83.4	83.4
Fayette County	Peachtree City Elementary School	99.6	83.3	95	92.2	NA	91.7	91.7
Fayette County	Peeples Elementary School	96	76.7	62.5	91.4	NA	83.3	83.3
Fayette County	Robert J. Burch Elementary School	77.6	87.2	76.9	85	NA	82.3	82.3
Fayette County	Sara Harp Minter Elementary School	90.4	80.8	83.3	88.5	NA	85.6	85.6
Fayette County	Spring Hill Elementary School	75.2	91.1	69.6	84.2	NA	81.7	81.7
Fayette County	All Schools Middle	87.7	91.6	61.1	90	NA	85.5	87.3
Fayette County	Bennett's Mill Middle School	70.6	85	73.5	87.6	NA	79.5	79.5
Fayette County	Booth Middle School	94.9	87.9	63.9	91.6	NA	87.1	87.1
Fayette County	Flat Rock Middle School	72.6	94.8	51.7	85.9	NA	79.9	79.9
Fayette County	Rising Starr Middle School	98.5	96.5	80.4	93.9	NA	94.2	94.2
Fayette County	Whitewater Middle School	90.2	94.2	76.8	90.4	NA	89.6	89.6
Fayette County	All Schools High	90.9	96.5	90.3	84.2	90	91.4	87.3
Fayette County	Fayette County High School	71.4	94.3	81.3	74.7	83.9	81.6	81.6
Fayette County	McIntosh High School	100	100	94.3	91	92.7	97	97
Fayette County	Sandy Creek High School	78.7	93.4	81.3	74.2	84.7	83.6	83.6
Fayette County	Starrs Mill High School	98	89.9	85.5	88.9	93.1	92.2	92.2
Fayette County	Whitewater High School	89.8	91.3	72.6	82.9	94	88.1	88.1
Floyd County	All Schools Elementary	65.2	83.9	98.4	80.6	NA	79.8	77.5
Floyd County	McHenry Primary	43	NA	0	68.4	NA	40.9	40.9
Floyd County	Armuchee Elementary School	71.2	88.2	97.5	81.6	NA	83.2	83.2

School District	School Name	Content Mastery	Progress	Closing Gaps	Readiness	Graduation Rate	CCRPI	Single Score
Floyd County	Cave Spring Elementary School	63.7	83.8	100	81.1	NA	79.7	79.7
Floyd County	Garden Lakes Elementary School	66.7	80.9	100	82.4	NA	79.8	79.8
Floyd County	Johnson Elementary	80.6	87.2	100	87.3	NA	87.2	87.2
Floyd County	Model Elementary School	63.7	71.9	81.3	80.5	NA	72.6	72.6
Floyd County	Pepperell Elementary	58.4	85.1	83.9	77.7	NA	75.4	75.4
Floyd County	Glenwood Primary School	76.3	NA	81.3	79.2	NA	78.3	78.3
Floyd County	Pepperell Primary	56	NA	0	75.7	NA	49.1	49.1
Floyd County	All Schools Middle	61.7	85.5	80	79.8	NA	76.4	77.5
Floyd County	Armuchee Middle School	58.1	70.1	6.3	82.2	NA	59.4	59.4
Floyd County	Coosa Middle School	54.6	92	94.6	75.3	NA	77.8	77.8
Floyd County	Model Middle School	72.7	96.9	72.5	84.4	NA	83.5	83.5
Floyd County	Pepperell Middle School	60.2	93.8	98.1	77.8	NA	81.2	81.2
Floyd County	All Schools High	62.8	85.3	51.6	75	93.9	74.9	77.5
Floyd County	Armuchee High School	77.9	100	71.9	82.5	93.9	87	87
Floyd County	Coosa High School	54	92.2	72.2	71.8	91	75.5	75.5
Floyd County	Model High	66.1	85	36.4	76.3	93.1	74.4	74.4
Floyd County	Pepperell High School	57.3	73.4	27.8	71.8	97.5	67.4	67.4
Liberty County	All Schools Elementary	63.1	85.2	100	78.8	NA	79.5	75.3
Liberty County	Waldo Pafford Elementary School	63.4	85.6	100	80.1	NA	80	80
Liberty County	Liberty Elementary School	66.2	90.1	81.3	78.8	NA	79.4	79.4
Liberty County	Button Gwinnett Elementary School	61.8	77.6	82.5	77.9	NA	73.7	73.7
Liberty County	Lyman Hall Elementary School	52.1	81.2	55	75	NA	67.3	67.3
Liberty County	Joseph Martin Elementary School	61.5	88.4	97.9	79	NA	79.9	79.9
Liberty County	Taylors Creek Elementary School	73.3	89.9	63.6	81.7	NA	79.3	79.3

School District	School Name	Content Mastery	Progress	Closing Gaps	Readiness	Graduation Rate	CCRPI	Single Score
Liberty County	Frank Long Elementary School	62.3	70.3	100	78.3	NA	74	74
Liberty County	All Schools Middle	57.4	88.2	66.2	78.5	NA	73.7	75.3
Liberty County	Midway Middle School	60.3	95.1	78.9	78.7	NA	79	79
Liberty County	Snelson-Golden Middle School	48.8	77.7	73.3	78.8	NA	68.6	68.6
Liberty County	Lewis Frasier Middle School	62.6	92	39.3	77.9	NA	72.5	72.5
Liberty County	All Schools High	58.7	76	51.5	70.3	85.1	68.9	75.3
Liberty County	Bradwell Institute	58.4	80.1	48.2	69.7	83.4	69.3	69.3
Liberty County	Liberty County High School	59	70.7	37.5	71.3	87.5	66.5	66.5
McIntosh County	All Schools Elementary	45.5	69.3	36.4	69.9	NA	57.3	61.9
McIntosh County	Todd Grant Elementary School	45.5	69.3	36.4	69.9	NA	57.3	57.3
McIntosh County	All Schools Middle	50.7	62.1	50	75.4	NA	59.5	61.9
McIntosh County	McIntosh County Middle School	50.7	62.1	50	75.4	NA	59.5	59.5
McIntosh County	All Schools High	48.3	95.5	52.6	72.7	77.4	70.9	61.9
McIntosh County	McIntosh Academy	48.3	95.5	52.6	72.7	77.4	70.9	70.9
Oglethorpe County	All Schools Elementary	62.6	83.5	55.4	79.1	NA	72.1	75.1
Oglethorpe County	Oglethorpe County Elementary School	62.6	83.5	55.4	78.8	NA	72.1	72.1
Oglethorpe County	Oglethorpe County Primary School	76.3	96.6	75	81.1	NA	78.1	78.1
Oglethorpe County	All Schools Middle	74.4	99	66.7	83.9	NA	83.8	75.1
Oglethorpe County	Oglethorpe County Middle School	74.4	99	66.7	83.9	NA	83.8	83.8
Oglethorpe County	All Schools High	70.6	71.5	54.2	73.5	89.5	72.5	75.1
Oglethorpe County	Oglethorpe County High School	70.6	71.5	54.2	73.5	89.5	72.5	72.5
Pike County	All Schools Elementary	67.5	83.8	92.5	67.6	NA	77	77.4
Pike County	Pike County Elementary School	67.5	83.8	92.5	82.7	NA	80	80
Pike County	Pike County Primary School	76.2	NA	100	50.5	NA	73.8	73.8

School District	School Name	Content Mastery	Progress	Closing Gaps	Readiness	Graduation Rate	CCRPI	Single Score
Pike County	All Schools Middle	66.6	85.3	100	84.3	NA	81.7	77.4
Pike County	Pike County Middle School	66.6	85.3	100	84.3	NA	81.7	81.7
Pike County	All Schools High	63.6	81.5	72.5	74.3	87	75	77.4
Pike County	Pike County High School	66.4	82	80	77.9	91	77.9	77.9
Pike County	Zebulon High School	19	56.3	18.8	35.3	61.6	39	39
Putnam County	All Schools Elementary	62.5	68.8	80.4	77.5	N/A	70.4	71.3
Putnam County	Putnam County Primary School	69.4	91.3	100	76.9	N/A	80.3	80.3
Putnam County	Putnam County Elementary School	62.5	68.8	80.4	78.6	N/A	70.6	70.6
Putnam County	All Schools Middle	63	80.6	44.2	77.8	N/A	69.3	71.3
Putnam County	Putnam County Middle School	63	80.6	44.2	77.8	N/A	69.3	69.3
Putnam County	All Schools High	60.4	86	57.7	74	92.3	74.6	71.3
Putnam County	Putnam County High School	60.4	86	57.7	74	92.3	74.6	74.6
Vidalia City	All Schools Elementary	53.2	57.6	42.3	68.2	NA	56.1	61.5
Vidalia City	J. D. Dickerson Primary School	59.1	NA	12.5	46	NA	44.3	44.3
Vidalia City	Sally Dailey Meadows Elementary School	53.2	57.6	42.3	78.6	NA	58.2	58.2
Vidalia City	All Schools Middle	51	77.6	47.7	80.6	NA	65.7	61.5
Vidalia City	J. R. Trippe Middle School	51	77.6	47.7	80.6	NA	65.7	65.7
Vidalia City	All Schools High	54.8	78.7	27.1	69.3	93.7	67.2	61.5
Vidalia City	Vidalia Comprehensive High School	54.8	78.7	27.1	69.3	93.7	67.2	67.2

NATIONAL CENTER FOR THE IMPROVEMENT OF EDUCATIONAL ASSESSMENT

Corporate Capability

April 2018

The National Center for the Improvement of Educational Assessment, Inc. (The Center for Assessment) is a Dover, NH based not-for-profit (501(c)(3)) corporation. Founded in September 1998, the Center's mission is to improve the educational achievement of students by promoting improved practices in educational assessment and accountability. The Center for Assessment does this by providing services directly to states, school districts, and partner organization to support state and district assessment and accountability systems. The Center collaborates with organizations that work directly with states and districts, or whose work impacts states, including the Council of Chief State School Officers (CCSSO), Achieve, Knowledge Works, Education First, The National Center for Educational Outcomes (NCEO), and the U.S. Department of Education. The Center pursues the dissemination of best practices through our annual conference (the Reidy Interactive Lecture Series); through extensive work with states' Technical Advisory Committees; through work with organizations that do similar research, development, and dissemination; and through numerous publications and presentations at professional conferences.

The Center focuses on the technical and practical issues that promote or inhibit the effectiveness of educational assessment programs. We seek to accomplish our mission by:

- Providing customized support to states and districts in designing, implementing, and improving fair, effective, and legally defensible assessment and accountability programs. The Center's staff provides a full range of support, including technical analyses, policy and management support, documentation and communication, and training. The Center also helps states design accountability systems that include effective programs in support of low-performing schools.
- Providing and managing Technical Advisory Committees that help ensure a state's evolving assessment and accountability programs receive the best on-going technical advice possible, focused on the specific issues and decision-making needs of the individual state or district.
- Developing and disseminating practical standards for assessment and accountability programs that include specific information about what states and districts should do *today* to have technically sound programs.
- Helping states develop innovative assessments, both standardized large-scale and comprehensive local assessment systems that feature integration with curriculum and instruction.
- Investigating and documenting at school, district or state levels strategies for educational improvement with promise of broader application.
- Advancing best practices in the field by serving as a conduit of information to all stakeholders in educational reform through sponsorship and leadership at conferences, the initiation of studies, and collaboration with other major service providers.

As a non-profit organization committed to the improvement of student learning, the Center for Assessment maintains a strong "open-source" ethic in terms of distributing its many creations and inventions. For example, the Center has developed many tools related to alignment methodology, student growth analyses, student learning objectives, and validity evaluation that it provides freely to its clients and other non-commercial entities.

Center Board

The Center for Assessment, as a New Hampshire not-for-profit corporation, is governed by a Board of Directors. The current nine-member Board includes leading thinkers and policy makers in education as well as business advisors. The following individuals make up the current Board of Directors:

- Mark Musick, Chair, former executive director Southern Regional Education Board (SREB) and former chair of the National Assessment Governing Board
- Lauress Wise, Vice-Chair, former CEO and current senior researcher at Human Resources Research Organization (HumRRO) and current President of the National Council on Measurement in Education (NCME)
- Carl Cohn, Executive Director of California Collaborative for Educational Excellence and former Superintendent of both Long Beach, and San Diego School Districts
- Linda Cook, former Vice President of Assessment and Director of the Center for Validity Research at Educational Testing Service
- Peg Goertz, Professor emeritus University of Pennsylvania and co-director of the Consortium for Policy Research in Education (CPRE)
- Henry Braun, Boisi Professor of Education and Public Policy and Director, Center for the Study of Testing, Evaluation, and Public Policy at Boston College
- Peter McWalters, former Commissioner of Education, Rhode Island Department of Education, currently a consultant to the Council of Chief State School Officers
- Peter Walcek, Chief Financial Officer, Dover-Wentworth Medical Center, Dover, NH
- Brian Gong, former Executive Director of the Center for Assessment

Center Directors

The operations of the Center for Assessment are managed by an Executive Director, Scott Marion, and Associate Director, Chris Domaleski. The directors work closely with the Board to establish the long and short term strategic direction of the Center, manage the daily operations, mentor staff, and represent the Center in all legal and financial matters.

Center Staff

The Center currently employs thirteen (13) professionals, including the two directors, all of whom hold doctorate degrees in measurement and/or educational disciplines. All staff members have worked previously in state departments of education, school districts, university research centers and/or testing companies. The Center's staff represents a unique resource in merging high measurement expertise with policy sensitivity and understanding of how large educational systems work. The Center provides highly effective and timely consultation drawing upon extensive data analyses, broad awareness of what is happening nationally, deep familiarity with the operational details of large scale assessment and accountability programs, outstanding communication and facilitation skills, and extraordinary personal commitment to helping

improve education by having our clients succeed. In this role, the Center often functions closely with the state Department of Education staff, whether interacting with internal work, advisory committees, legislative groups, or contractors.

Current Contracts

The Center for Assessment currently has contracts with more than 50 entities (largely states, districts, and NGOs). Since its inception in 1998, the Center was had contracts with more than forty (40) of the states, and has worked with several additional states in other capacities such as part of consortia. A list of current contracts can be seen on the next page.

State/Entity & District Contracts and Foundation Grants	
1. Achieve	27. Multi-State Alternate Assessment Consortium**
2. Alaska**[1]	28. Nebraska*
3. Arkansas**	29. Nellie Mae Foundation
4. Bill & Melinda Gates Foundation	30. Nevada*
5. Central Susquehanna Intermediate Unit	31. New Hampshire**
6. Colorado	32. New York
7. Council of Chief State School Officers	33. New Jersey
8. Curriculum Associates	34. North Carolina*
9. Delaware*	35. North Dakota*
10. EdReports	36. Oklahoma
11. Educational Records Bureau	37. PARCC (Partnership for Assessment of Readiness of College and Careers)**
12. Georgia**	38. Pennsylvania**
13. Gwinnett County (GA)**	39. Pittsburgh Public Schools
14. Hawaii*	40. Polk County School District (FL)
15. Indiana	41. Renaissance Learning
16. Illinois	42. Rhode Island**
17. Kansas*	43. Selinsgrove School District (PA)
18. Kentucky	44. Smarter/Balanced Assessment Consortium*
19. Louisiana**	45. U.S.V.I.
20. Massachusetts*	46. Utah**
21. Massachusetts Association of 766 Approved Private Schools (maaps)	47. Vermont*
22. Massachusetts Institute for a New Commonwealth (MassInc)	48. Washington
23. Maine*	49. West Virginia
24. Michigan**	50. Wisconsin*
25. Mississippi**	51. Wyoming
26. Montana*	52. Wyoming Education Association

[1] *Indicates Technical Advisory Committee (TAC)/Expert Panel (EP) membership
**Indicates managing the TAC/EP

PUTNAM
COUNTY CHARTER SCHOOL SYSTEM
inspire. innovate. excel.

December 4, 2018

U.S. Department of Education

To Whom It May Concern:

As Superintendent of Putnam County Charter School Systems, we are eager to continue our collaborations with Dr. Laine Bradshaw, Navvy Education, partner LEAs, and our state's leaders to implement and scale the Navvy assessment system. We have been collaborating with Dr. Bradshaw for the past 4.5 years and worked closely with her to provide our input on the design of the Navvy assessment system based on our experiences and expertise. In addition, we have extended participation to a diverse sample of school districts that each provided valuable input on the system's use and implementation.

In Putnam County, we have been assessing in a manner aligned to the philosophy of Navvy for the last 10 years. W . believe that standards-level assessments are integral to teaching and learning in our schools: We need both students and teachers to understand what they are working towards and have a way to keep track of their progress. In addition, we need to know what students know and understand when they are being promoted from one grade level to the next. There was, however, no assessment system that could do this available on the market. Thus, we are excited to be partnering with Dr. Bradshaw and Navvy Education to provide standards-level assessments that are valid and reliable to meet the needs of our teachers and students.

As a system, we are committed to being a servant leader to our state's LEAs as they implement Navvy. We are committed to collaborating with the state, Navvy Education, and professional associations and experts to ensure LEAs are provided the supports they need to implement Navvy successfully. We will facilitate leadership meetings and shared decision making around the use of Navvy for statewide accountability. We will provided facilities as needed for meetings and will host one of the quarterly summits each year. We have greatly enjoying innovating with Dr. Bradshaw to this point and collaborating with member LEAs, and we look forward to continuing to work gether to lead the way for creating the assessment solutions that our schools critically need.

Sincerely,

Eric Arena
Superintendent

158 Old Glenwood Springs Road
Eatonton, Georgia 31024
Phone: 706-485-5381 Fax: 706-485-3820

FIRST DISTRICT **REGIONAL EDUCATIONAL SERVICE AGENCY**

RICHARD SMITH
EXECUTIVE DIRECTOR

201 W. LEE STREET - P.O. BOX 780 - BROOKLET, GEORGIA 30415
TELEPHONE: (912) 842-5000 - FAX: (912) 842-5161
www.fdresa.org

December 5, 2018

U.S. Department of Education
Re: Innovative Assessment Demonstration Authority

To Whom It May Concern:

The First District Regional Educational Service Agency (RESA) is pleased to support the Innovative Assessment Demonstration Authority application to implement and scale the Navvy assessment system. RESAs are outreach agencies in the state of Georgia funded by the Georgia Department of Education to work closely with schools to help implement the state's educational initiatives. At First District RESA, we employ a professional team of educational specialists who work directly with teachers and school administrators to support their efforts to educate students and prepare them for future study and/or careers. We provide training and support in curriculum, assessment, pedagogy, and school practices for 18 school districts, 4 of whom are participating with the Navvy assessment system in collaboration with Putnam County and Navvy Education.

