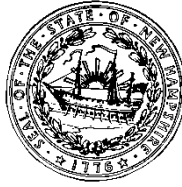**Frank Edelblut**
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NEW HAMPSHIRE PERFORMANCE ASSESSMENT OF COMPETENCY EDUCATION: WAIVER EXTENSION REQUEST TO THE UNITED STATES DEPARTMENT OF EDUCATION

Revised: September 7, 2017

Introduction

The New Hampshire Department of Education (NHDOE) is pleased to provide the following information in support of the State's request to extend its current waiver under the authority now granted under the Elementary and Secondary Education Act. This memo is our formal request to allow NH DOE to continue with and expand the Performance Assessment of Competency Education (PACE) pilot for the coming academic year 2017-2018, or until the Secretary releases an application for the Innovative Assessment and Accountability Demonstration Authority, whichever period is shorter. Under this waiver extension request, we are seeking to move the PACE system towards scaling statewide and wish to expand the PACE assessment system to the Tier 1 schools and districts listed in Table 1.

Table 1.

Tier 1 Schools/Districts by Year of Entry

	Tier 1			
	District/School	**Elementary**	**Middle**	**High**
1*	**Sanborn (SAU 17)**	Memorial Elementary (PK-5) Bakie Elementary (PK-5)	Sanborn Regional Middle (6-8)	Sanborn Regional High (9-12)
2*	**Rochester (SAU 54) (Elementary Schools are K-5, except where noted)**	Chamberlin St School Each Rochester School Gonic School Maple St Magnet School McClelland School Nancy Loud School (K-4) School Street School (K-4) William Allen School	Rochester Middle School (6-8)	Spaulding High (9-12)
3*	**Epping (SAU 14)**	Epping Elementary (PK-5)	Epping Middle School (6-8)	Epping High (9-12)
4*	**Souhegan HS (SAU 39)**			Souhegan High (9-12)
5*	**Concord (SAU 8)**	Abbot-Downing school (K-5) Beaver Meadow School (PK-5) Broken Ground School (3-5) Christa McAuliffe School (K-5) Mill Brook School (PK-2)	Rundlett Middle School (6-8)	Concord High (9-12)
6*	**Pittsfield (SAU 51)**	Pittsfield Elementary (PK-6)	Pittsfield Middle High School (7-12)	
7*	**Monroe (SAU 77)**	Monroe Consolidated School (K-8)		
8**	**Seacoast Charter**	Seacoast Charter School (PK-8)		
9*	**Littleton (SAU 35)** (5 districts) Profile Lafayette Landaff Lisbon	Bethlehem Elem (K-6) Lafayette Regional (K-6) Landaff Blue School (K-3)		

	Bethlehem	Lisbon Regional → K-12	
			Profile Jr/Sr High (7-12)
10	**Laconia (SAU 30)**	Elm Street School (PK-5) Pleasant Street Elem (PK-5) Woodland Heights (PK-5)	
11	**Amherst (SAU 39)**		Amherst Middle School (6-8)
12	**Plymouth (SAU 30)**	Plymouth Elementary School (K-8)	
13	**Haverhill (SAU 23)**	Bath Village School (K-6) Piedmont Village School (PK-8) Warren Village School (PK-8)	
14	**Newport (SAU 43)**	Richards Elementary School (K-5)	

  *   Indicates all schools in district are in PACE;
       No asterisk indicates some schools in the district are in PACE, but not all.
       [NOTE – Souhegan HS is a single district within SAU 39; Amherst and Mont Vernon are
       also districts in SAU 39—the High School and Middle School are in Tier 1 PACE, the
       elementary schools are in Tier 2]
  ** Charter School

NH DOE has previously submitted extensive documentation in support of the PACE assessment system, starting with our original proposal in November 2015 and continuing with many updates and progress reports through this past February 2017. In an effort to summarize the evidence supporting NH's effort to sustain and scale the PACE assessment system, we have included the following documentation:

1. A brief discussion of the overall design of the PACE assessment system and a commitment to meet the 95% participation expectation and.
2. A full technical manual summarizing the structure and theory of action for the PACE assessment and accountability system along with detailed analyses and results comprising the latest validity and comparability evidence;
3. A crosswalk of the ESSA Section 1204 Demonstration Authority technical requirements to the corresponding documentation located in the technical manual;
4. A copy of the PACE formative evaluation report from a third-party, independent review team at the Human Resources Research Organization (HumRRO); and