Our districts piloting the Navvy assessment system strongly feel this type of system provides timely information and feedback that will help our teachers provide personalized instructional supports to students who need help with specific understandings defined by the standards. The reports are user-friendly and help not only teachers and administration, but also students, keep track of standards mastery. The general feeling across administrators and teachers is that the system is going to promote teaching and learning practices that result in stronger student outcomes.

We appreciate Superintendent Arena's leadership and Dr. Bradshaw's innovative research that focuses on enhancing classroom assessment functionalities and improving our statewide accountability system. We look forward to partnering with them and other participating LEAs to reform assessment and make it useful for supporting our educational goals. As a partner, we have facilitated input to the system by hosting item writing collaboratives and coordinating informational meetings about the system. We will continue to assist the state's innovative assessment effort to implement and scale Navvy by providing facilities for meeting space in the coastal Georgia area, facilitating conversations among participating LEAs, and by coordinating one of the quarterly assessment summits where districts can receive the support they need to get started with Navvy and successfully implement the system in their schools.

Sincerely,

Richard Smith
Executive Director, First District RESA

UNIVERSITY OF GEORGIA

Aderhold Hall, G3
110 Carlton St.
Athens, Georgia 30602
TEL 706-542-6446/Fax 706-542-0360
coedean@uga.edu
www.coe.uga.edu

College of Education
Office of the Dean

December 12, 2019

U.S. Department of Education

To Whom It May Concern:

I strongly support Dr. Laine Bradshaw's efforts to develop and implement evidence-based innovations to provide improved assessment solutions for our schools. Through her dual roles as a researcher at the University of Georgia making advances in diagnostic assessments and as an entrepreneur and founder of Navvy Education, LLC bringing these innovations to school districts, she has merged two critical pieces of the puzzle in reforming assessment practices.

I specifically support her partnership with LEAs and the state's application to US ED for the Innovative Assessment Demonstration Authority that seeks to implement and scale the Navvy assessment system she developed with experts across the state. From my experience and expertise as a mathematics educator and researcher and a former school board member, I see the critical need for reform in the types of assessment systems that are available to districts. This project promises to provide districts with a system that is rigorously aligned to standards, produces reliable results, and provides on-going supports.

Based on the strong partnerships Dr. Bradshaw has in place with local LEAs and the state and on the research-based, learning-focused nature of the Navvy assessment system, I see strong potential for this initiative to make significant advances in assessment practices. Locally, these advances will help schools in Georgia, which is a priority for our university as a land- and sea-grant university. Nationally and internationally, these advances are needed to shift to assessment systems based on more contemporary data and learning sciences.

To assist in providing implementation support to participating LEAs, the College of Education will gladly serve as a host for one of the quarterly assessment summits each year. We will also work collaboratively with participating LEAs during this summit to provide, as needed, speakers or facilitators for the event who have experience in research-based practices of assessment, school leadership, pedagogy, and curriculum.

Sincerely,

Denise A. Spangler

Denise A. Spangler
Dean

An Equal Opportunity, Affirmative Action, Veteran, Disability Institution

Innovative Assessment Demonstration Authority Application Assurances for Georgia Pilot Districts

This form assures that each LEA participating in an approved Georgia innovative assessment pilot will:

(1) Continue use of statewide academic assessments in reading/language arts, mathematics, and science required under 34 CFR 200.2(a)(1) and section 111(b)(2) of the Act –
   (i) In all non-participating schools; and
   (ii) In all participating schools for which such assessments will be used in addition to innovative assessments for accountability purposes under section 111(c) of the Act consistent with paragraph (b)(1)(ii) of this section or for evaluation purposes consistent with 34 CFR 200.106(e) during the demonstration authority period;

(2) Ensure that all students and each subgroup of students described in section 111(c)(2) of the Act in participating schools are held to the same challenging State academic standards under section 111(b)(1) of the Act as all other students, except that students with the most significant cognitive disabilities may be assessed with alternate assessments aligned with alternate academic achievement standards consistent with 34 CFR 200.6 and section 111(b)(1)(E) and (b)(2)(D) of the Act, and receive the instructional support needed to meet such standards;

(3) Report the following annually to the GaDOE, for purposes of reporting to the Secretary of the U.S. Department of Education, at such time and in such manner as the GaDOE may reasonably require:
   (i) An update on implementation of the innovative assessment pilot, including –
   (A) The pilot's progress against its timeline under 34 CFR 200.106(c) and any outcomes or results from its evaluation and continuous improvement process under 34 CFR 200.106(e); and
   (B) A description of the pilot's progress in scaling up the system to additional LEAs within the consortium or schools within the LEA consistent with its strategies under 34 CFR 200.106(a)(3)(i), including updated assurances from participating LEAs consistent with paragraph (e)(2) of this section.
   (ii) The performance of students in participating schools at the consortium, LEA, and school level, for all students and disaggregated for each subgroup of students described in section 1111(c)(2) of the Act, on the innovative assessment, including academic achievement and participation data required to be reported consistent with section 1111(h) of the Act, except that such data may not reveal any personally identifiable information.
   (iii) School demographic information, including enrollment and student achievement information, for the subgroups of students described in section 1111(c)(2) of the Act, among participating schools and LEAs and for any schools or LEAs that will participate for the first time in the following year, and a description of how the participation of any additional schools or LEAs in that year contributed to progress toward achieving high-quality and consistent implementation across demographically diverse LEAs in the State consistent with the SEA's benchmarks described in 34 CFR 200.106(a)(3)(iii).
   (iv) Feedback from teachers, principals and other school leaders, and other stakeholders consulted under paragraph (a)(2) of this section, including parents and students, from participating schools and LEAs about their satisfaction with the innovative assessment system;

(4) Ensure that each participating LEA informs parents of all students in participating schools about the innovative assessment, including the grades and subjects in which the innovative assessment will be administered, and, consistent with section 1112(e)(2)(B) of the Act, at the

beginning of each school year during which an innovative assessment will be implemented. Such information must be –

(i) In an understandable and uniform format;

(ii) To the extent practicable, written in a language that parents can understand or, if it is not practicable to provide written translations to a parent with limited English proficiency, be orally translated for such parents; and

(iii) Upon request by a parent who is an individual with a disability as defined by the Americans with Disabilities Act, provided in an alternative format accessible to that parent; and

(5) Provide information to GaDOE, as applicable, so that GaDOE can coordinate with and provide information to, as applicable, the Institute of Education Sciences for purposes of the progress report described in section 1204(c) of the Act and ongoing dissemination of information under section 1204(m) of the Act.

(6) Cooperate with any evaluation that the GaDOE carries out, or arranges for, of the implementation of the pilot.

(7) Transition back to the regular assessment system (Georgia Milestones) if the LEA fails to meet requirements of section 1204 for the duration of the pilot timeline.

(8) Will comply with all requirements of this section for each year that the LEA is participating.

Authorized Representative (Printed Name):

Eric Arena

LEA Name:

Putnam County Schools

Signature:

EA

Date:

12/12/18

Innovative Assessment Demonstration Authority Application Assurances for Georgia Pilot Districts

This form assures that each LEA participating in an approved Georgia innovative assessment pilot will:

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   (i) In all non-participating schools; and
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(2) Ensure that all students and each subgroup of students described in section 111(c)(2) of the Act in participating schools are held to the same challenging State academic standards under section 111(b)(1) of the Act as all other students, except that students with the most significant cognitive disabilities may be assessed with alternate assessments aligned with alternate academic achievement standards consistent with 34 CFR 200.6 and section 111(b)(1)(E) and (b)(2)(D) of the Act, and receive the instructional support needed to meet such standards;

(3) Report the following annually to the GaDOE, for purposes of reporting to the Secretary of the U.S. Department of Education, at such time and in such manner as the GaDOE may reasonably require:
   (i) An update on implementation of the innovative assessment pilot, including –
   (A) The pilot's progress against its timeline under 34 CFR 200.106(c) and any outcomes or results from its evaluation and continuous improvement process under 34 CFR 200.106(e); and
   (B) A description of the pilot's progress in scaling up the system to additional LEAs within the consortium or schools within the LEA consistent with its strategies under 34 CFR 200.106(a)(3)(i), including updated assurances from participating LEAs consistent with paragraph (e)(2) of this section.
   (ii) The performance of students in participating schools at the consortium, LEA, and school level, for all students and disaggregated for each subgroup of students described in section 1111(c)(2) of the Act, on the innovative assessment, including academic achievement and participation data required to be reported consistent with section 1111(h) of the Act, except that such data may not reveal any personally identifiable information.
   (iii) School demographic information, including enrollment and student achievement information, for the subgroups of students described in section 1111(c)(2) of the Act, among participating schools and LEAs and for any schools or LEAs that will participate for the first time in the following year, and a description of how the participation of any additional schools or LEAs in that year contributed to progress toward achieving high-quality and consistent implementation across demographically diverse LEAs in the State consistent with the SEA's benchmarks described in 34 CFR 200.106(a)(3)(iii).
   (iv) Feedback from teachers, principals and other school leaders, and other stakeholders consulted under paragraph (a)(2) of this section, including parents and students, from participating schools and LEAs about their satisfaction with the innovative assessment system;

(4) Ensure that each participating LEA informs parents of all students in participating schools about the innovative assessment, including the grades and subjects in which the innovative assessment will be administered, and, consistent with section 1112(e)(2)(B) of the Act, at the

beginning of each school year during which an innovative assessment will be implemented. Such information must be –

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(6) Cooperate with any evaluation that the GaDOE carries out, or arranges for, of the implementation of the pilot.

(7) Transition back to the regular assessment system (Georgia Milestones) if the LEA fails to meet requirements of section 1204 for the duration of the pilot timeline.

(8) Will comply with all requirements of this section for each year that the LEA is participating.

Authorized Representative (Printed Name): Michele Taylor	
LEA Name: Calhoun City Schools	
Signature: Michele Taylor	**Date:** 12-14-18

Innovative Assessment Demonstration Authority Application Assurances for Georgia Pilot Districts

This form assures that each LEA participating in an approved Georgia innovative assessment pilot will:

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   (i) In all non-participating schools; and
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(2) Ensure that all students and each subgroup of students described in section 111(c)(2) of the Act in participating schools are held to the same challenging State academic standards under section 111(b)(1) of the Act as all other students, except that students with the most significant cognitive disabilities may be assessed with alternate assessments aligned with alternate academic achievement standards consistent with 34 CFR 200.6 and section 111(b)(1)(E) and (b)(2)(D) of the Act, and receive the instructional support needed to meet such standards;

(3) Report the following annually to the GaDOE, for purposes of reporting to the Secretary of the U.S. Department of Education, at such time and in such manner as the GaDOE may reasonably require:
   (i) An update on implementation of the innovative assessment pilot, including –
   (A) The pilot's progress against its timeline under 34 CFR 200.106(c) and any outcomes or results from its evaluation and continuous improvement process under 34 CFR 200.106(e); and
   (B) A description of the pilot's progress in scaling up the system to additional LEAs within the consortium or schools within the LEA consistent with its strategies under 34 CFR 200.106(a)(3)(i), including updated assurances from participating LEAs consistent with paragraph (e)(2) of this section.
   (ii) The performance of students in participating schools at the consortium, LEA, and school level, for all students and disaggregated for each subgroup of students described in section 1111(c)(2) of the Act, on the innovative assessment, including academic achievement and participation data required to be reported consistent with section 1111(h) of the Act, except that such data may not reveal any personally identifiable information.
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   (iv) Feedback from teachers, principals and other school leaders, and other stakeholders consulted under paragraph (a)(2) of this section, including parents and students, from participating schools and LEAs about their satisfaction with the innovative assessment system;

(4) Ensure that each participating LEA informs parents of all students in participating schools about the innovative assessment, including the grades and subjects in which the innovative assessment will be administered, and, consistent with section 1112(e)(2)(B) of the Act, at the

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(6) Cooperate with any evaluation that the GaDOE carries out, or arranges for, of the implementation of the pilot.

(7) Transition back to the regular assessment system (Georgia Milestones) if the LEA fails to meet requirements of section 1204 for the duration of the pilot timeline.

(8) Will comply with all requirements of this section for each year that the LEA is participating.

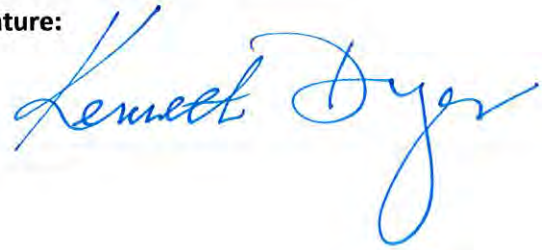
Authorized Representative (Printed Name):

Kenneth Dyer

LEA Name:

Dougherty County School System

Signature:



Date:

December 14, 2018

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Authorized Representative (Printed Name): Martin G. Waters, Superintendent	
LEA Name:	
Signature:	**Date:** 12/14/18

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(8) Will comply with all requirements of this section for each year that the LEA is participating.

Authorized Representative (Printed Name):	
Timothy M Dixon	
LEA Name:	
Cook County Board of Education	
Signature:	**Date:**
Timothy M Dixon	12-17-18

R. Philip Chalmers, Ph.D.

Curriculum Vitae

Professional History

2019–Present **Assistant Professor**, *York University*, Toronto, Quantitative Methodology.

2017–2018 **Assistant Professor**, *University of Georgia*, Athens, Quantitative Methodology.

Education

2016 **PhD**, *York University*, Toronto, Ontario, Canada, Area: Quantitative Methods.

2012 **MA**, *York University*, Toronto, Ontario, Canada, Area: Quantitative Methods.

2009 **BSc**, *Nipissing University*, North Bay, Ontario, Canada, Major: Psychology.

Dissertation

Title A Differential Response Functioning Framework for Understanding Item, Bundle, and Test Bias

Committee David Flora, Jolynn Pek, Robert Cribbie, Michael Friendly, Augustine Wong, and Daniel Bolt

Master's thesis

Title Full-Information Maximum-Likelihood Estimation of Noncompensatory IRT Models

Supervisors David Flora and Michael Friendly

Honours and Awards

2014–2017 SSHRC Joseph-Armand Bombardier CGS Doctoral Scholarship ($105,000)

2014–2017 SSHRC Doctoral Fellowship ($60,000; Declined)

2015 Norman S. Endler Research Fellowship Award from York University ($1000)

2014 Award for Outstanding Poster at the International Meeting of the Psychometric Society (IMPS; $1000)

2014 OGS Research Scholarship ($15,000; Declined)

2014 Certificate of Academic Excellence for Masters Thesis, awarded by the Canadian Psychological Association

2013 John M. Chambers Statistical Software Award ($1000)

2013 OGS Research Scholarship ($15,000)

323 Aderhold Hall – Athens, GA, 30602
rphilip.chalmers@uga.edu

2012 OGS Research Scholarship ($15,000)

2012 Michael Friendly Research Award for Quantitative Methods in Psychology

2011 OGS Research Scholarship ($15,000)

2010 MA 'Entrance Scholarship' from York University ($4000)

Articles In Review

Chalmers, R. P. (submitted). Generalized SIBTEST and Crossing-SIBTEST for Multi-Group DIF Testing. *Journal of Educational Measurement*.

Chalmers, R. P. (submitted). Non-compensatory Response Models for Dichotomous and Polytomous Items. *Applied Psychological Measurement*.

Pek, J., Zhang, R., Flake, J. K., **Chalmers, R. P.** (submitted). What Does the Triad Task Measure? A Historical and Empirical Account. *Social Psychological and Personality Science*.

Pek, J., **Chalmers, R. P.**, & Hoyle, R. (submitted). Coherence in the research process: Rediscovering classical approaches to mediation. *Journal of Experimental Social Psychology*.

Ogreden, O., **Chalmers, R. P.**, Terwee, C. B., Smits, N. (submitted). A study of alternative approaches to non-normal latent trait distribution in Item Response Theory models used for health output measurement. *Statistical Methods in Medical Research*

Schneider, L., **Chalmers, R. P.**, Debelak, R., & Merkle, E. (submitted). Model selection of non-nested and nested item response models using Vuong tests. *Multivariate Behavioral Research*

Published Articles

Chalmers, R. P. (in press). Numerical Approximation of the Observed Information Matrix with Oakes' Identity. *British Journal of Mathematical and Statistical Psychology*. DOI: 10.1111/bmsp.12127

Chalmers, R. P. (in press). On misconceptions and the limited usefulness of ordinal alpha. *Educational and Psychological Measurement*. DOI: 10.1177/0013164417727036

Counsell, A., Cribbie, R. A., & **Chalmers, R. P.** (in press). Comparing Means under Heteroscedasticity and Nonnormality: Further Exploring Robust Means Modeling. *Journal of Modern Applied Statistical Methods*.

Chalmers, R. P. (2018). Model-Based Measures for Detecting and Quantifying Response Bias. *Psychometrika, 83*(3), 696–732. DOI: 10.1007/s11336-018-9626-9

Chow, P., **Chalmers, R. P.**, Flynn, D. M., McLandress, A. J., and Steadman, V. G. L. (2018). A Technique to Measure College Students on the Depression-Elation Continuum. *College Student Journal, 52*, 177–186.

Chalmers, R. P. (2018). Improving the Crossing-SIBTEST statistic for detecting non-uniform DIF. *Psychometrika, 83*(2), 376–386. DOI: 10.1007/s11336-017-9583-8

323 Aderhold Hall – Athens, GA, 30602
rphilip.chalmers@uga.edu

Liu, C.-W. & **Chalmers, R. P.** (2018). Fitting Item Response Unfolding Models to Likert-scale and Pairwise Preference Data using mirt in R. *PLoS ONE, 13*(5). DOI: https://doi.org/10.1371/journal.pone.0196292

Chalmers, R. P., Pek, J., & Liu, Y. (2017). Profile-likelihood Confidence Intervals in Item Response Theory Models. *Multivariate Behavioral Research, 52*(5), 533–550. DOI: 10.1080/00273171.2017.1329082

Chalmers, R. P. & Ng. V. (2017). Plausible-Value Imputation Statistics for Detecting Item Misfit. *Applied Psychological Measurement, 41*, 372–387.

Sigal, M. & **Chalmers, R. P.** (2016). Play It Again: Teaching Statistics with Monte Carlo Simulation. *Journal of Statistics Education, 21*, 1–21. DOI: 10.1080/10691898.2016.1246953

Pek, J., **Chalmers, R. P.**, & Monette, G. (2016). On the Relationship Between Confidence Regions and Exchangeable Weights in Multiple Linear Regression. *Multivariate Behavioral Research, 51,* 719–739.

Chalmers, R. P. (2016). Generating Adaptive and Non-Adaptive Test Interfaces for Multidimensional Item Response Theory Applications. *Journal of Statistical Software, 71*(5), 1–39.

Chalmers, R. P., Counsell, A., & Flora, D. B. (2016). It might not make a big DIF: Improved Differential Test Functioning statistics that account for sampling variability. *Educational and Psychological Measurement, 1*, 114–140.

Chalmers, R. P., & Flora, D. (2015). faoutlier: An R package for detecting influential cases in exploratory and confirmatory factor analysis. *Applied Psychological Measurement, 39*, 573-574.

Chalmers, R. P. (2015). Extended Mixed-Effects Item Response Models with the MH-RM Algorithm. *Journal of Educational Measurement, 52*, 200–222.

Pek, J., **Chalmers, R. P.**, Kok, B. E., & Losardo, D. (2015). Visualizing Confidence Bands for Semiparametrically Estimated Nonlinear Relations among Latent Variables. *Journal of Educational and Behavioral Statistics, 40*, 4, 402–423.

Pek, J. & **Chalmers, R. P.** (2015). Diagnosing Nonlinearity With Confidence Envelopes for a Semiparametric Approach to Modeling Bivariate Nonlinear Relations Among Latent Variables. *Structural Equation Modeling, 22*, 2, 288–293.

Chalmers, R. P., & Flora, D. (2014). Maximum-likelihood estimation of non-compensatory IRT models with the MH-RM algorithm. *Applied Psychological Measurement, 38*(5), 339–358.

Weiss, J. A., Robinson, S., Fung, S., Tint, A., **Chalmers, R. P.**, & Lunsky, Y. (2013). Family hardiness, social support, and self-efficacy in mothers of individuals with Autism Spectrum Disorders. *Research in Autism Spectrum Disorders, 7*(11), 1310–1317.

Flora, D. B., LaBrish, C., & **Chalmers, R. P.** (2012). Old and new ideas for data cleaning and assumption testing with exploratory and confirmatory factor analysis. *Frontiers in Psychology, 3*, 1–21.

Chalmers, R. P. (2012). mirt: A multidimensional item response theory package for the R environment. *Journal of Statistical Software, 48*(6), 1–29.

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Published Software

Friendly, M., Fox, J., and **Chalmers, R. P.** (2015). matlib: Matrix Functions for Teaching and Learning Linear Algebra and Multivariate Statistics. R package. `http://cran.r-project.org/web/packages/matlib/index.html`

Chalmers, R. P. (2015). SimDesign: Structure for Organizing Monte Carlo Simulation Designs. R package. `http://cran.r-project.org/web/packages/SimDesign/index.html`

Chalmers, R. P. (2014). mirtCAT: Computerized Adaptive Testing with Multidimensional Item Response Theory. R package. `http://cran.r-project.org/web/packages/mirtCAT/index.html`

Kok, B. E., Pek, J., Sterba, S., Bauer, D., and **Chalmers, R. P.** (2014). plotSEMM: Graphing Nonlinear Relations Among Latent Variables from Structural Equation Mixture Models. R package. `http://cran.r-project.org/web/packages/plotSEMM/index.html`

Chalmers, R. P., Smith, C., and Sigal M. (2012). OLScurve: OLS Growth Curve Trajectories. R package. `http://cran.r-project.org/web/packages/OLScurve/index.html`

Chalmers, R. P. (2012). faoutlier: Influential Case Detection Methods for Factor Analysis and Structural Equation Models. R package. `http://cran.r-project.org/web/packages/faoutlier/index.html`

Chalmers, R. P. (2011). mirt: Multidimensional Item Response Theory. R package. `http://cran.r-project.org/web/packages/mirt/index.html`

Convention Papers and Invited Presentations

October 2018 Ogreden, O., Terwee, C. B., **Chalmers, R. P.**, Smits, N. Non-normality of Latent Trait Distribution: A Problem of Model Selection in IRT. PROMIS Health Organization. Dublin, Ireland

July 2018 Schneider, L., **Chalmers, R. P.**, Debelak, R., & Merkle, E. Vuong tests for model selection of MIRT models. International Meeting of the Psychometric Society. New York City, New York.

February 2018 Schneider, L., **Chalmers, R. P.**, Debelak, R., & Merkle, E. Applying Vuong Tests to Item Response Models Using mirt and nonnest2. International Workshop on Psychometric Computing (Psychoco). Tuebingen, Germany.

July 2016 **Chalmers, R. P.**, Flora, D., & Counsell, A. Large-sample Hypothesis Tests and Confidence Intervals for Two Differential Test Functioning Measures. International Meeting of the Psychometric Society. Asheville, North Carolina.

June 2015 **Chalmers, R. P.** Mixed regression effects in item response theory applications. Symposium presentation talk at the annual Canadian Psychological Association (CPA) meeting. Ottawa, Ontario.

June 2015 Pek, J. & **Chalmers, R. P.** On the relationship between confidence regions and exchangeable weights in multiple linear regression. Symposium presentation at the annual Canadian Psychological Association (CPA) meeting. Ottawa, Ontario.

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May 2015 Flora, D., **Chalmers, R. P.**, & Counsell, A. Because it might not make a DIF: Assessing differential test functioning. Symposium presentation at the annual Modern Modeling Methods conference. Mansfield, Connecticut.

February 2015 **Chalmers, R. P**. Multidimensional Item Response Theory Applications with mirt and mirtCAT. Keynote presentation at the International Workshop on Psychometric Computing (Psychoco). Amsterdam, Netherlands.

July 2014 Pek, J. & **Chalmers, R. P**. Detecting nonlinearity of latent relationships with confidence envelopes for a semiparametric approach to modeling bivariate nonlinear relations among latent variables. Paper presented at the 2014 International Meeting of the Psychometric Society. Madison, Wisconsin.

July 2014 **Chalmers, R. P**. & Pek, J. Graphical utilities for diagnosing nonlinear relationships in structural equation models. Poster presentation at the 2014 International Meeting of the Psychometric Society. Madison, Wisconsin.

May 2013 Chow, P., & **Chalmers, R. P**. Adding a positive form to BDI-II can produce a full-spectrum scale measuring severe depression at one end and elation at the other end. Poster presentation, 2013 World Congress on Positive Psychology. Los Angeles, California.

May 2013 Counsell, A., **Chalmers, R. P**, Sigal, M. J., & Cribbie, R. (2013). Extending the Robust Means Modeling Framework. Paper presented at the Modern Modeling Methods conference. Storrs, Connecticut.

June 2012 LaBrish, C., Flora, D. B., & **Chalmers, R. P.** Old and new ideas for data screening and assumption testing for exploratory and confirmatory factor analysis. Symposium conducted at the 73rd conference of the Canadian Psychological Association. Halifax, Nova Scotia.

July 2012 **Chalmers, R. P**. mirt: A Multidimensional Item Response Theory Package in R. Invited Symposium Contribution, 2012 International Meeting of the Psychometric Society. Lincoln, Nebraska.

Professional Activities

Workshops

March 2017 **Chalmers, R. P**. *Multidimensional Computerized Adaptive Testing with mirtCAT*. Workshop to be presented at the Jena Spring School on Educational Measurement at Friedrich-Schiller-University Jena, Germany.

February 2015 **Chalmers, R. P**. *Unidimensional and multidimensional item response theory in R*. Two day workshop in the workshop series jointly organized by ETH Zürich and the University of Zürich, Switzerland.

February 2015 **Chalmers, R. P**. *Introduction to R graphics*. One day workshop in the workshop series jointly organized by ETH Zürich and the University of Zürich, Switzerland.

September 2013 **Chalmers, R. P**. *mirt: Item Response Theory in R*. Invited Workshop Contribution, Methods and Evaluation section of the German Psychological Society, Klagenfurt, Austria.

September 2013 **Chalmers, R. P**. *mirt: Item Response Theory in R*. Invited Workshop Contribution for University of Tüebingen, Germany.

Other Professional Experience

2016 Consultant for Multi-Health Systems Inc. (MHS), Toronto, ON, Canada.

2013-2015 Student coordinator for the Quantitative Methods Forum at York University.

2013–2015 Statistical consultant for undergraduate and graduate students with Statistical Consulting Services (SCS) at York University

Ad hoc Reviewer

Psychometrika
Applied Psychological Measurement
Multivariate Behavioral Research
Psychological Methods
Journal of Educational and Behavioral Statistics
Journal of Educational Measurement
British Journal of Mathematical and Statistical Psychology
Educational and Psychological Measurement
Journal of Statistical Software
The R Journal
Psychological Tests and Assessment Modeling
Journal of Statistical Computation and Simulation
Journal of Experimental Education
Journal of Clinical Psychology
Psicologica
Statistics and Its Interface
International Journal of Methodology and Experimental Psychology
Quality of Life Research
Psychological Medicine

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SUSAN LYONS

Curriculum Vitae

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EDUCATION

University of Kansas, Lawrence, KS

Ph.D. Educational Psychology & Research — May 2015

Track: Research, Evaluation, Measurement & Statistics

Dissertation: *Effect of summer learning loss on aggregate estimates of student growth*

M.S.Ed. Educational Psychology & Research — June 2013

Boston University, Boston, MA

B.A. Mathematics & Math Education*, Cum Laude* — May 2010

HONORS & APPOINTMENTS

TranformingEducation National Technical Advisory Board	2016-Present
KU School of Education Merit Scholarship	2013-2015
Mary Oyster O'Guin Memorial Scholarship	2013-2015
Kingsbury Center Data Award	2014
KU Graduate Studies Summer Research Fellowship	2014

PROFESSIONAL EXPERIENCE

Center for Assessment, Dover, NH — 2014 – Present

Associate

Provide technical expertise and support related to the design and implementation of assessment and accountability systems. Notable projects include the New Hampshire Performance Assessment for Competency Education (PACE) project where I lead much of the design and analysis to support the technical quality of the innovative assessment system—including working with educators to build performance assessment capacity. Additionally, I am working to support states as they transition their assessment and accountability systems under the Every Student Succeeds Act through work with the Georgia Educator Effectiveness and Accountability Technical Advisory Committee, the New Hampshire Accountability Task Force, and partnerships with organizations such as the Hewlett Foundation, Council for Chief State School Officers, and KnowledgeWorks.

Boston College, Chestnut Hill, MA — 2015 – 2017

Part-time Faculty

Design and taught graduate-level statistics courses for beginning through advanced doctoral students in the Lynch School of Education. Statistical theory is emphasized along with computer software applications. Served as the supervisor for graduate teaching assistants.

Center for Research on Learning, Lawrence, KS — 2012 – 2014

Graduate Research Assistant

Position funded by IES award entitled: *An Adaptive Testing System for Diagnosing Sources of Mathematics Difficulties*. Under the supervision of Drs. John Poggio and Susan Embretson, I worked with a team at Georgia Institute of Technology to carry out key functions associated with the grant.

Center for Educational Testing and Evaluation, Lawrence, KS 2011 – 2012
Graduate Research Assistant
Member of the team responsible for development, quality assurance, alignment, and timely release of all Kansas summative state assessments, including alternate and accommodated forms.

Colegio Menor, Cumbaya, Ecuador 2010 – 2011
Seventh Grade Math Teacher
Taught four classes with a total of 79 seventh graders. Engaged with students in project-based learning. Maintained open and effective communication with Spanish-speaking parents about student learning and progress.

PUBLICATIONS

Buckley, K., & **Lyons, S**. (*in development*). Teacher and leader perceptions of student learning objectives.

Dadey, N., **Lyons, S.,** & DePascale, C. (2018). Score comparability across computerized assessment delivery devices. *Applied Measurement in Education, 31*(1), 30-50.

Lyons, S., & Evans, C. (2017*).* Evaluating comparability in the scoring of performance assessments for accountability purposes. *Voices in Urban Education, 46.*

Lyons, S., & Qiu, Y. (2017). Voices from the field: Performance assessments in state accountability as discussed at CCSSO's National Conference on Student Assessment. *Voices in Urban Education.*

Evans, C., & **Lyons, S.** (2017). Comparability in innovative assessment systems for state accountability. *Educational Measurement: Issues and Practice, 36*(3), 24-34.

Lyons, S., & Dadey, N. (2017). *Considering English language proficiency within systems of accountability under the Every Student Succeeds Act*. National Center for the Improvement of Educational Assessment: Dover, NH.

Marion, S., & **Lyons, S.** (2016). *In Search of Unicorns: Conceptualizing and validating the "Fifth Indicator" in ESSA accountability systems.* National Center for the Improvement of Educational Assessment: Dover, NH.

Lyons, S. & Marion, S. F. (2016). *Comparability options for states applying for the Innovative Assessment and Accountability Demonstration Authority: Comments submitted to the United States Department of Education regarding proposed ESSA regulations.* National Center for the Improvement of Educational Assessment: Dover, NH.

Marion, S. M., **Lyons, S.**, D'Brot, J. (2016). *Developing a theory of action to support high quality accountability system design.* National Center for the Improvement of Educational Assessment: Dover, NH.

Lyons, S., Marion, S.F., Pace, L., & Williams, M. (2016). *Addressing accountability issues including comparability in the design and implementation of an innovative assessment and accountability system*. www.innnovativeassessments.org

Thompson, J., **Lyons, S.**, Marion, S. F., & Pace, L. (2016). *Supporting educators and students through implementation of an innovative assessment and accountability system*. www.innovativeassessments.org

Thompson, J., **Lyons, S.**, Marion, S.F., Pace, L., & Williams, M. (2016). *Ensuring and evaluating assessment quality for innovative assessment and accountability systems.* www.innnovativeassessments.org

Marion, S.F., Pace, L., Williams, M., & **Lyons, S.** (2016). *Project narrative: Creating a state vision to support the design and implementation of an innovative assessment and accountability system.* www.innovativeassessments.org

Lyons, S., & Hall, E. (2016). *The role of the Standards for Educational and Psychological Testing in establishing a methodology to support the evaluation of assessment quality.* National Center for the Improvement of Educational Assessment: Dover, NH.

Hall, E. & **Lyons, S.** (2016). *A guide to evaluating college- and career-ready assessments: Focus on test characteristics – Evaluation methodology.* National Center for the Improvement of Educational Assessment: Dover, NH.

Hall, E. & **Lyons, S.** (2016). *A guide to evaluating college- and career-ready assessments: Focus on test characteristics – Criteria evaluation framework*. National Center for the Improvement of Educational Assessment: Dover, NH.

Whetstone, P., **Gillmor, S.**, & Schuster, J. (2015). Effects of a metacognitive social skills intervention in a rural setting with at-risk adolescents. *Rural Special Education Quarterly*, *34*(2).

Gillmor, S., Poggio, J., & Embretson, S. (2015). Effects of reducing cognitive load of mathematics test items on student performance. *Numeracy, 8*(1), 4.

Gillmor, S., & Rabinowicz, S. (2013). Understanding geometry and measurement through service-learning. *Mathematics Teaching in the Middle School*, *19*(1), 55-58.

Seider, S., Rabinowicz, S., & **Gillmor, S.** (2012). Differential outcomes for American college students engaged in community service learning involving youth and adults. *Journal of Experiential Education*, *35*(3), 447-463.

Seider, S., **Gillmor, S.**, & Rabinowicz, S. (2012). The impact of community service learning upon the expected political voice of participating college students. *Journal of Adolescent Research, 27*(1), 44-77.

Seider, S., Rabinowicz, S., & **Gillmor. S.** (2011). The impact of philosophy and theology service-learning experiences upon the public service motivation of participating college students. *Journal of Higher Education*, *82*(5), 597-628.

Seider, S., **Gillmor, S.**, & Rabinowicz, S. (2011). The impact of community service learning upon the worldviews of business majors vs. non-business majors at an American university. *Journal of Business Ethics*, *98*(3), 458-504.

Seider, S., Gillmor**, S.**, & Rabinowicz, S. (2010). Complicating college students' conception of the American Dream through community service learning. *Michigan Journal of Community Service Learning*, *17*(1), 5-19.

Seider, S., Rabinowicz, S., & **Gillmor, S**. (2010). Community service learning and conceptions of poverty among American college students. *Analyses of Social Issues & Public Policy*, *10* (1) 215-236.

Seider, S., **Gillmor, S.**, Leavitt, J., & Rabinowicz, S. (2009). Puzzling over community service and reflection. *Journal of College & Character*, 10 (7), 1-8.

INVITED PRESENTATIONS

D'Brot, J., & **Lyons, S.** (2017, May). *Identification and exit criteria for CSI and TSI schools.* Presentation as part of CCSSO's Learning from Our Peers: Webinar Mini-Series.

Lyons, S., & Buckley, K. (2017, April). *Re-imagining school accountability under ESSA: Opportunities and challenges for evaluating school quality and student success.* Pre-conference professional development and training course, hosted by AERA Division H, provided at the annual conference of the American Educational Research Association, San Antonio, TX.

Pompa, D., & **Lyons, S.** (2017, March). *Strategic opportunities for including English learners in ESSA state accountability plans.* Webinar hosted by the National Center on Immigrant Integration Policy of the Migration Policy Institute.

Lyons, S. (2017, February). *Incorporating English language proficiency into systems of accountability.* Paper presented at the Convening on Accountability and English Learners hosted by the Latino Policy Forum, Chicago, IL.

Lyons, S., & Patelis, T. (2016, October). *Keeping a watchful eye on new assessment models.* Presentation at the High Quality Assessment Project meeting on Improving Partnerships to Support High Quality Assessments, New Orleans, LA.

Lyons, S. (2016, October). *Developing a theory of action for an innovative assessment system.* Presentation at the Innovative Assessment Convening hosted by Remake Learning, Pittsburg, PA.

Marion, S., & **Lyons, S.** (2016, July). *Comparability by design in the innovative assessment and accountability pilot.* Paper presented at CCSSO's Innovative Assessment and Accountability Technical Assistance Meeting, Denver, CO.

Lyons, S., & Anderson, J. (2016, June). *Flexibility and comparability within a system.* Workshop presented at CCSSO's ESSA Accountability Systems Technical Assistance Meeting, Tempe, AZ.

Marion, S., & **Lyons, S.** (2016, May). *What's in an item?* Presentation for the Education Writers' Association National Seminar, Boston, MA.

CONFERENCE PRESENTATIONS

Lyons, S. (2017, June). *Formative evaluation of New Hampshire's Performance Assessment of Competency Education (PACE).* Paper presented as part of a symposium at CCSSO's National Conference on Student Assessment, Austin, TX.

Lyons, S., & Marion, S. (2017, June). *Comparability options for states applying for the Innovative Assessment and Accountability Demonstration Authority*. Symposium presented at CCSSO's National Conference on Student Assessment, Austin, TX.

Lyons, S. (2017, April). *Considerations for maintaining equity within an Innovative Assessment and Accountability Demonstration Authority.* Paper presented as part of a symposium entitled "Flexible K-12 Assessments Afforded by ESSA: Psychometric Possibilities and Case Studies" at the annual meeting of the National Council on Measurement in Education, San Antonio, TX.