5. A summary of new efforts underway that contribute to the continued viability of the PACE assessment system.

Overview of the PACE Assessment System Design

The PACE assessment system is based on a foundation of using rigorous and engaging performance tasks to create more meaningful assessment and instruction experiences for all students while gaining rich information about student achievement on the competencies and standards. Student annual determinations (e.g., proficiency) are based on student competencies scores—aligned to statewide content standards. Competency scores are informed by three sources of assessment information: 1) student performance on the PACE Common Performance Assessment, 2) student performance on local performance assessments, and 3) student performance on non-performance-based summative local assessments. The statewide annual assessment is administered once per grade span and used to provide annual determinations for students in lieu of PACE annual determinations. The following table outlines the grades and subjects in which PACE and the statewide assessments are administered. More information regarding the structure and technical quality of the PACE assessment system is provided in the PACE 2016-2017 Technical Manual enclosed with this waiver extension request.

	ELA	Math	Science
Grade 3	Statewide assessment	PACE	
Grade 4	PACE	Statewide assessment	PACE
Grade 5	PACE	PACE	
Grade 6	PACE	PACE	
Grade 7	PACE	PACE	
Grade 8	Statewide assessment	Statewide assessment	PACE
Grade 9	PACE	PACE	PACE
Grade 10	PACE	PACE	PACE
Grade 11	Statewide assessment	Statewide assessment	PACE

PACE Participation Rates

Participation rates are consistently quite high because the PACE assessment system is not a single assessment event but instead is a system of assessments that are administered throughout the year. Therefore it is unlikely that students would not have participated in the system. In fact, if they had been in school for a full academic year, the only reason for a student to show up as a non-participant is if there is a data issue. For example, administrative difficulties such as a teacher leaving mid-year can contribute to participation rates that are less than 100%, but overall, participation in the PACE assessment system is high and was 96% for the 2015-2016 school year. The New Hampshire Department of Education fully commits to maintaining a PACE participation rate of above 95% for the duration of the waiver.

PACE 2016-2017 Technical Manual

The full technical manual is enclosed in the attachments along with this waiver extension request. Below is a detailed outline of the structure of the technical manual in order to provide an overview of the information and documentation included within the manual.

1. A Framework for Evaluating the Technical Quality of PACE
2. Is the PACE Assessment System Valid?
3. Overview of the NH PACE System
4. Communication with USED
   a. 2016-2017 Waiver Approval Letter
   b. December 2016 Update to USDOE on Criteria for Success and Milestones
5. 2015-2016 Student Performance and Participation Results
6. NH PACE Theory of Action
7. Building Local Capacity
   a. Three-Tiered System
   b. Tier 1 Capacity Building
      i. High-Quality Performance Task Development Training
      ii. Advanced Teacher Leader Training
      iii. Summer Institute Training and Professional Activities
   c. Summary
8. Comparability-Based Framework for Validating the System of Assessments
   a. Overview of Validity Evidence for the NH PACE System
   b. Within-District Comparability
      i. Evidence of Alignment and Assessment Quality
         1. Reviews of local assessment maps
         2. Two-Part Review Protocol for Local Assessments
      ii. Evidence of Reliable Scoring
         1. Principles of Scoring Student Work
         2. Inter-Rater Reliability Estimates
         3. Generalizability Analysis.
   c. Cross-District Comparability
      i. Setting Comparable Performance Standards
      ii. Social Moderation Comparability Audits on PACE Common Tasks
      iii. Body of Work Standards Validation
   d. Comparability of Annual Determinations across Assessment Systems
      i. Common ALDs and ALD Development Process
      ii. Percent Proficient Across All Grade Levels
      iii. Concurrent Comparability Evaluations
      iv. Non-concurrent Evaluation of Comparability
         1. 2015 SBAC to 2016 PACE
         2. 2015 PACE to 2016 SBAC
   e. Summary
9. External Evaluation of System Success
   a. HumRRO Executive Summary Report (2016-2017)
   b. Effects of PACE on 8th Grade Student Achievement Outcomes (2014-2016)
10. Appendices

Crosswalk to Demonstration Authority Application Requirements

	Technical Requirements	Location of supporting evidence in technical manual or brief summary of how requirement is satisfied
(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 § 200.104(b)(2) or extension period described in § 200.108 and prior to statewide use consistent with § 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 § 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, so long as the statewide academic assessments under § 200.2(a)(1) and section 1111(b)(2) of the Act are administered in any required grade and subject under § 200.5(a)(1) in which the SEA does not choose to implement an innovative assessment;	The entire technical manual is submitted as evidence for meeting these requirements. See "A Framework for Evaluating the Technical Quality of PACE," in technical manual as an overview.
(2)	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.	"Evidence of Alignment and Assessment Quality," in technical manual.
(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.	"2015-2016 Student Performance and Participation Results," in technical manual.