Lyons, S. (2017, April). *Teacher and leader perceptions of student learning objectives: A case study of implementation in one state.* Paper presented as part of a symposium entitled "Student Learning Objectives and the Challenge of Campbell's Law" at the annual meeting of the National Council on Measurement in Education, San Antonio, TX.

Lyons, S., & Evans, C. (2017, April). *Application of generalizability theory to classroom assessments in a school accountability context.* Paper presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX.

Lyons, S., & Hall, E. (2016, September). *Evaluating assessment quality: Transitioning from summative to interim.* Presentation at the 18th Annual Reidy Interactive Lecture Series, Portsmouth, NH.

Marion, S., **Lyons, S.**, & Thompson, J. (2016, June). *First in the nation: New Hampshire's leading edge assessment and school accountability pilot*. Symposium presented at CCSSO's National Conference on Student Assessment, Philadelphia, PA.

Thompson, J., Simaska, D., & **Lyons, S.** (2016, June). *Text Dependent Analysis: Building teacher capacity to instruct for a new item type*. Symposium presented at CCSSO's National Conference on Student Assessment, Philadelphia, PA.

Lyons, S. (2016, April). *Investigating the technical quality of reported scores.* Paper presented as part of symposium entitled "Beyond the Bubble Test: A Progress Report on Year One of New Hampshire's Performance Assessment of Competency Education Pilot Accountability Project" at the annual meeting of the New England Educational Research Organization, Portsmouth, NH.

Lyons, S., Hall, E., & Patelis, T. (2016, April). *Using the standards to support assessment quality evaluation.* Paper presented at the annual meeting of the National Council on Measurement in Education, Washington, D.C.

Evans, C., & **Lyons, S.** (2016, April). Comparability in balanced assessment systems for state accountability. Paper presented as part of symposium entitled "Advances in Balanced Assessment Systems: Conceptual framework, informational analysis, application to accountability" at the annual meeting of the National Council on Measurement in Education, Washington, D.C.

Buckley, K., & **Lyons, S**. (2016, April). *Teacher and leader perceptions of and engagement with student learning objectives in one state.* Paper presented at the annual conference of the American Educational Research Association, Washington, D.C.

Lyons, S., & Buckley, K. (2015, October). *Perceptions of student learning objectives: Lessons learned from data meeting observations.* Paper presented at the annual conference of the Northeastern Educational Research Association, Trumbull, CT.

Evans, C., & **Lyons, S.** (2015, September). *Quality control across political boundaries.* Presentation at the 17th Annual Reidy Interactive Lecture Series, Boston, MA.

Patelis, T., Gong, B., Hall, E. & **Gillmor, S**. (2015, June). *Evaluating the quality of assessments*. Symposium presented at CCSSO's National Conference on Student Assessment, San Diego, CA.

Gillmor, S., Betebenner, D., & Marion, S. (2015, April). *The effect of summer learning loss on annual estimates of* student *growth for teacher evaluation.* Paper presented at the annual meeting of the New England Educational Research Organization, Portsmouth, NH.

Hall, E., **Gillmor, S.**, Gong, B., Hess, K., Marion, S., & Patelis, T. (2015, April). *Assessment quality related to college and career readiness assessments.* Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL.

Poggio, J., **Gillmor, S.**, Sipahi, R., & Jiang, Z. (2015, April). *An error analysis examining international assessments and resulting country equivalence.* Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL.

Gillmor, S., & Skorupski, W. (2014, April). *Comparing the estimates of teacher effects using VAMs and SGPs*. Paper presented at the Cognition and Assessment Special Interest Group Business Meeting, Philadelphia, PA.

Gillmor, S., Poggio, J., & Embretson, S. (2014, April). *Effects of reducing the cognitive load of mathematics items on student performance.* Paper presented at the annual conference of the American Educational Research Association, Philadelphia, PA.

Gillmor, S., Poggio, J., Longabach, T. & Papanastasiou, E. (2014, April). *A new threat to validity: An examination of cultural discrepancies in omission rates on international assessments.* Paper presented at the annual conference of the American Educational Research Association, Philadelphia, PA.

McJunkin, L., Poggio, J., & **Gillmor, S.** (2014, April) *Construct validity and fairness of technology-enhanced items for visually-impaired students.* Paper presented at the annual meeting of the National Council on Measurement in Education, Philadelphia, PA.

Gillmor, S., & Carter, K. (2013, October). *Improving the usability of the concerns-based adoption model: Validation of a revised diagnostic tool for measuring levels of use.* Paper presented at the annual conference of the American Evaluation Association, Washington, DC.

Poggio, J., **Gillmor, S.**, & Poggio, A. (2013, April). *A formative assessment tutorial model in mathematics.* Paper presented at the annual meeting of the National Council for Measurement in Education, San Francisco, CA.

Rabinowicz, S., & **Gillmor, S.** (2013, March). *Understanding geometry and measurement through service-learning.* Paper presented at the annual National Service-Learning Conference, Denver, CO.

Carter, K., & **Gillmor, S.** (2013, March). *The influence of achievement on specific reading indicators on achievement in overall math and specific math indicators.* Poster presented at the University of Kansas' Annual Capitol Graduate Research Summit, Lawrence, KS.

Whetstone, P., **Gillmor, S.** & Schuster, J. (2013, February). *Social skills change student behavior.* Paper presented at the annual conference for the Learning Disabilities Association of America, San Antonio, TX.

Seider, S., **Gillmor, S.**, & Rabinowicz, S. (2010, June). *Differential outcomes for American college students engaged in community service learning involving youth and adults.* Paper presented at The Future of Community Engagement in Higher Education conference, Boston, MA.

PROFESSIONAL AFFILIATIONS

American Educational Research Association—*Division D: Measurement and Research Methodology*
National Council for Measurement in Education
New England Educational Research Organization
Northeastern Educational Research Association

The National Center
for the Improvement of
Educational Assessment, Inc.

Vita
SCOTT F. MARION
President

Scott F. Marion is the President of the non-profit The National Center for the Improvement of Educational Assessment, Inc. Previously, he served as the Vice President of the Center since 2005 and as a senior associate from 2003-2005. The mission of the Center is to help states and districts foster higher student achievement through improved practices in educational assessment and accountability. The Center does this by:

- Providing customized support to states and districts in designing, implementing, and improving fair, effective, and legally defensible assessment and accountability programs. The Center's staff provides the full range of support, including technical analyses, policy support, documentation and communication, and training from designing an accountability system to meet a legislative mandate through designing effective programs in support of low-performing schools.
- Coordinating Technical Advisory Committees that help ensure a state's evolving assessment and accountability programs receive the best on-going technical advice possible, focused on the specific issues and decision-making needs of the individual state or district.
- Developing and disseminating practical standards for assessment and accountability programs that include specific information about what states and districts should do *today* to have technically sound programs.

As President, Dr. Marion consults with numerous states on such issues as optimal design of assessment and accountability systems, creating or documenting legally defensible approaches to accountability and educator evaluation, gathering validation evidence for accountability programs, and designing comprehensive assessment systems to serve both instructional and accountability purposes. In addition to his management role at the Center for Assessment, Dr. Marion assists in active leadership in the Center's efforts to develop practical professional standards through the Center's annual lecture series and as a regular contributor to professional publications and the annual conferences of AERA, NCME, and CCSSO.

As Wyoming's assessment director (1999-2003), Dr. Marion managed the K-12 testing program, the Wyoming Comprehensive Assessment System, overseeing the state's Uniform Reporting System, and generally overseeing all assessment-related activities at the Wyoming Department of Education. Wyoming's innovative high school competency assessment system—The Body of Evidence System—was the most ambitious project of his administration. Scott Marion worked through the entire cycle of development of the assessment system from initial design through incorporation into legislation, administrative rule, and into actual implementation. From 1997 Dr. Marion worked with department of education staff and educators in the field, the state board of education, advisory panels, and the governor's and legislative offices to design Wyoming's first statewide, standards-based assessment system.

Dr. Marion earned his Ph.D. at the University of Colorado at Boulder under mentorship of Professors Lorrie Shepard and Robert Linn. Dr. Marion started his career as a field biologist prior to earning his Master's of Science in Science and Environmental Education from the University of Maine.

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website www.nciea.org

Education

Ph.D. May 2004. University of Colorado, Boulder, CO. Research and evaluation methodology. Specialization--Educational Assessment. Dissertation Advisor: Lorrie Shepard. Dissertation title: Psychometric Concerns When Measuring Advanced Knowledge.

Master of Science. May 1992. University of Maine, Orono, Maine. Science and Environmental Education G.P.A. 4.0 Thesis Advisor: Theodore Coladarci. Thesis title: *Gender differences in science course-taking patterns among college undergraduates: Indicators of a hidden curriculum in science education?*

Maine State Certification. August 1986. University of Maine, Orono, Maine.

Bachelor of Science. May 1979. State University of New York, College of Environmental Science and Forestry, Syracuse, NY. September 1975-May 1979. Majored in zoology and forest biology, graduated cum laude (G.P.A. 3.1).

Professional History

Wyoming Department of Education. Cheyenne, WY.

Director of Assessment and Accountability. November 1999-January 2003. Responsible for managing the state's K-12 testing program, Wyoming Comprehensive Assessment System, overseeing the state's Uniform Reporting System, and, generally, overseeing all assessment-related activities at the Wyoming Department of Education, including assessment issues related to district accreditation and student graduation requirements. Managed two budgets in excess of three million dollars per year, supervised three staff members, several external consultants, and a testing contractor.

Wyoming Department of Education. Cheyenne, WY.

Assessment Specialist. August 1997-October, 1999. Served as a consultant to the Department to help with the development and implementation of the Wyoming Comprehensive Assessment System. Duties included writing background research reports, planning design team meetings, drafting the assessment system technical reports, and writing and reviewing requests for proposals.

School of Education, University of Colorado at Boulder. Campus Box 249, Boulder, CO.

Research Assistant, August 1993-September 1994; August 1995-May, 1997. I worked as a research associate of a variety of assessment related research projects funded by the Center for Research on Student Standards and Testing (CRESST). Supervisor: Dr. Lorrie Shepard

Evaluation Internship, September 1994 - August 1995. As part of a two-person internship team, I served as a co-principal investigator for an evaluation of the National Science Foundation-funded Mathematicians and Education Reform (MER) Forum. This internship was supported by the American Educational Research Association's Grants Program and NSF. Supervisor: Dr. Ernest House.

College of Education, University of Maine, Orono, ME.

Part-time Faculty Member. 1991-1993. Responsibilities include teaching the following graduate and undergraduate courses: EDS 520--Educational Measurement; ESC 525--Planning the Environmental Curriculum; and EDB 221--Introduction to Educational Psychology.

Center for Research and Evaluation, College of Education. University of Maine, Orono, ME.

Research Associate, September 1988-July 1993. Responsibilities included conducting curriculum and program evaluations for school systems and other agencies, managing the Center's data bases and archives, writing grants and funding proposals, writing research and technical reports, and providing research design and statistical consulting services for University faculty and graduate students.

Selected Publications

Marion, S.F. (2018). The opportunities and challenges of a systems approach to assessment. *Educational Measurement: Issues and Practice, 37, 1*, 45-48. https://doi.org/10.1111/emip.12193

Marion, S.F., Vander Els, J. & Leather, P. (2017). Reciprocal accountability for transformative change: New Hampshire's performance assessment of competency education (PACE). *VUE: Voices in Urban Education*, 46, 20-25.

Marion, S.F., Lyons, S., & Pace, L. (2017). Evaluating and Continuously Improving an Innovative Assessment and Accountability System. www.innovativeassessments.org.

Gagnon, D.J., Hall, E. & Marion, S.F. (2017). Teacher evaluation and local control in the United States: An investigation into the degree of local control afforded to districts in defining evaluation procedures for teachers in non-tested subjects and grades. *Assessment in Education: Principles, Policy & Practice, 24, 4, 489-505.*

Marion, S.F., Pace, L., Williams, M., & Lyons, S. (2016). Project Narrative: Creating a State Vision to Support the Design and Implementation of An Innovative Assessment and Accountability System. www.innovativeassessments.org

Marion, S.F., Lyons, S., Pace, L., & Williams, M. (2016). A Theory of Action to Guide the Design and Evaluation of States Innovative Assessment and Accountability System Pilots. www.innovativeassessments.org.

Thompson, J., Lyons, S., Marion, S.F., Pace, L., & Williams, M. (2016). Ensuring and Evaluating Assessment Quality for Innovative Assessment and Accountability Systems. www.innovativeassessments.org.

Lyons, S., Marion, S.F., Pace, L., & Williams, M. (2016). Addressing Accountability Issues including Comparability in the Design and Implementation of an Innovative Assessment and Accountability System. www.innovativeassessments.org.

Jenkins, S., Pace, L., Lyons, S., Marion, S.F. (2016). Establishing a Timeline and Budget for Design and Implementation of an Innovative Assessment System. www.innovativeassessments.org.

Thompson, J, Lyons, S., Marion, S.F., Pace, L. (2016). Supporting Educators and Students Through Implementation of an Innovative Assessment and Accountability System. www.innovativeassessments.org.

Graue, E., Marion, S.F., & Nelson, M. (2016, Spring). Eye on her research: Assessment in a learning culture. *Education Views, pp 6-8*. School of Education, University of Colorado, Boulder.

Rothman, R. & Marion, S.F. (2016). The next generation of state assessment and accountability. *Kappan, 97, 8, 34-37.*

Marion, S.F. & Buckley, K. (2016). Design and implementation considerations of performance-based and authentic assessments for use in accountability systems. In Braun, H. (ed). *Meeting the Challenges to Measurement in an Era of Accountability*. New York, NY: Routledge, Taylor & Francis Group.

Chattergoon, R. & Marion, S.F. (2016). Not as easy as it sounds: Designing a balanced assessment system. *The State Education Standard, 16, 1*, 6-9

Marion, S.F. (2015). The search for the Holy Grail: Content-referenced score interpretations from large-scale tests. *Measurement: Interdisciplinary Research & Perspectives, 2,* pp. 106-110.

Domaleski, C., Gong, B., Hess, K., Marion, S., Curl, C., Peltzman, A. (2015). Assessment to support competency-based pathways. Washington, DC: Achieve. www.Achieve.org and www.nciea.org

Marion, S. (2015, Feb). Two sides of the same coin: Competency based education and Student Learning Objectives. Published by Competency Works. http://www.competencyworks.org/resources/two-sides-of-the-same-coin-competency-based-education-and-student-learning-objectives/

Marion, S., & Leather, P. (2015). Assessment and accountability to support meaningful learning. *Education Policy Analysis Archives, 23(9)*. http://dx.doi.org/10.14507/epaa.v23.1984

Diaz-Bilello, E.B., Patelis, T., Marion, S.F., Hall, E., Betebenner, D. & Gong, B. (2014). Are the *Standards for Educational and Psychological Testing* Relevant to State and Local Assessment Programs? *Educational Measurement: Issues and Practice, 33, 4*, 16–18

Marion, S.F., DePascale, C., Domaleski, C., Gong, B., & Diaz-Bilello, E. (2012, May). Considerations for analyzing educators' contributions to student learning in non-tested subjects and grades with a focus on Student Learning Objectives. **www.nciea.org.**

Marion, S.F. & Buckley, K. (2011). Approaches and considerations for incorporating student performance results from "Non-Tested" grades and subjects into educator effectiveness determinations. www.nciea.org.

Buckley, K. & Marion, S.F. (2011). A Survey of Approaches Used to Evaluate Educators in Non-Tested Grades and Subjects. www.nciea.org.

Marion, S.F. (2010). Constructing a validity argument for alternate assessments based on modified achievement standards. In Perie, M. *Alternate Assessments Based on Modified Achievement Standards*. Baltimore, MD: Brooks Publishing.

Li, Y., Marion, S.F., Perie, M. & Gong, B. (2010) An approach for evaluating the technical quality of interim assessments. *Peabody Journal of Education, 85, 2*, 163-185

Perie, M., Marion, S.F., & Gong, B. (2009). Moving towards a comprehensive assessment system: A framework for considering interim assessments. *Educational Measurement: Issues and Practice, 28, 3*, 5-13.

Marion, S.F. (2009). Some key considerations for test evaluators and developers. In Schafer, W. and Lissitz, R. (eds.) *Alternate assessments based on alternate achievement standards: Policy, practice, and potential* (pp. 357-360).

Marion, S. F. & Perie, M. (2009). Validity arguments for alternate assessments. In Schafer, W. and Lissitz, R. (eds.) *Alternate assessments based on alternate achievement standards: Policy, practice, and potential* (pp. 115-127). Baltimore, MD: Brooks Publishing.

Perie, M., Marion, S.F., Gong, B., & Wurtzel, J. (2007). The Role of Interim Assessments in a Comprehensive Assessment System: *A Policy Brief*. www.aspeninst.org and www.nciea.org.

Marion, S.F. & Gong, B. (2007). Assessing college readiness: A continuation of Kirst. *NCME Newsletter, 15, 2*, 5-7.

Hill, R.K., Gong, B., Marion, S., DePascale, C., Dunn, J., and Simpson, M. (2006). Using Value Tables to Explicitly Value Growth, Paper presented at the MARCES conference.

Dunn, J. & Marion, S. F. (2006). NCLB Growth: What are we learning as reauthorization approaches? *NCME Newsletter, 14, 4*, 3-4.

Marion, S. F. & Pellegrino, J. W. (2006). A validity framework for evaluating the technical quality of alternate assessments. *Educational Measurement: Issues and Practice, 25, 4,* 47-57.

Dunn, J., Gong, B. & Marion, S. F. (2006). NCLB science assessments: A unique opportunity. *Measurement: Interdisciplinary Research and Perspectives, 4, 4*, 242-246.

Gong, B. & Marion, S. F. (2006). Dealing with flexibility in assessments for students with significant cognitive disabilities. Minneapolis, MN: University of Minnesota, National Center for Educational Outcomes Synthesis Report No. 60. http://education.umn.edu/nceo/OnlinePubs/Synthesis60.html.

Glenn, W. J., Picus, L.O., Marion, S., & Calvo, N. (2006). School facility quality and student achievement in Wyoming. *School Business Affairs, 72, 5,* 12-16.

Picus, L. O., Marion, S.F. Calvo, N., Glenn, W. J. (2005). Understanding the relationship between student achievement and the quality of educational facilities: Evidence from Wyoming. *Peabody Journal of Education, 80, 3*, 2005

Marion, S. F., White, C, Carlson, D., Erpenbach, W. J., Rabinowitz, S., Sheinker, J. (2002) Making valid and reliable decisions in the determination of adequate yearly progress: A Paper in the Series: *Implementing The State Accountability System Requirements Under The No Child Left Behind Act Of 2001*. Washington, D.C.: Council of Chief State Schools Officers.

Marion, S. F. & Stevens, S. (2001, March). *The Wyoming Assessment Handbook*. Cheyenne, WY: Wyoming Department of Education. http://www.measuredprogress.org/wycas/WhatsNew/AssessmentHandbook.pdf

Marion, S. F., Sheinker, A., Hansche, L., & Carlson, D. (1998, January). Wyoming Comprehensive Assessment System Design Report. Report prepared for the Wyoming State Legislature. Cheyenne, WY: Wyoming Department of Education. http://www.measuredprogress.org /wycas/WDEPP/design.htm

Shepard, L. A., Smith, M. L., & Marion, S. F. (1998). On the success of failure: A rejoinder to Alexander. *Psychology in the Schools, 35,* 404-406.

Shepard, L. A., Smith, M. L., & Marion, S. F. (1996). Failed evidence on grade retention. *Psychology in the Schools, 33,* 251-261.

Borko, H. Mayfield, V. Marion, S. F., Flexer, R., & Cumbo, K. (1997) Teachers' developing ideas and practices about mathematics performance assessment: Successes, stumbling blocks, and implications for professional development. *Teacher and Teacher Education, 13,* 259-278.

Eisenhart, M., Finkel, E., & Marion, S. F. (1996). Creating the conditions for scientific literacy: A re-examination. *American Educational Research Journal, 33,* 261-296.

Shepard, L. A. Flexer, R. J., Hiebert, E. H., Marion, S. F., Mayfield, V., & Weston, T. J. (1996). Effects of introducing classroom performance assessments on student learning. *Educational Measurement: Issues and Practice, 15, 3,* 7-18..

Shepard, L. A., Smith, M. L., & Marion, S. F. (1996). Failed evidence on grade retention. *Psychology in the Schools, 33, 3.*

Maddaus, J. & Marion, S. F. (1995). Do standardized test scores influence parental choice of high school? *Journal of Research in Rural Education, 11, 2,* 75-83.

National Research Council/National Academy of Science Publications

(Participated as an active committee member and report contributor to the following NRC reports.)

National Research Council. (2014). *Developing Assessments for the Next Generation Science Standards.* Committee on Developing Assessments of Science Proficiency in K-12. Board on Testing and Assessment and Board on Science Education, James W. Pellegrino, Mark R. Wilson, Judith A. Koenig, and Alexandra S. Beatty, *Editors.* Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

Braun, H., Chudowsky, N., & Koenig, J. A. (2010). *Getting value out of value-added: Report of a workshop.* Washington, DC: National Academies Press.

National Research Council. (2010). *State assessment systems: Exploring best practices and innovations: Summary of two workshops.* Alexandra Beatty, Rapporteur; Committee on Best Practices for State Assessment Systems. National Research Council. Board on Testing and Assessment. Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

Technical Reports, Studies, Conference Papers and Presentations

Numerous technical reports of evaluation studies produced for such organizations as the National Science Foundation and various state agencies. I have given hundreds of presentations at various national conferences including almost yearly presentations at the American Educational Research Association (AERA)/National Council of Measurement in Education (NCME) annual meetings since 1990 and CCSSO's Large Scale Assessment Conference since 1998.

Honors, Awards, Scholarships and Fellowships

The Spencer Foundation. Spencer Dissertation Fellowship for Research Related to Education. 1998-1999.

The Spencer Foundation & American Educational Research Association. Travel Fellowship Award. 1996-1997.

American Educational Research Association & National Science Foundation. Evaluation Internship Award. 1994-1995.

American Educational Research Association, National Science Foundation, & National Center for Educational Statistics. Selected to participate in the AERA Statistics Institute. April 8-10, 1994.

University of Colorado. University Fellowship awarded by the Graduate School to fund the first year of Ph.D. studies. 1993-1994.

New York State Regents Scholarship. 1975-1979.

National Honor Society. 1974-1975.

Service

Rye School Board, Rye, NH. 2013-present; Board Chair, 2015-2017.

AERA, Division D, Robert L. Linn Distinguished Lecture Award. Committee Member: 2009-2012; 2016-present

Committee Member: AERA Book Award. 2006-2009

United States Department of Education. National Technical Advisory Committee Member. 2008-2010

National Research Council Committee Member for the following:

- Developing Assessments of Science Proficiency in K-12. Board on Testing and Assessment and Board on Science Education (2013-2014)
- Best Practices for State Assessment Systems (2013-2014)
- Value-Added Model in Education (2009-2010)

Southeast New Hampshire Land Trust—Board member, 2012-present.

The Keystone Center Board of Trustees 2006-2009

Laine Percell Bradshaw

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Quantitative Methodology Program
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Education

Ph.D. in Research, Evaluation, Measurement and Statistics
The University of Georgia, 2011

M.Ed. in Mathematics Education
The University of Georgia, 2007

B.S. in Mathematics Education
The University of Georgia, 2007
Graduated Summa Cum Laude
Graduated with Honors

Academic Positions

The University of Georgia August 2016 – present
Associate Professor (tenure track), Department of Educational Psychology

The University of Georgia July 2012 – July 2016
Assistant Professor (tenure track), Department of Educational Psychology

James Madison University July 2011 – June 2012
Assistant Professor (tenure track), Department of Graduate Psychology
Assistant Assessment Specialist, Center for Assessment and Research Services

Peer-reviewed Journal Articles

*Indicates collaboration with a student during their graduate studies.
**Indicates equal contribution from authors.

Izsák, A., Jacobson, E., & **Bradshaw, L.** (In Press). Surveying Middle Grades Teachers' Reasoning About Fraction Arithmetic in Terms of Measured Quantities. *Journal of Research in Mathematics Education.*

*Madison, M., & **Bradshaw, L.** (2018). Assessing Growth in a Diagnostic Classification Model Framework. *Psychometrika*, 83(4), 963-990.

*Bao, Y., & **Bradshaw, L.** (2018). An Attribute-level Item Selection Method for DCM-CAT. *Measurement: Interdisciplinary Research and Perspectives,* 16(4), 209-255.

*Madison, M., & **Bradshaw, L.** (2018). Evaluating Intervention Effects in a Diagnostic Classification Model Framework. *Journal of Educational Measurement*, 55(1), 32-51.

Harrison, A., **Bradshaw, L.**, Naqvi, N., Campbell, J., & Paff, M. (2017). Development and Psychometric Evaluation of the Autism Stigma and Knowledge Questionnaire (ASK-Q). *Journal of Autism and Development Disorders*, *47*(10), 3281-3295.

*Sen, S. & **Bradshaw, L.** (2017). Comparison of relative fit indices for diagnostic model selection. *Applied Psychological Measurement*, *41*(6), 422-438.

***Bradshaw, L.** & Madison, M. (2016). Invariance Principles for General Diagnostic Models. *International Journal of Testing*, *16*(2), 99-118.

*Liu, R., Huggins-Manley, A.C., **Bradshaw, L.** (2016). The impact of Q-matrix designs on diagnostic classification accuracy in the presence of attribute hierarchies. *Educational and Psychological Measurement*, *77*(2), 420-440.

Templin, J., **Bradshaw, L.**, & Paek, P. (2016). A comprehensive framework for integrating innovated psychometric methodology into educational research. In A. Izsák, J. Remillard, & J. Templin (Eds.), *Psychometric methods in mathematics education: Opportunities, challenges, and interdisciplinary collaborations* (pp. 97-117). Journal of Research in Mathematics Education Monograph Series No. 15. Reston, VA: National Council of Teachers of Mathematics.

*Madison, M., & **Bradshaw, L.** (2015). The effects of Q-matrix design on classification accuracy in the log-linear cognitive diagnosis model *Educational and Psychological Measurement, 75* (3), 491-511.

Bradshaw, L., Izsák, A., Templin, J., & Jacobson, E. (2014). Diagnosing teachers' understandings of rational number: Building a multidimensional test within the diagnostic classification model framework. *Educational Measurement: Issues and Practice, 33*(1), 2-14.

Bradshaw, L., & Templin, J. (2014). Combining scaling and classification: A psychometric model for scaling ability and diagnosing misconceptions. *Psychometrika*, *79* (3), 403-425.

*Jurich, D., & **Bradshaw, L.** (2014). Diagnosing psychosocial research attributes: An illustration of diagnostic classification modeling. *International Journal of Testing, 14,* 49-72.

Templin, J., & **Bradshaw, L.** (2014). Hierarchical diagnostic classification models: A family of models for estimating and testing attribute hierarchies. *Psychometrika, 79*(2) 317-339.

Templin, J., & **Bradshaw, L. (2014). The use and misuse of psychometric models. *Psychometrika, 79*(2) 347-354.

Templin, J., & **Bradshaw, L.** (2013). Measuring the reliability of diagnostic classification model examinee estimates. *Journal of Classification*, *30*(2), 251-275.

Book Chapters/Other Invited Publications

Bradshaw, L. (2018) Diagnostic classification models. In Frey, B. (Ed.), *The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation,* 507-512.

Bradshaw, L. (2018). Diagnostic classification models. In D. Bandalos (Ed.), *Measurement Theory and Application for the Social Sciences.* New York, NY: Guilford Press, 446-477.

Bradshaw, L. (2016). Diagnostic Classification Models: A Multivariate Classification Approach for Cognitively Complex Assessment. In A. Rupp, & J. Leighton (Eds.), *Handbook of Cognition and Assessment*. Wiley-Blackwell, 297-326.

Other Creative Research Products

*Indicates collaboration with a graduate student.

Bradshaw. L., & Hollingsworth, W. (2013). DigiTAP: A software system for digitially-capturing think-aloud protocols (Version 1.0) [Computer software]. Athens, GA: Hollingsworth Technologies, Incorporated and Metricology, LLC.

*Madison, M., **Bradshaw. L.**, & Hollingsworth, W. (2014). Q*Power: A web-based program for designing diagnostic assessments (Version 1.0) [Computer software]. Athens, GA. Available from http://www.lainebradshaw.com/qpower.

Bradshaw, L. (2008) Website: http://www.mathtasks.com.

Currently Funded External Projects

Principal Investigator: *Diagnostic Inventories of Cognition in Education* (2017-2021). Institute of Educational Sciences, Cognition and Student Learning: Goal 5 Measurement. $1,400,000.

Co-Principal Investigator: *Developing Enhanced Assessment Tools for Capturing Students' Procedural Skills and Conceptual Understandings in Math* (2015-2019). United States Department of Education, Institute of Educational Sciences: Cognition in Special Education, Measurement Goal 5 ~$1,600,000. PI: Brian Bottge.

Co-Principal Investigator: *Investigating Proportional Reasoning from Two Perspectives* (2014-2017). National Science Foundation: Education and Human Resources Core: Research on Educational and Learning (REAL) Program ~$1,333,000. PI: Andrew Izsák.

Co-Principal Investigator: *Assessing the Structure of Knowledge in Teaching Mathematics* (2016-2020). National Science Foundation: Discovery Research K-12 ~$1,700,000. PI: Erik Jacobson.

External Grant Proposals Under Review

None.

Previously Funded Grant Proposals

Principal Investigator: *Engineering Diagnostic Concept Inventories* (Summer, 2015): University of Georgia College of Education Early Career Faculty Grant, $6,000.

Principal Investigator: *UGA Mathematics Curriculum Team* (2015-2016). Office of STEM Education, University of Georgia ~$1000.

Principal Investigator: *Developing Validity Arguments for Model-based Diagnostic Feedback* (Summer, 2014): University of Georgia College of Education $10,000.

Principal Investigator: *UGA Mathematics Curriculum Team* (2014-2015). Office of STEM Education, University of Georgia ~$1000.

Key Personnel: *Collaborative Research: Assessing Teachers' Pedagogical Design Capacity and Mathematics Curriculum*. Supplement to National Science Foundation: Discovery Research K-12 (DRL-0918141), $59,000. PI: Janine Remillard and Ok-Kyeong Kim.

Key Personnel: *AutoMentor: Virtual Mentoring and Assessment in Computer Games for STEM Learning* (2009-2014). National Science Foundation: Division of Research on Learning in Formal and Informal Settings (DRL-0918409) $2,080,693. PI: David Williamson Shaffer.

Key Personnel: *Diagnosing Teachers' Multiplicative Reasoning* (2008-2010). National Science Foundation: Discovery Research K-12 (DRK-12; DRL-0822064), $944,163. PI: Andrew Izsák.

Key Personnel: Spencer Foundation, *Proportional Reasoning of Middle Grades Pre-Service Teachers* (2013-2014), $39,992. PI: Andrew Izsák.

Unfunded External Grant Proposals

Principal Investigator: *Diagnostic Inventories of Cognition in Education* (2016-2020). Institute of Educational Sciences, Cognition and Student Learning: Goal 5 Measurement. $1,400,000.

Principal Investigator: *Development and Psychometric Evaluation of the Autism Stigma and Knowledge Questionnaire* (ASK-Q; 2016-2018). National Institutes Of Health. $150,000.

Co-Principal Investigator: Developing 21st Century Assessments to Measure 21st Century Skills in Integrated STEM Setting **(2016-2020).** Institute of Educational Sciences. $450,000. PI: Chandra Orrill.

Co-Principal Investigator: Exploratory Foundations for 21st Century Assessments (2016-2020). National Science Foundation. $2,400,000. PI: Chandra Orrill.

Co-Principal Investigator: *Assessing the Generality and Transfer of Teachers' Knowledge* (2016-2020). National Science Foundation: Discovery Research K-12 ~$1,400,000. PI: Erik Jacobson.

Co-Principal Investigator: Evolving Learning Maps: Statistical Methods to Improve Dynamic Map-Based Psychometrics (July 2015- June 2018): US DOE/IES: MMP ~$900,000.

Co-Principal Investigator: Assessing the Generality and Transfer of Teachers' Knowledge (2015-2018). National Science Foundation: Discovery Research K-12 ~$450,000. PI: Erik Jacobson.

Principal Investigator: Engineering Diagnostic Concept Inventories (June 2015- May 2020): National Science Foundation: CAREER Program ~$820,850.

Co-Principal Investigator: *Developing Mathematics Understanding of Students with Disabilities Using Anchored Instructional Measures* (AIMs) (2014-2018). National Science Foundation: Discovery Research K-12, $2,880,000. PI: Brian Bottge.

Principal Investigator: *Engineering Diagnostic Concept Inventories* (2014-2019): National Science Foundation: CAREER Program ~$761,000.

Co-Principal Investigator: *Capturing Students' Procedural Skills and Conceptual Understanding in Math with Enhanced Assessment Tools* (2014-2016). United States Department of Education, Institute of Educational Sciences: Cognition in Special Education, Measurement Goal 5 ~$1,600,000. PI: Brian Bottge.

Co-Principal Investigator: *Investigating Proportional Reasoning from Two Perspectives* (2014-2018). National Science Foundation: Education and Human Resources Core Program ~$1,000,000. PI: Andrew Izsák.

Co-Principal Investigator: *Developing Enhanced Assessment Tools for Capturing Students' Procedural Skills and Conceptual Understanding in Math* (2013-2016). United States Department of Education, Institute of Educational Sciences: Cognition in Special Education, Measurement Goal 5 ~$1,600,000. PI: Brian Bottge. Score: 1.99.

Key Personnel: *Proportional Reasoning of Middle Grades Pre-Service Teachers (PRoMPT)* (2013-2015). National Science Foundation: Research and Evaluation on Education in Science and Engineering Program ~$1,045,888. PI: Andrew Izsák, Sybilla Beckman.

Key Personnel: Race to the Top District Grant. United States Department of Education (2013-2016). ~$12,454,087. District: Morgan County Charter School System.

Technical Reports

Bradshaw, L. (2015a). *An Evaluation of Diagnostic Classification Model-based Computer Adaptive Testing Algorithm for PARCC Diagnostic Assessments in Mathematics Comprehension and Decoding.* Technical Report. Pearson Education.

Bradshaw, L. (2015b). *FlexMIRT Estimation Accuracy under Expected Field Test Designs for Diagnostic Classification Model-based PARCC Diagnostic Assessments.* Technical Report. Pearson Education.

Bradshaw, L. (2014a). *PARCC Diagnostic Assessments: Design Research for Diagnostic Classification Model-based PARCC Diagnostic Assessments in Mathematics Comprehension and Decoding.* Technical Report. Pearson Education.

Bradshaw, L. (2014b). *Diagnosing attributes using the Curriculum Embedded Mathematics Assessment.* Technical Report. University of Pennsylvania.

Presentations

*Indicates collaboration with a student during their graduate studies.
°Indicates invited presentation.

2018

Bradshaw, L. (April, 2018). *Using classification-based psychometrics in local assessment systems for feedback and accountability.* Member of panel presentation at the annual meeting of the National Council of Measurement in Education in New York, NY.

Bradshaw, L., Famularo, L., Lee, H., & Masters, J. (April, 2018). *Designing diagnostic inventories of cognition in education.* Paper presented at the annual meeting of the American Educational Research Association in New York, NY.

Bao, Y., & Bradshaw, L. (April, 2018). *A diagnostic classification model for polytomous attributes.* Paper presented at the annual meeting of the National Council of Measurement in Education in New York, NY.

Feldberg, Z., & Bradshaw, L. (April, 2018). *Reporting results from diagnostic classification models for teachers.* Poster presented at the annual meeting of the American Educational Research Association in New York, NY.

Shen, Y., Bao, Y., Wang, S., & Bradshaw, L. (April, 2018). *Detecting Misconceptions and Estimating Ability Simultaneously: A Hybrid Computerized Adaptive Testing Framework.* Paper presented at the annual meeting of the National Council of Measurement in Education in New York, NY.

Zor, S., & Bradshaw, L. (April, 2018). *Designing field tests for multidimensional classification models.* Poster presented at the annual meeting of the National Council of Measurement in Education in New York, NY.

2017

*Feldberg, Z., & **Bradshaw, L.** (October, 2017). Technology-based diagnostic assessment systems: Interpretations and Use. Paper presented at the annual meeting of the Northeastern Educational Research Association in Trumbull, Connecticut, U.S.

*Bao, Y., & **Bradshaw, L.** (October, 2017). A diagnostic classification model for polytomous attributes. Paper presented at the annual meeting of the Northeastern Educational Research Association in Trumbull, Connecticut, U.S.

*Feldberg, Z., & **Bradshaw, L.** (August, 2017). Use of technology-based, diagnostic assessment tools in the classroom. Paper presented at the annual meeting of the Northeastern Educational Research Association in Trumbull, Connecticut, U.S.

*Shen, Y., Bao, Y., Wang, S., & **Bradshaw, L.** (July, 2017). Using computerized adaptive testing to detect students' misconceptions: Exploration of item selection. Paper presented at the annual meeting of the *International Association for Computerized Adaptive Testing* in Japan.