(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 described in § 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 § 200.2(a)(1) and section 1111(b)(2) of the Act for such students.	"Comparability of the Annual Determinations across Assessment Systems," in technical manual.
(4)(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 § 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.	"Comparability-Based Framework for Validating the System of Assessments," in technical manual.
5(i)	Provide for the participation of all students, including children with disabilities and English learners;	"2015-2016 Student Performance and Participation Results," in technical manual.
5(ii)	Be accessible to all students by incorporating the principles of universal design for learning, to the extent practicable, consistent with § 200.2(b)(2)(ii)	See: "*Principled Assessment Design for the Performance Assessment of Competency Education (PACE)*" which includes a section on the role of UDL task design.
5(iii)	Provide appropriate accommodations consistent with § 200.6(b) and (f)(1)(i) and section 1111(b)(2)(B)(vii) of the Act;	"Common Accommodations," in technical manual.
(6)(7)	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;	Given the strong evidence supporting comparability between the PACE and statewide system of assessments, the PACE annual determinations will be used in the Academic Achievement indicator under section 1111(c)(4)(B) for those schools participating in PACE.
	Generate an annual summative determination of achievement, using the annual data from the innovative assessment, for each student in a participating school in	"2015-2016 Student Performance and Participation Results," in technical

	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;	manual. Students with the most significant cognitive disabilities will continue to be assessed using the statewide alternate assessment in the PACE districts.
(8)	Provide disaggregated results by each subgroup of students described in § 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 § 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 § 200.2(e)	"2015-2016 Student Performance and Participation Results," in technical manual.
(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.	Given the strong evidence supporting comparability between the PACE and statewide system of assessments, the PACE annual determinations will be used in the Academic Achievement indicator under section 1111(c)(4)(B) for those schools participating in PACE. This indicator, along with information from the other accountability indicators, will be used to identify PACE schools for comprehensive and targeted support in a way that is exactly consistent with non-PACE schools. The growth indicator will be calculated using a value-table approach with the PACE annual determinations in a way that is described in the forthcoming September submission of New

			Hampshire's consolidated state ESSA plan. Student proficiency on the PACE assessments will be used to track school progress on statewide long-term goals for academic achievement under section 1111(c)(4)(A) of the Act for all students and each subgroup of students. PACE annual determinations will be reported in a manner that is consistent with the statewide assessment results on State and LEA report cards under section 1111(h) of the Act.
(10)		§ 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 § 200.106(a)(3)(i), including updated assurances from participating LEAs consistent with paragraph (e)(2) of this section.	The previous waiver restricted the NH DOE from expanding beyond nine (9) districts, which contradicts the desire to expand statewide at the end of the seven years of reviews and potential extensions. Therefore, as noted above, NH DOE plans to expand PACE to 14 districts in the 2017-2018 with more than double that number in the pipeline to join in the next few years.

Independent Formative Evaluation

The full HumRRO formative evaluation report is enclosed in the attachments along with this waiver extension request. The executive summary of the report is presented below.

HumRRO conducted several data collection activities over the course of the evaluation. These included interviews with nine PACE District Leads; visits to schools in eight PACE districts to conduct interviews or focus groups with administrators, teachers, parents, and students, as well as classroom observations; observation of cross-district meetings including task development sessions and scoring and calibration sessions; participation in monthly PACE Leads Meetings; and review and analysis of scoring and calibration data. In addition, we administered a teacher survey to all teachers in Tier 1 districts, in part to help determine the generalizability of our findings from the teacher focus groups.

Snapshot of Key Findings

Buy-in

One of the most challenging requirements for the success of any educational intervention is securing buy-in from the major participants and leadership of classrooms, schools, and districts. PACE addresses this challenge in several ways. First, educators are in charge of nearly all aspects of the program. Teachers decide what is assessed, how it is assessed, and how the tasks are scored. By placing the responsibility for creating the tasks on the primary users of the assessment data, PACE gives teachers more say in how their students will be assessed than in more traditional testing systems.