*Bao, Y., & **Bradshaw, L.** (April, 2017). *Item selection methods for computer adaptive testing with hierarchical diagnostic classification models.* Paper presented at the annual meeting of the National Council of Measurement in Education in San Antonio, TX.

***Bradshaw, L.**, Guthrie, K., & Bian, M. (April, 2017). Digital and remote collection of response process validity evidence. Paper presented at the annual meeting of the American Educational Research Association in San Antonio, TX.

*Madison, M., & **Bradshaw, L.** (April, 2017). *Assessing intervention effects in a diagnostic classification model framework.* Paper presented at the annual meeting of the National Council of Measurement in Education in San Antonio, TX.

Harrison, A., Kaff, M., **Bradshaw, L.**, Naqvi, N., Campbell, J., Manji, K., . . . Paff, M. (2017). Examining Measurement Approaches to Assessing ASD Knowledge in Cross-Cultural Contexts. In *African Regional International Meeting for Autism Research (IMFAR)*. Stellenbosch, South Africa
Regional

Harrison, A., **Bradshaw, L.**, Naqvi, N., Paff, M., & Campbell, J. (2017). *A Proposed Solution to Psychometric Concerns with Existing ASD Knowledge Tools*. Poster session presented at the meeting of International Meeting for Autism Research

2016

Izsak, A., Beckman-Kazez, S., **& Bradshaw, L.** (November, 2016). *Diagnosing reasoning to measure growth in pre-service middle-grades teachers' facility with fraction arithmetic.* Paper presented at the annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education in Tuscon, AZ.

*Madison, M. & **Bradshaw, L.** (October, 2016). *An application of a longitudinal diagnostic classification model.* Paper presented at the annual meeting of the Northeastern Educational Research Association in Trumbull, Connecticut, U.S.

*Bao, Y., & **Bradshaw, L.** (July, 2016). *Attribute-level Item Selection Method for DCM-CAT.* Paper presented at the 2016 International Meeting of the Psychometric Society in Asheville, North Carolina, U.S.

*Madison, M. & **Bradshaw, L.** (July, 2016). *Assessing change over time in a general diagnostic classification model.* Paper presented at the 2016 International Meeting of the Psychometric Society in Asheville, North Carolina, U.S.

°**Bradshaw, L.** (April, 2016). *Designing a large-scale, classification-based assessment system for diagnosing standards mastery.* Paper presented at annual meeting of the National Council on Measurement in Education in Washington, DC.

Bradshaw, L. & Levy, R. (April, 2016). *Interpreting examinee results from classification-based models.* Paper presented at the annual National Council on Measurement in Education conference in Washington, DC.

*Bao, Y., & **Bradshaw, L.** (2016). *The Impact of Model Misspecification in a DCM-CAT.* Paper presented at the annual meeting of the National Council on Measurement in Education in Washington, DC.

*Madison, M., & **Bradshaw, L.** (2016). *The.* Paper presented at the annual meeting of the National Council on Measurement in Education in Washington, DC.

Dhaliwal, T , Hembry, T., & **Bradshaw, L.** (2016). *Achieving the Promise of CDMs: Communicating CDM-based Assessment Results.* Paper presented at the annual National Council on Measurement in Education conference in Washington, DC.

2015

*Kang, E. K., Spangler, D. A., & Bradshaw, L. (October, 2015). Relationship between prospective primary teachers' mathematics knowledge for teaching and beliefs. In *Proceedings of the 2015 international conference on mathematics education: Vol. 2. The International Perspective on Curriculum and Evaluation of Mathematics* Vol. 2 (pp. 164-170). Seoul, Republic of Korea.

*Bao, Y. & **Bradshaw, L.** (July, 2015). Power analysis of item-level interactions in a general diagnostic classification model framework. Paper presented at the International Meeting of the Psychometric Society in Beijing, China.

Bradshaw, L. (June, 2015). *PARCC diagnostic assessments for mathematics comprehension: A diagnostic classification model approach*. Paper presented at the Council of Chief State School Officers (CCSSO) 2015 National Conference on Student Assessment (NCSA) in San Diego, California.

Hembry, T., Dhaliwal, T., Koepfler, J., & **Bradshaw, L.** (2015). *Improving the effectiveness of reporting for assessments using cognitive diagnostic models based on empirical data.* Paper presented at the Council of Chief State School Officers (CCSSO) 2015 National Conference on Student Assessment (NCSA) in San Diego, California.

Bradshaw, L. (April, 2015). Reliability for a node-based dynamic assessment. In A. Clark (Chair) *Psychometrics in a Learning Maps Environment*. Symposium presented at the annual National Council on Measurement in Education conference in Chicago, IL.

*Madison, M., **& Bradshaw, L.**, & Hollingsworth, W. (April, 2015). *Using Q*Power to refine diagnostic assessment designs.* Paper presented at the annual American Educational Research Association conference in Chicago, IL.

*Sen, S., & **Bradshaw, L.** (April, 2015). *Performance of relative fit indices: A comparison across model types.* Paper presented at the annual National Council on Measurement in Education conference in Chicago, IL.

Izsák, A., Beckmann, S., & **Bradshaw, L.** (February, 2015). *Investigating proportional relationships from two perspectives.* Poster presented at the University of Georgia College of Education Faculty and Graduate Student Research Conference in Athens, GA.

Lindstrom, J. & **Bradshaw, L.** (February, 2015). *Predicting reading success using a multilevel model.* Poster presented at the University of Georgia College of Education Faculty and Graduate Student Research Conference in Athens, GA.

Madison, M., & **Bradshaw, L.** (February, 2015). *Developing Diagnostic Formative Assessments in Graduate Statistics Courses.* Poster presented at the University of Georgia College of Education Faculty and Graduate Student Research Conference in Athens, GA.

Bao, Y., & **Bradshaw, L.** (February, 2015). *Item level specifications in a general diagnostic classification model framework.* Poster presented at the University of Georgia College of Education Faculty Research Conference in Athens, GA.

2014

Bradshaw, L., & Templin, J. (October, 2014). *The little model that couldn't: How the DINA model misclassifies students and hides important effects.* Paper presented at the annual meeting of the Northeastern Educational Research Association in Trumbull, CT.

Bradshaw, L. (July, 2014). *The added value of using model-based classification for diagnostic test feedback.* Paper presented at the meeting of the International Test Commission in San Sebastian, Spain.

°**Bradshaw, L.** (April, 2014). *A Psychometric framework for diagnosing misconceptions.* Seminar speaker for the Quantitative Methods program at Vanderbilt University in Nashville, TN.

Bradshaw, L. (April, 2014). *Diagnostic measurement models for item response dependencies caused by misconception effects.* Paper presented at the annual meeting of the American Educational Research Association in Philadelphia, PA.

Bradshaw, L., & Koepfler, J. (April, 2014). *A caution in the quest for diagnostic test-based inferences.* Paper presented at the annual National Council on Measurement in Education conference in Philadelphia, PA.

*Madison, M., **Bradshaw, L.,** & Hollingsworth, B. (April, 2014). *The role of Q-matrix design in diagnostic assessment.* Paper presented at the 2014 Annual Meeting of the National Council on Measurement in Education in Philadelphia, PA.

*Jang, Y., **Bradshaw, L.**, Oliver, J. S., Hodges, G. W., Cohen, A., Rogers, W., …, Robertson, T. (April, 2014). *Diagnosing students' mastery of concepts in biology: An examination of mastery states before and after instruction based on 3-D animations.* Paper presented at the business meeting of the Cognition and Assessment Special Interest Group at the annual meeting of the American Educational Research Association in Philadelphia, PA.

*Jurich, D., **Bradshaw, L.**, & DeMars, C. (April, 2014). *Limited information methods to assess overall fit of diagnostic classification models.* Paper presented at the annual National Council on Measurement in Education conference in Philadelphia, PA.

Wang, C., **Bradshaw, L.**, & Koepfler, J. (April, 2014). *An integrated approach towards the development of cognitive diagnostic assessment.* Paper presented at the annual National Council on Measurement in Education conference in Philadelphia, PA.

*Arican, M., Karadavut, T., Bradshaw, L., Izsak, A. (April, 2014). *Diagnosing teachers' understandings of rational number: Exploring the effects of interpreting drawn figures.* Poster presented at the annual College of Education Faculty/Student Research conference in Athens, GA.

*Bao, Y., Xing, X., & Bradshaw, L. (April, 2014). Diagnosing career indecision types for adolescents using a diagnostic classification model. Poster presented at the annual College of Education Faculty/Student Research conference in Athens, GA.

*Jang, Y., Bradshaw, L., Oliver, J. S., Hodges, G. W., Cohen, A., Rogers, W., …, Robertson, T. (April, 2014). Diagnosing students' mastery of concepts in biology: An examination of mastery states before and after instruction based on 3-D animations. Poster presented at the annual College of Education Faculty/Student Research conference in Athens, GA.

*Madison, M., & Bradshaw, L. (April, 2014). The effects of Q-matrix design on classification accuracy in the LCDM. Poster presented at the annual College of Education Faculty/Student Research conference in Athens, GA.

2013

°**Bradshaw, L.** (December, 2013). *Building a multidimensional test within the diagnostic classification model framework.* Seminar speaker for the Measurement and Statistics program at the Florida State University in Tampa, FL.

*Madison, M., & **Bradshaw, L.** (October, 2013). The Effects of Q-Matrix Design on Classification Accuracy in the LCDM. Paper presented at the annual Northeastern Educational Research Association conference in Rocky Hill, CT.

°**Bradshaw, L.** (April, 2013). *A psychometric model for scaling individuals and diagnosing misconceptions.* Dissertation presented at American Educational Research Association Special Interest Group for Cognition and Assessment business meeting in San Francisco, CA.

*Kopp, J., **Bradshaw, L.,** Young, M. J., & Lau, A. (April, 2013). *A method for vertically-scaling diagnostic classification models.* Paper presented at the annual National Council on Measurement in Education conference in San Francisco, CA.

°**Bradshaw, L.** (February, 2013). *Building a multidimensional test within the diagnostic classification model framework.* Seminar speaker for Quantitative Methods program at the Georgia Institute for Technology in Atlanta, GA.

°**Bradshaw, L.** (January, 2013). Diagnostic classification models: A practical measurement paradigm for multidimensional constructs. In J. Rojewski (Chair) *Innovative Research Methods*. Panel session conducted at the University of Georgia College of Education Faculty Research Conference in Athens, GA.

2012

*Jurich, D., & **Bradshaw, L.** (2012, October). *Modeling testlet effects within a diagnostic classification framework.* Paper presented at the annual Northeastern Educational Research Association conference in Rocky Hill, CT.

Bradshaw, L., & Templin, J. (2012, April). *A two parameter asymptote IRT model for binary data.* Paper presented at the annual National Council on Measurement in Education conference in Vancouver, BC Canada.

Bradshaw, L., Templin, J., & Izsák, A. (2012, April). A diagnostic assessment of teachers' understandings of rational number. In A. Izsák (Chair), *Harnessing psychometric models to develop next generation, research-based assessments of rational number knowledge.* Symposium conducted at the annual American Educational Research Association conference in Vancouver, BC Canada.

2011

Bradshaw, L. (2011, June). Psychometric tools for analyses of wrong answers in multiple choice tests. In E. Taleporos, (Chair) *Analyses of wrong answers in multiple choice tests.* Symposium conducted at the Council of Chief State School Officers' National Conference on Student Assessment in Orlando, FL.

Bradshaw, L., & Templin, J. (2011, April). *A nominal response model for scaling ability and diagnosing misconceptions.* Paper presented at the annual National Council on Measurement in Education conference in New Orleans, LA.

Templin, J., & **Bradshaw, L.** (2011, April). *A hypothesis test for attribute hierarchies in diagnostic classification models.* Paper presented at the annual National Council on Measurement in Education conference in New Orleans, LA.

°**Bradshaw, L.** (2011, March). *A psychometric model for scaling ability and diagnosing misconceptions using multiple choice tests.* Research presented for University of Georgia's Statistics Department colloquium series in Athens, GA.

2010

Bradshaw, L., & Templin, J. (2010, July). *Combining scaling and classification: A model for scaling ability and diagnosing misconceptions with nominal response item types.* Paper presented at the annual International Meeting of the Psychometric Society in Athens, GA.

Izsák, A., Lobato, J., Druken, B., Orrill, C., Jacobson, E., & **Bradshaw, L.** (2010, July). *Applying cognitive diagnosis models to measure middle grades teachers' multiplicative reasoning.* Paper presented at the annual International Meeting of the Psychometric Society in Athens, GA.

Nixon, C., Acar, S., **Bradshaw, L.**, Bramlett, A., Chen, Y., Jimenez, A., Lee, S., Raczynski, K., Sen, S., & Kim, S.-H. (2010, July). *Analyses of items with multiple choices.* Paper presented at the annual International Meeting of the Psychometric Society in Athens, GA.

Bradshaw, L., & Cohen, A. (2010, May). Accuracy of multidimensional item response model parameters estimated under small sample sizes. In A. Izsák (Chair), *Using cognitive attributes to develop mathematics assessments, opportunities, and challenges.* Symposium conducted at the annual American Educational Research Association conference in Denver, CO.

Bradshaw, L., Lin, J., Young, M., & Lee, K. (2010, May). *An examination of linguistic modifications on a large scale test.* Paper presented at the annual American Educational Research Association conference in Denver, CO.

Izsák, A., Lobato, J., Orrill, C., Jacobson, E., & **Bradshaw, L.** (2010, May). Identifying attributes and developing items to assess middle grades teachers' multiplicative reasoning. In A. Izsák (Chair), *Using cognitive attributes to develop mathematics assessments, opportunities, and challenges.* Symposium conducted at the annual American Educational Research Association conference in Denver, CO.

Izsák, A., Lobato, J., Orrill, C. H., Jacobson, E., & **Bradshaw, L.** (2010, April). *Designing attribute-based items to assess middle grades teachers' multiplicative reasoning*. Paper presented at the National Council of Teachers of Mathematics Research Presession, San Diego, CA.

Bradshaw, L., & Wang, A. (2010, April). *A multilevel growth modeling approach to examining the spread of bacteria.* Poster presented at the University of Georgia College of Education Graduate Student Research Conference in Athens, GA.

Samuelsen, K., **Bradshaw, L.**, Bramlett, A., & Jiminez, A. (2010, February). *Translating research into practice.* Paper presented at the Eastern Educational Research Association conference in Savannah, GA.

2009

Bradshaw, L. (2009, October). *Item and test construction.* Training session presented at the annual South Carolina Council of Teachers of Mathematics conference in Columbia, SC.

Tomlinson, J., & **Bradshaw, L.** (2009, October). *Transforming ideas into tasks for class.* Training session presented at the annual South Carolina Council of Teachers of Mathematics conference in Columbia, SC.

Bradshaw, L. (2009, October). *Item and test construction.* Training session presented at the annual Georgia Council of Teachers of Mathematics conference in Eatonton, GA.

Palmour, J., **Bradshaw, L.**, Franklin, C., Presley, D. & Olive, J. (2009, October). *Developing effective assessment items for the GPS.* Presentation given at the annual Georgia Council of Teachers of Mathematics conference in Eatonton, GA.

Cohen, A., Templin, J., & **Bradshaw, L**. (2009, April) *Beyond unidimensionality: Measuring all of achievement.* Paper presented at the annual National Council on Measurement in Education conference in San Diego, CA.

Bradshaw, L., & Choi, Y.-J. (2009, April). *Examining regional differences on the Rosenberg Self-Esteem Scale using confirmatory factor analysis*. Poster presented at the University of Georgia College of Education Centennial Graduate Student Research Conference in Athens, GA.

Bradshaw, L. (2009, February). *Best practices of item and test construction*. Training session presented at the annual Georgia Perimeter College Mathematics Conference in Clarkston, GA.

2008

Bradshaw, L., & Samuelsen, K. (2008, October). *Test success!* Training session presented at the annual Georgia Council of Teachers of Mathematics conference in Eatonton, GA.

Tomlinson, J., & **Bradshaw, L.** (2008, October). *Transforming ideas into tasks for class.* Training session presented at the annual Georgia Council of Teachers of Mathematics conference in Eatonton, GA.

Samuelsen, K., & **Bradshaw, L.** (2008, March). *The credibility interval method for the detection of DIF within a Bayesian framework.* Paper presented at the annual National Council on Measurement in Education conference in New York, NY.

2007

°**Bradshaw, L.** (2007, October). *Implementing the Georgia Performance Standards for mathematics.* Presentation given for University of Georgia Mathematics Education Student Association colloquium in Athens, GA.

Teaching Experiences

°Indicates invited workshop or training session.
*Indicates collaboration with a student.

Graduate-level Courses

Quantitative Methodology Program, The University of Georgia
Quantitative Methodology Special Topics Seminar (EPSY 8990)
Categorical Data Analysis (ERSH 8360)
Diagnostic Measurement (ERSH 8140)
Analysis of Variance (ERSH 8310)

Assessment and Measurement Program, James Madison University
Categorical Data Analysis (PSYC 850)
Diagnostic Classification Modeling (PSYC 850)

Research, Evaluation, Measurement & Statistics Program, University of Georgia
Analysis of Variance (ERSH 8310), Teaching Assistant

Undergraduate Courses

The University of Georgia
Freshman Year Odyssey Seminar (FYOS 1001)

High School Courses

North Oconee High School
Algebra I, Student Teaching
Algebra III, Student Teaching

Professional Development Training Sessions/Workshops

Bradshaw, L., & Madison, M. (April, 2018). *Diagnostic Classification Models: Fundamentals.* Half day training session to be presented at the annual meeting of the National Council on Measurement in Education in New York, NY.

Madison, M., & **Bradshaw, L.** (April, 2018). *Diagnostic Classification Models: Advanced Applications.* Half day training session to be presented at the annual meeting of the National Council on Measurement in Education in New York, NY.

Bradshaw, L., & Madison, M. (April, 2017). *Diagnostic Measurement: Theory, Methods and Applications.* Full day training session to be presented at the annual meeting of the National Council on Measurement in Education in San Antonio, TX.

Bradshaw, L. (April, 2015). *An Introduction to Diagnostic Classification Modeling.* Full day training session presented at the annual meeting of the National Council on Measurement in Education in Chicago, IL.

Bradshaw, L., & Templin, J., (April, 2014). *Diagnostic Measurement: Theory, Methods and Applications.* Full day training session presented at the annual meeting of the National Council on Measurement in Education in Philadelphia, PA.

°**Bradshaw, L.** (March, 2014). *An Introduction to Diagnostic Measurement.* Presented for Pearson Education in Iowa City, IA.

°**Bradshaw, L.** (January, 2014). *An Overview of Diagnostic Measurement.* A web-based training session presented for Pearson Education.

Templin, J., & **Bradshaw, L.** (April, 2013). *Diagnostic Measurement: Theory, Methods and Applications*. Full day training session presented at the annual meeting of the National Council on Measurement in Education in San Francisco, CA.

***Bradshaw, L.**, & Jurich, D. (October, 2012). *An Introduction to Diagnostic Measurement.* Half day workshop presented at the annual meeting of the Northeastern Educational Research Association in Rocky Hill, CT.

Bradshaw, L., & Templin, J., (April, 2012). *Diagnostic Measurement: Theory, Methods and Applications.* Full day training session presented at the annual meeting of the National Council on Measurement in Education in Vancouver, BC Canada.

°**Bradshaw, L.** (February, 2012). *Diagnostic Classification Modeling. Diagnostic Classification Modeling.* Invited workshop presented for The College Board in NY, NY.

Templin, J., & **Bradshaw, L.** (April, 2011). *Diagnostic Measurement: Theory, Methods and Applications.* Workshop presented at the annual meeting of the American Educational Research Association in New Orleans, LA.

Templin, J., & **Bradshaw, L.** (May, 2010). *Diagnostic Measurement.* May 2010. Teaching assistant for workshop presented for University of Georgia Institute for Interdisciplinary Research in Education in Athens, GA.

High School-level Courses

Student Teacher, Algebra I, Spring 2007
North Oconee High School

Student Teacher, Algebra III, Spring 2007
North Oconee High School

Mentorship

PhD Major Professor

Completed

Matthew Madison, Quantitative Methodology, UGA

In Progress

Yu Bao, Quantitative Methodology, UGA
Meina Bian, Quantitative Methodology, UGA
Zack Feldberg, Quantitative Methodology, UGA
Jiajun Xue, Quantitative Methodology, UGA
Kang Xu, Quantitative Methodology, UGA
Selay Zor, Quantitative Methodology, UGA

PhD Co-Major Professor

Completed

Eun Kang, Mathematics Education, UGA, 2014

PhD Dissertation Committee Member

Completed

Shawn Fowler, Applied Cognition and Development, UGA, 2018
Alex Lyford, Statistics, UGA, 2017
Tugba Karadavut, Quantitative Methodology, UGA Committee Member, 2016
Kristina Collins, Ph.D., Gifted Education, UGA, Committee Member, 2015
Daniel Jurich, Assessment and Measurement, James Madison University, 2014
Christy Brown, Research, Evaluation, Measurement & Statistics, UGA, 2013

In Progress

Kellie Templeman, Applied Cognition and Development, UGA

MA Major Professor

Completed

Selay Zor, Quantitative Methodology, UGA, 2018
Stephen Imperiale-Hagerman, M.Ed., Quantitative Methodology, UGA, 2013

In-progress

Madeline Schellman, Quantitative Methodology, UGA

MA Thesis Committee Member

Completed

Yawei Shen, Quantitative Methodology, UGA Committee Member, 2016
Christopher Runyon, MA, Psychological Sciences, JMU, 2012

MEd Major Professor

Completed

Sue Hyeon Paek, Quantitative Methodology, UGA, 2017
Jia Liang, Quantitative Methodology, UGA, 2014

Honors and Awards

Carl Glickman Faculty Fellow Award, 2018
Awarded by the University of Georgia College of Education: Research/Outreach

Jason Millman Promising Measurement Scholar Award, 2015
Awarded by the National Council of Measurement in Education

Ocie T. Dekle Excellence in Teaching Award, 2015
Awarded by The University of Georgia College of Education

Sarah H. Moss Fellowship, 2013-2014
Awarded by The University of Georgia Center for Teaching and Learning for an amount of $10,000. Assignment to the University of Nottingham, Nottingham, England

Outstanding Dissertation Award, 2013
Awarded by the American Educational Research Association (AERA) Cognition and Assessment Special Interest Group

Joseph R. Hooten Award for Excellence in Mathematics Education, 2007
Awarded by Mathematics Education Department at the University of Georgia

Leadership Positions and Service Activities

Organization Leadership

National Council on Measurement in Education

(i) Bradley Hanson Award Committee (2014 –2016, 2018)
(ii) Faculty Advisor, Graduate Student Issues Committee (2013 – 2015)
(iii) Newsletter Advisory Board Member (2012 – 2016)
(iv) Review Panelist for Annual Conference (2014, 2015)

American Educational Research Association

(i) Chair, Cognition and Assessment Special Interest Group (2015 – 2018)
(ii) Vice-chair, Cognition and Assessment Special Interest Group (2012 – 2015)
(iii) Conference Program Co-Chair, Division D: Quantitative Methods and Statistical Theory (2013, 2014)

The University of Georgia Graduate Researchers in Educational Psychology & Instructional Technology

(i) Vice President, Executive Committee (2010 – 2011)
(ii) Member-at-Large, Executive Committee (2009 – 2010)
(iii) Program Representative, Executive Committee (2007 – 2009)

The University of Georgia Mathematics Education Student Association

Undergraduate Representative (2006 – 2007)

Editorial Leadership

Editorial Board Member

Educational Assessment
Journal of Classification
Journal of Educational Measurement

Peer Reviewer for Journals

Applied Psychological Measurement
British Journal of Mathematical and Statistical Psychology
Educational Measurement: Issues and Practice
International Journal of Testing
Journal of Research in Mathematics Education
Journal of Statistics Education
Multivariate Behavioral Research
Psychometrika

Peer Reviewer for Conferences and Organizations

American Educational Research Association Conference
Division D and Cognition and Assessment SIG
National Council of Measurement in Education Conference
Northeastern Educational Research Association

University Committee Member

The University of Georgia College of Education

Member, Search Committee: Assistant Professor, Gifted Education (2019)
Faculty Senate (2016-2018)
Member, Search Committee: Dean of College of Education (2018)
Member, Search Committee: Assistant Professor, Mathematics Education (2018)
Promotion and Tenure Committee (2017)
Junior Faculty Mentoring Committees (2016-Present; 2017-Present)
Chair, Search Committee: Assistant Professor, Quantitative Methodology (2017)
Chair, Search Committee: Assistant Professor, Quantitative Methodology (2016)
Member, Planning Committee, Faculty/ Student Research Conference (2015)
Member, Planning Committee, Graduate Student Research Conference (2013, 2014)
Member, Curriculum Committee (2013-2015)
Member, Search Committee: Full Professor, Research, Evaluation, Measurement, and Statistics (2013)
Member, Search Committee: Assistant Professor, Research, Evaluation, Measurement, and Statistics (2011)
Member, Conference Organization Committee: 75th International Meeting of the Psychometric Society at the University of Georgia in Athens, Georgia. (2010)

James Madison University

Member, Tech One Task Force Committee (2011 – 2012)
Member, Search Committee: Assistant Professor of Assessment & Measurement/Assessment Specialist (2012)

Technical Advisory Committee Member

Utah state (2018-present)
Educational Records Bureau (2014 – Present)
Curriculum Associates (2015 – 2016)

Consulting

Chief Psychometric Consultant, PARCC Diagnostic Assessment Project (2013-2016)

Other Past Professional Experiences

Assessment Specialist, Center for Assessment and Research Services, James Madison University

Assessment specialists coordinate with faculty and other university stakeholders to provide internal assessment of programs at the university. Responsibilities include facilitating the specification of program learning objectives, designing and creating assessments, analyzing results of assessment data, conducting relevant research regarding the results, and reporting findings in written and oral formats to stakeholders.

General Education Program, Science and Mathematics Cluster (2011 – 2012)
Study Abroad Program (2011 – 2012)
International Students Program (2011 – 2012)

Graduate Research Assistant, NSF funded *Diagnosing Teacher's Multiplicative Reasoning* (DTMR) project (NSF DRK-12; DRL-0822064)

2010 – 2011, Athens, GA: work includes designing and implementing simulation studies and empirical data analyses for a newly developed nominal response diagnostic classification model (DCM), as well as reviewing items with respect to cognitive interview data for the creation of a final form of an assessment to diagnose teachers' abilities to reason multiplicatively.
2009 – 2010, Athens, GA: designed and implemented simulation studies to investigate properties of small sample estimation and reliability for various diagnostic classification models.
2008 – 2009, Athens, GA: authored mathematics items to measure middle grades teachers' mathematical reasoning and analyzed cognitive interviews to assess effectiveness of items.

Pearson Education, 2009, San Antonio, TX

Pearson Psychometric Fellowship: conducted research on the effectiveness of linguistically modified items on a large scale assessment and participated in usual psychometric tasks completed by large-scale testing company.

Georgia Center for Assessment, 2007 – 2008, Athens, GA

Graduate Assistantship: developed DCM framework for writing mathematics items to measure 4th and 8th grade students' mathematics reasoning and conducted interviews with students to develop items.

Georgia Department of Education, 2008 – 2009, Atlanta, GA

Math III and IV Instructional Framework Committee: individual work included writing the tasks and supportive materials for a complete unit in Math III as well as editing other committee members' tasks for Math III and IV.

Cassandra Drennon and Associates, 2008, Athens, GA

Consultant: work included the construction of a Likert-type scale that assessed middle grades children's perceptions of mental illnesses.

Georgia Department of Education, 2007, Atlanta, GA

Intern for the Director of the State Mathematics Curriculum: work included helping prepare training sessions about implementing Math I for high school teachers and then compiling the data from teachers' feedback about the training to be included in a report to the State Board of Education.

Eighth Grade Instructional Framework Committee: work included task writing for curriculum Frameworks.

Statistical Software Skills

Fortran, Mplus, R, SAS, SPSS

Professional Affiliations

American Educational Research Association, 2007 - present
Georgia Council of Teachers of Mathematics
National Council on Measurement in Education, 2007 - present
National Numeracy Network
Northeastern Educational Research Association, 2012 – present
Psychometric Society

Matthew J. Madison

Clemson University
College of Education
226 Holtzendorff Hall
Clemson, SC 29634

Office: (864) 656 – 5105
Email: mjmadis@clemson.edu
Website: www.matthewmadison.com

Education

Degree	*Program*	*Institution*	*Year*
Ph.D.	Quantitative Methodology	University of Georgia	2016
M.S.	Statistics	University of Georgia	2014
M.A.	Mathematics	Central Michigan University	2011
B.S.	Mathematics	University of South Carolina	2009

Academic Positions

Clemson University July 2018 – Present
College of Education
Department of Education and Human Development
Assistant Professor, Quantitative Methodology

University of California – Los Angeles June 2016 – June 2018
Graduate School of Education and Information Studies
Social Research Methodology Division
Assistant Professor, Advanced Quantitative Methods

Research Interests

Psychometrics; diagnostic classification models; item response models; longitudinal psychometric models; K-16 formative assessment; STEM education assessment

Publications

*Indicates collaboration with a graduate student.

Madison, M. J. (accepted). Reliably assessing growth with longitudinal diagnostic classification models. *Educational Measurement: Issues and Practice.*

Madison, M. J., & Bradshaw, L. (2018). Assessing growth in a diagnostic classification model framework. *Psychometrika, 83*(4), 963-990.

Madison, M. J., & Bradshaw, L. (2018). Evaluating intervention effects in a diagnostic classification model framework. *Journal of Educational Measurement, 55*(1), 32-51.

Bradshaw, L., & **Madison, M. J.** (2016). Invariance properties for general diagnostic classification models. *International Journal of Testing, 16*(2), 99-118.

Madison, M. J., & Bradshaw, L. (2015). The effects of Q-matrix design on classification accuracy in the LCDM. *Educational and Psychological Measurement, 75*(3), 491-511.

Piatek-Jimenez, K., **Madison, M. J.**, & Przybyla-Kuchek, J. (2014). Equity in mathematics textbooks: A new look at an old issue. *Journal of Women and Minorities in Science and Engineering, 20*(1)*,* 55-74.

Piatek-Jimenez, K., & **Madison, M. J.** (2012). Equity in mathematics textbooks: A report on progress. *Proceedings of the 34th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education.* Kalamazoo, MI: Western Michigan University.

Manuscripts Under Review

*Indicates collaboration with a graduate student.

***Madison, M. J.,** Chung, S., Kim, J., & Bradshaw, L. P. Approaches to estimating longitudinal diagnostic classification models. Manuscript under review.

Current Grant Support

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Grant Proposals Under Review

Principal Investigator: CAREER: *Multilevel Diagnostic Classification Models for Evaluating Intervention Effects* (2019 – 2024). National Science Foundation ~ $559,363.

Principal Investigator: *A Family of Diagnostic Learning Models* (2019 – 2021). American Educational Research Association ~ $34,758.61. Co-PI: Meghan Fagher.

Previously Funded Grants

Principal Investigator: *Assessing Nested Effects in a Diagnostic Classification Model Framework* (2017 – 2018). UCLA Faculty Research Grant ~ $6,305.

Unfunded Grant Proposals

Co-Principal Investigator: *Know Your Nearest Neighbors* (2018 – 2023). National Science Foundation: Discovery Research PreK – 12 ~ $2,999,569. PI: David Weintrop.

Co-Principal Investigator: *Talent for Teaching* (2018 – 2023). National Science Foundation: Robert Noyce Scholarship Program ~ $1,447,285. PI: Christopher Anderson.

Co-Principal Investigator: *Principles of Data Science (PODS)* (2017 – 2020). National Science Foundation: STEM + Computing ~ $2,500,000. PI: Rob Gould.

Principal Investigator: *Diagnosing Teachers' Statistical Preparation* (2017 – 2018). UCLA Transdisciplinary Seed Grant ~ $32,337.

Research Presentations

*Indicates collaboration with a graduate student.

2019

Madison, M. J. (2019, April). *Effects of Item Parameter Drift on Longitudinal Diagnostic Classification Models.* Paper to be presented at the annual meeting of the National Council on Measurement in Education in Toronto, Ontario, CA.

*Kim, J., **Madison, M. J.**, Chung, S., & Bradshaw, L. (2019, April). *Approaches to estimating longitudinal diagnostic classification models.* Paper to be presented at the annual meeting of the National Council on Measurement in Education in Toronto, Ontario, CA.

*Soo, Y. S., **Madison, M. J.** (2019, April). *Effects of Local Dependence on Longitudinal Diagnostic Classification Models.* Paper to be presented at the annual meeting of the National Council on Measurement in Education in Toronto, Ontario, CA.

2018

Madison, M. J., & Bao, Y. (2018, July). *A longitudinal and polytomous diagnostic classification model.* Paper presented at the International Meeting of the Psychometric Society in New York, NY.

*Keenan, E. G., **Madison, M. J.**, Wood, J. J., & Lerner, M. D. (2018, May). *Psychometric analysis of the autism spectrum quotient using diagnostic classification modeling*. Poster presented at the Annual Meeting of the International Society for Autism Research, Rotterdam, Netherlands.

Madison, M. J. (2018, April). *Item influence measures for diagnostic classification models*. Paper presented at the annual meeting of the National Council on Measurement in Education in New York, NY.

*Cho, A. C. B., Wood, J., & **Madison, M. J.** (2018, January). *Personality matters: A latent profile analysis of personality subgroups in children with autism spectrum disorder*.

Poster presented at the Annual Conference for the University of California Center for Research on Special Education, Disabilities, and Developmental Risk in Davis, CA.

2017

Madison, M. J., (2017, October). *A diagnostic approach to reliably assessing growth.* Paper presented at the annual meeting of the Northeastern Education Research Association in Trumbull, CT.

*Cruz, E., & **Madison, M. J.** (2017, October). *Diagnosing teachers' statistical preparation: A Pilot Study*. Paper presented at the Annual Meeting of the Society for Advancement of Chicanos/Hispanics and Native Americans in Science in Salt Lake City, UT.

Madison, M. J., & Bradshaw, L. (2017, April). *Evaluating intervention effects in a diagnostic classification model framework.* Paper presented at the annual meeting of the National Council on Measurement in Education in San Antonio, TX.

2016

*Grantham, T., **Madison, M. J.**, Collins, K., & Luckey, J. (2016, November). *Single-subject acceleration for gifted Black males using the Math Hall and Ball afterschool program*. Paper presented at the annual meeting of the National Association for Gifted Children in Orlando, FL.

Madison, M. J., & Bradshaw, L. (2016, October). *Evaluating innovative instruction using a longitudinal diagnostic classification model.* Paper presented at the annual meeting of the Northeastern Education Research Association in Trumbull, CT.

Madison, M. J., & Bradshaw, L. (2016, July). *Assessing growth in a general diagnostic classification model.* Paper presented at the International Meeting of the Psychometric Society in Asheville, NC.

Xiong, X., **Madison, M. J.**, & Mattar, J. (2016, April). *Speededness for task based simulations items in a multi-stage licensure examination*. Paper presented at the annual meeting of the National Council on Measurement in Education in Washington, D.C.

Madison, M. J., & Bradshaw, L. (2016, April). *Assessing growth in a diagnostic classification model framework.* Poster presented at the 2016 College of Education Graduate Student and Faculty Research Conference in Athens, GA.

2015

Madison, M. J., & Bradshaw, L. (2015, October). *Invariance properties for general diagnostic classification models.* Paper presented at the annual meeting of the Northeastern Education Research Association in Trumbull, CT.

Madison, M. J., & Bradshaw, L. (2015, April). *Using Q*Power to refine diagnostic assessment designs.* Paper presented at the annual meeting of the American Educational Research Association in Chicago, IL.

Madison, M. J. & Bradshaw, L. (2015, February). *Developing Diagnostic Formative Assessments in Graduate Statistics Courses.* Poster presented at the 2015 College of Education Graduate Student and Faculty Research Conference in Athens, GA.

2014

Madison, M. J. & Bradshaw, L. (2014, April). *The effects of Q-matrix design on classification accuracy in the LCDM.* Poster presented at the 2014 College of Education Graduate Student and Faculty Research Conference in Athens, GA.

Madison, M. J., Bradshaw, L., & Hollingsworth, B. (2014, April). *The role of Q-matrix design in diagnostic assessment.* Paper presented at the annual meeting of the National Council on Measurement in Education in Philadelphia, PA.

2013

Madison, M. J. & Bradshaw, L. (2013, October). *The effects of Q-matrix design on classification accuracy in the LCDM.* Paper presented at the annual meeting of the Northeastern Education Research Association in Rocky Hill, CT.

Madison, M. J., & Templin, J. (2013, April). *Group-mean centering in hierarchical linear models: A weighting approach*. Poster presented at the 2013 College of Education Graduate Student Research Conference in Athens, GA. Awarded 2nd place research prize.

2012

Bradshaw, L., Brown, C., Cohen, A., **Madison, M. J.**, & Templin, J. (2012, December). *Evaluating the statistical properties of epistemic network analysis*. Poster presented at the 4th annual Discovery Research K-12 Meeting in Madison, WI.

Piatek-Jimenez, K., & **Madison, M. J.** (2012, November). *Equity in mathematics textbooks: A report on progress.* Poster presented at the annual conference of the North American Chapter of the International Group for the Psychology of Mathematics Education in Kalamazoo, MI.

Marcinek, T., & **Madison, M. J.** (2012, July). *Learning to interpret the mathematical thinking of others in pre-service mathematics courses: potential and limitations*. Paper presented at the 12th International Congress on Mathematical Education in Seoul, Korea.

Hamed, D., & **Madison, M. J.** (2012, April). *Factors affecting student achievement in business calculus*. Poster presented at the annual Student Research and Creative Endeavors Exhibition in Mount Pleasant, MI.

Invited Presentations/Workshops

Madison, M. J. (2019, March). *Introduction to diagnostic measurement models.* Invited presentation the UCLA Curtis Center Mathematics and Teaching Conference.

Madison, M. J. (2018, October). *Introduction to diagnostic measurement models.* Invited workshop to University of Massachusetts Amherst Research, Educational Measurement, and Psychometrics Program.

Madison, M. J. (2018, April). *A diagnostic classification analysis of an MDTP Test.* Invited presentation to the Working Group of the Mathematics Diagnostic Testing Project. Long Beach, CA.

Madison, M. J. (2018, March). *Meaningful metrics in educational research.* Invited presentation to the Quantitative Methodology Colloquium, UGA Department of Educational Psychology.

Madison, M. J. (2018, February). *Getting more out of educational assessments.* Invited presentation to the Precision Institute at National University in San Diego, CA.

Madison, M. J. (2018, January). *Non-arbitrary metrics in educational research.* Invited presentation to the Teaching and Learning Lab (TALL), UCLA Department of Psychology.

Madison, M. J. (2017, October). *Evaluating learning (and forgetting) over time via a diagnostic classification model.* Invited presentation to the Cognitive Psychology CogFog Meeting, UCLA Department of Psychology.

Madison, M. J. (2017, October). *Psychometric models for the reliable measurement of multiple latent traits*. Invited presentation to the UCLA Department of Statistics Research Seminar.

Madison, M. J. (2017, April). *Evaluating an instructional intervention with a longitudinal diagnostic model*. Invited presentation to the Human Development and Psychology Colloquium, UCLA Department of Education.

Madison, M. J. (2016, May). *Navigating the academic job market.* Invited presentation to Graduate Researchers in Educational Psychology at the University of Georgia.

Madison, M. J. (2016, January). *Getting more out of educational assessments.* Invited presentation at the 2016 University of Georgia College of Education Doctoral Recruitment Weekend in Athens, GA.

Technical Reports

Madison, M. J. (2018). *A Diagnostic Classification Analysis of an MDTP Test*. Technical Report. Mathematics Diagnostic Testing Project.

Madison, M. J. (2015). *Examining the Speediness of the Uniform CPA Examination*. Technical Report. American Institute of Certified Public Accountants.

Developed Software

Madison, M. J., Bradshaw, L. (2015). Q*Power (1.0): A tool for prospective diagnostic assessment design. [Computer software]. Athens, GA.

Teaching Experience

Graduate Courses

Instructor: EDF 9270/1 – Quantitative Research Design and Statistics in Education 2018
Clemson University

Instructor: EDUC 255 – Diagnostic Classification Models 2017
University of California – Los Angeles

Instructor: EDUC 231C – Categorical Data Analysis 2017
University of California – Los Angeles

Co-instructor: EDUC 288 – Research Apprenticeship Course 2017
University of California – Los Angeles

Instructor: EDUC 230B – Linear Models in Social Sciences: Multiple Regression 2017, 2018
University of California – Los Angeles

Instructor: EDUC 230A – Introduction to Research Design and Statistics 2016, 2017
University of California – Los Angeles

Teaching Assistant: ERSH 8310 – Applied Analysis of Variance in Education 2013 – 2015
University of Georgia

Undergraduate Courses

Instructor: MTH 217 – Business Calculus 2012
Central Michigan University

GRE Mathematics Preparatory Instructor 2011 – 2012
Central Michigan University Ronald E. McNair Scholars

Instructor: MTH 105 – Intermediate Algebra 2009 – 2011
Central Michigan University

Instructor: MTH 055 – Beginning Algebra 2010
Central Michigan University

Supplemental Instruction Leader: MTH 141 – Calculus I 2006 – 2009
University of South Carolina

Professional Development Training Sessions/Workshops

Madison, M. J. (April, 2019). *Diagnostic Classification Models Part II: Advanced Applications*. Half-day training session presented at the annual meeting of the National Council on Measurement in Education in Toronto, Ontario, CA.

Bradshaw, L., & **Madison, M. J.** (April, 2018). *Diagnostic Classification Models Part I: Fundamentals*. Half-day training session presented at the annual meeting of the National Council on Measurement in Education in New York, NY.

Madison, M. J., & Bradshaw, L. (April, 2018). *Diagnostic Classification Models Part II: Advanced Applications*. Half-day training session presented at the annual meeting of the National Council on Measurement in Education in New York, NY.

Bradshaw, L., & **Madison, M. J.** (April, 2017). *Diagnostic Measurement: Theory, Methods and Applications*. Full day training session presented at the annual meeting of the National Council on Measurement in Education in San Antonio, TX.

Mentorship

Postdoctoral Research Associate Supervisor
In Progress
Meghan Sullivan, UCLA + National University Precision Institute

Ph.D. Dissertation Co-Chair
In Progress
Eric Setoguchi, Social Research Methodology, UCLA

Ph.D. Dissertation Committee Member
In Progress
Anne Blackstock-Bernstein, Human Development and Psychology, UCLA

Second Year Project Committee Member
In Progress
An Cho, Human Development and Psychology, UCLA

Honors and Awards

Outstanding Dissertation Award Nominee 2018
American Educational Research Association, Division D

Owen W. Scott Award for Academic Merit and Professional Promise 2015
University of Georgia Department of Educational Psychology

UGA Amazing Student 2014
University of Georgia College of Education

2nd Place: Quantitative Division Poster 2013
Group-mean centering in hierarchical linear models: A weighting approach. Poster presented at the 2013 College of Education Graduate Student Research Conference in Athens, GA.

Outstanding Tutor Honorable Mention 2012
Central Michigan University Department of Mathematics

Outstanding Teaching Assistant 2011
Central Michigan University Department of Mathematics

Emerging Scholar Award 2008
University of South Carolina Ronald E. McNair Scholars Program

Service Activities/Leadership Positions

Quantitative Methodologist Professor Search Committee 2018 – Present
Clemson College of Education
Department of Education and Human Development

Program Chair 2018 – Present
American Educational Research Association
Special Interest Group 167: Cognition and Assessment

Outstanding Dissertation Committee 2018 – Present
American Educational Research Association, Division D

Membership Chair 2017 – 2018
Northeastern Educational Research Association

Core Faculty Member 2017 – 2018
UCLA Department of Education
Educational Leadership Program

Academic Personnel Committee 2017 – 2018
UCLA Department of Education

Faculty Search Committee 2017 – 2018
UCLA Department of Psychology

California State University Sally Casanova Pre-Doctoral Scholars Program 2017
Undergraduate Research Faculty Mentor

Membership Committee 2016 – 2017
Northeastern Educational Research Association

DCMNET: Diagnostic Classification Model Network 2016 – Present
Listserv Owner and Operator

Standards and Test Use Committee 2015 – 2016
National Council for Measurement in Education

Project U-SPARC: Math Hall and Ball Co-director 2015
University of Georgia / Howard B. Stroud Elementary

The 2014 Frasier Equity & Excellence STEM Conference Planning Committee 2014 – 2015
University of Georgia, College of Education

Graduate Student Liaison 2013 – 2016
American Educational Research Association
Special Interest Group 167: Cognition and Assessment

Mathematics Curriculum Team 2013 – 2015
University of Georgia

Training and Professional Development Committee 2013 – 2014
National Council for Measurement in Education
Graduate Student Representative

Graduate Researchers in Educational Psychology
University of Georgia
Executive Committee: Treasurer 2013 – 2014
Program Representative: Quantitative Methodology 2012 – 2013

Other Professional Activities

Graduate Research Assistant 2015 – 2016
Developing Enhanced Assessment Tools for Capturing Students' Procedural Skills and Conceptual Understandings in Mathematics. United States Department of Education, Institute of Educational Sciences: Cognition in Special Education, Measurement Goal 5.

Psychometric Intern Summer 2015
American Institute of Certified Public Accountants

Graduate Assistant 2014 – 2015
Georgia Center for Assessment

Graduate Research Assistant 2012 – 2014
AutoMentor: Virtual Mentoring and Assessment in Computer Games for STEM Learning. National Science Foundation: Division of Research on Learning.

Software Skills

Fortran, MATLAB, Mplus, Python, R, SAS, SPSS, Visual Studio, Visual Basic

Professional Affiliations

American Statistical Association	2015 – Present
Psychometric Society	2015 – Present
Northeastern Educational Research Association	2013 – Present
American Educational Research Association	2012 – Present
National Council on Measurement in Education	2012 – Present

References

American Educational Research Association, American Psychological Association, National Council on Measurement in Education (2014). *Standards for Educational and Psychological Testing*. Washington, DC: AERA.

Bao, Y., & Bradshaw, L. (2018). An Attribute-level Item Selection Method for DCM-CAT. *Measurement: Interdisciplinary Research and Perspectives,* 16(4), 209-255.

Black, P. J., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy and Practice, 5*(1), 7-74.

Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2004). Working inside the black box: Assessment for learning in the classroom. *Phi delta kappan*, *86*(1), 8-21.

Bradshaw, L. (2014). *PARCC Diagnostic Assessments: Design Research for Diagnostic Classification Model-based PARCC Diagnostic Assessments in Mathematics Comprehension and Decoding.* Technical Report. Pearson Education.

Bradshaw, L. (2015). *An Evaluation of Diagnostic Classification Model-based Computer Adaptive Testing Algorithm for PARCC Diagnostic Assessments in Mathematics Comprehension and Decoding.* Technical Report. Pearson Education.

Bradshaw, L. (2017). Diagnostic classification models. In D. Bandalos (Ed.), *Measurement Theory and Application for the Social Sciences.* New York, NY: Guilford Press.

Bradshaw, L., Izsák, A., Templin, J., & Jacobson, E. (2014). Diagnosing teachers' understandings of rational number: Building a multidimensional test within the diagnostic classification model framework. *Educational Measurement: Issues and Practice, 33*(1), 2-14.

Bradshaw, L., & Madison, M. (2016). Invariance principles for general diagnostic models. *International Journal of Testing*, *16*(2), 99-118.

Bradshaw, L., & Templin, J. (2014). Combining scaling and classification: A psychometric model for scaling ability and diagnosing misconceptions. *Psychometrika*, *79* (3), 403-425.

Çepni, S., Taş, E., & Köse, S. (2006). The effects of computer-assisted material on students' cognitive levels, misconceptions and attitudes towards science. *Computers & Education*, *46*(2), 192-205.

Clark, I. (2011). Formative assessment: Policy, perspectives and practice. *Florida Journal of Educational Administration & Policy, 4*(2), 158–180.

Council of Chief State School Officers (2011, April). Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards: A Resource for State Diaglouge. Washing, DC: Author.

Cullen, J., & Shaw, S. (2000). The Accuracy of Teacher Prediction of Student Test Performance for Students Referred to Special Education. Connecticut: Department of Education and Educational Psychology, Western Connecticut State University.

Delmas, G., Joan, G., Ooms, A., & Chance, B. (2007). Assessing students'conceptual understanding after a first course in statistics. *Statistics Education Research Journal*, *6*(2).

DeLuca, C. (2012). Preparing teachers for the age of accountability: Toward a framework for assessment education. Action in Teacher Education, 34(5/6), 576-591.

DeLuca, C., & Klinger, D. (2010). Assessment literacy development: identifying gaps in teacher candidates' learning. *Assessment in Education: Principles, Policy & Practice*,

17(4): 419-438.

Demaray, M. K., & Elliot, S. N. (1998). Teachers' judgments of students' academic functioning: A comparison of actual and predicted performances. *School Psychology Quarterly, 13*(1), 8-24.

Engelsen, K. S., & Smith, K. (2014). Assessment literacy. In C. Wyatt-Smith, V. Klenowski, & P. Colbert (Eds.), *The enabling power of assessment: Designing assessment for quality learning.* (pp. 91-107). New York: Springer.

Feldberg, Z., & Bradshaw, L. (April, 2018). *Reporting results from diagnostic classification models for teachers.* Poster presented at the annual meeting of the American Educational Research Association in New York, NY.

Fink, S., and Markholt, A., Bransford, J., (2011). *Leading for Instructional Improvement: How Successful Leaders Develop Teaching and Learning Expertise*. San Francisco, CA: Jossey-Bass.

Fuller, M. L. (2000). Teacher Judgment as Formative and Predictive Assessment of Student Performance on Ohio's Fourth and Sixth Grade Proficiency Tests. ERIC Clearinghouse Document ED441015.

Gallagher, C., & Worth, P. (2008). Formative assessment policies, programs, and practices in the Southwest Region (*Issues & Answers Report, REL 2008 – No. 041*). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from http://ies.ed.gov/ncee/edlabs

Goodwin, L. D., & Leech, N. L. (2003). The meaning of validity in the new standards for educational and psychological testing. *Measurement and Evaluation in Counseling and Development,* 36(3), 181-191.

Gray, L., Thomas, N., & Lewis, L. (2010). Educational Technology in U.S. Public Schools: Fall 2008 (NCES 2010–034). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

Gürbüz, R., & Birgin, O. (2012). The effect of computer-assisted teaching on remedying misconceptions: The case of the subject "probability". *Computers & Education*, *58*(3), 931-941.

Henson, R., & Douglas, J. (2005). Test construction for cognitive diagnosis. *Applied Psychological Measurement, 29*(4), 262-277.

Heritage, M. (2010). Formative Assessment and Next-Generation Assessment Systems: Are We Losing an Opportunity? Washington, D.C.: *Council of Chief State School Officers*.

Hoge, R. D., & Coladarci, T. (1989). Teacher-based judgments of academic achievement: A review of the literature. *Review of Educational Research, 59*(3), 297-313.

Hou, L., de la Torre, J., & Nandakumar, R. (2014). Differential item functioning assessment in cognitive diagnostic modeling: Application of the Wald Test to investigate DIF in the DINA model. *Journal of Educational Measurement, 51*(1).

Impara, J., and Plake, B., (1996). Professional Development in Student Assessment for Educational Administrators: An Instructional Framework. Educational Measurement: Issues and Practice. 15(2): 14

Jurich, D., & Bradshaw, L. (2012, October). *Modeling testlet effects within a diagnostic classification framework.* Paper presented at the annual Northeastern Educational Research Association conference in Rocky Hill, CT.

Jurich, D., Bradshaw, L., & DeMars, C. (April, 2014). *Limited information methods to assess overall fit of diagnostic classification models.* Paper presented at the annual National Council on Measurement in Education conference in Philadelphia, PA.

Li, X., & Wang, W. C. (2015). Assessment of differential item functioning under cognitive diagnosis models: The DINA model example. *Journal of Educational Measurement*, *52*(1), 28-54.

Liu, T. C., & Lin, Y. C. (2010). The application of Simulation Assisted Learning Statistics (SALS) for correcting misconceptions and improving understanding of correlation. *Journal of Computer Assisted Learning*, *26*(2), 143-158.

Madison, M., & Bradshaw, L. (2018). Assessing Growth in a Diagnostic Classification Model Framework. *Psychometrika*, 83(4), 963-990.Madison, M., & Bradshaw, L. (2015). The effects of Q-matrix design on classification accuracy in the log-linear cognitive diagnosis model. *Educational and Psychological Measurement, 75* (3), 491-511.

Madison, M., & Bradshaw, L. (2018). Evaluating Intervention Effects in a Diagnostic Classification Model Framework. *Journal of Educational Measurement*, 55(1), 32-51.

McMillan, J., (2000). Fundamental Assessment Principles for Teachers and School Administrators. *Practical Assessment: Research and Evaluation*, 7 (8).

Mulholland, L. A., & Berliner, D. C. (1992). *Teacher experience and the estimation of student achievement.* Paper presented at Annual Meeting of the American Educational Research Association. San Francisco, CA. ERIC Document Reproduction Service No. ED348350.

Nichols, P. D., Chipman, S. F., & Brennan, R. L. (Eds.) (1995). *Cognitively Diagnostic Assessment*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Pellegrino, J. W., Chudowsky, N., & Glaser, R. (Eds.) (2001). *Knowing What Students Know: The Science and Design of Educational Assessment.* Washington, DC: The National Academy Press.

Popham, W. J. (2006). *Defining and enhancing formative assessment.* Paper presented at the Annual Large-Scale Assessment Conference, Council of Chief State School Officers, San Francisco, CA.

Popham, J. (2009). Assessment literacy for teachers: Faddish or fundamental? *Theory into Practice*, 48(1): 4-11.

Popham, J. (2017). *Classroom Assessment: What Teachers Need to Know* (8th ed.). Boston, MA: Pearson.

Roeber, E. (2011). Assessment literacy for Michigan education. *Michigan Assessment Consortium*. Retrieved from http://michiganassessmentconsortium.org/resource/white-papers/assessment-literacy-michigan-education

Rupp, A. A., & Templin, J. (2008). Unique characteristics of cognitive diagnosis models: A comprehensive review of the current state-of-the-art. *Measurement: Interdisciplinary Research and Perspectives, 6*(4)*,* 219-262.

Rupp, A. A., Templin, J., & Henson, R. (2010). *Diagnostic measurement: Theory, methods, and applications*. New York: Guilford.

Russell, M., O'Dwyer, L. M., & Miranda, H. (2009). Diagnosing students' misconceptions in algebra: Results from an experimental pilot study. *Behavior Research Methods*, *41*(2), 414-424.

Sadler, D. R. (1989). Formative assessment and the design of instructional systems. *Instructional Science*, *18*(2), 119-140.

Stiggins, R., & Duke, D., (2008). Effective Instructional Leadership Requires Assessment Leadership. *Phi Delta Kappan*. 90(4) 285-291.

Templin, J., & Bradshaw, L. (2013). Measuring the reliability of diagnostic classification model examinee estimates. *Journal of Classification*, *30*(2), 251-275.

Templin, J., & Bradshaw, L. (2014). Hierarchical diagnostic classification models: A family of models for estimating and testing attribute hierarchies. *Psychometrika, 79* (2), 317-339.

Templin, J., & Henson, R. A. (2006). Measurement of psychological disorders using cognitive diagnosis models. *Psychological Methods, 11*, 287-305.

Xu, Y., & Brown, G. (2016). Teacher assessment literacy in practice: A reconceptualization. *Teacher and Teacher Education* 58(2): 149-162.