The second way PACE gains buy-in is by emphasizing the integrated nature of the assessments. Unlike end-of-year comprehensive statewide assessments, which sample from the past year's curriculum, PACE is targeted to the learning that is occurring at the time of administration. Since there is no specific testing window for PACE, and since the tasks are targeted to one broad curricular topic, teachers can administer the tasks when it makes the most sense. There is no need for intensive review during the weeks leading up to the testing window and no post-test slump between the end of the testing window and the end of the school year.

A third reason PACE participants are committed is that PACE replaces the Smarter Balanced assessments in the grade/subjects for which it is administered— an assessment that many New Hampshire educators regard as an interruption of their instruction that provides little useful information. PACE tasks require deep knowledge on the part of students. There is no chance of getting an answer correct by guessing. Students actually perform the tasks on which they are assessed, rather than answer questions about those tasks.

Collaboration

Participating districts reported a high degree of collaboration. First, educators from all Tier 1 districts meet regularly throughout the year. They participate in task development sessions, professional development, scoring sessions, standard-setting, and other meetings.

Districts also interact through the "LibGuide" system. This system is a repository for "all things PACE." It is a web-based repository for PACE tasks, rubrics, and shared resources. Teachers who implement common tasks early share their lessons and provide tips for smoother implementation among their colleagues. The teachers share book lists that are suitable for use in English language arts tasks. They share equipment lists for science labs, including locally available inexpensive options for commonly needed equipment.

Over the course of the evaluation period, PACE implemented three key new collaboration measures:

- Naming an overall curriculum coordinator to assist with PACE task development activities.
- Naming of multiple Content Leads (about 30 total) for each grade level and content area combination. These teachers were identified as leaders in PACE and were recommended by peers and ultimately selected by the PACE District Leads to help coordinate subject/grade-specific activities.
- The third new innovation is the "buddy district." Districts are now paired with other districts to promote collaboration. Districts with Content Leads are often paired with districts that do not have them. Newer PACE districts are typically paired with experienced districts.

These new collaboration initiatives help PACE cope with expansion. As the program expands, these efforts become increasingly necessary to maintain the requisite levels of participation and ownership among PACE educators.

Teaching & Learning

Teachers across districts expressed that PACE has had a positive impact on increasing the depth of knowledge at which they teach and gives them real-time feedback that they can use to make "on-the-spot" adjustments to their instruction to better meet the needs of their students. Unlike most large-scale assessment systems, which are focused on the estimation of student and/or school performance, PACE is also intended to influence instructional practices. PACE leadership is not overly concerned about teachers "teaching to the test." PACE, ideally, supports "testing to what is taught."

PACE also represents a shift for students. Typically, students learn content prior to the tests and then demonstrate their learning through their performance on the tests. PACE certainly has similar aspects, but because of the integrated nature of the assessments, students learn while

testing as well. PACE tasks often require multiple classes to complete and might involve several steps (e.g., reading a novel, discussing the characters and their motivations, then writing a response to a prompt related to the novel). Because of the integrated nature of PACE, testing and learning are not entirely separate components of a student's day.

Context

While there are several contextual factors influencing the quality of PACE implementation worth mentioning, the largest stems from implementing PACE at the district level. Districts vary in their capacity, student populations, and in the expertise and experience of their staff members. Early adopters of competency-based education had a significant advantage in implementing PACE. They already had a collection of locally developed tasks from which to start and were familiar with the design of competency-based rubrics. In many cases, their students had largely become accustomed to the kinds of tasks PACE requires.

District size plays an important role in PACE implementation as well. Smaller districts typically have only one teacher per grade/subject. In some cases, there may be only one teacher per grade; in elementary school this teacher is responsible for ELA, mathematics, and science tasks. This means that all of the work associated with developing and administering the local tasks is concentrated among very few people. Smaller districts often have to solicit help from outside the district to conduct double scoring.

Larger districts have more support staff and typically have same-grade/subject teachers who can work as teams within districts, or even within the same school. This does not always mean that the teachers in larger districts have less work, however. The more students in a school who take a PACE assessment, the larger the effort required for scoring. A very small district might only have 10 students who complete a task. A larger district could have a few hundred students completing a task.

PACE was implemented, in part, to reduce perceived negative consequences associated with large-scale, end-of-year standardized testing. PACE was designed to stave off reductions in the depth of learning of students, to promote critical thinking, and to integrate curriculum, instruction, and assessment into a cohesive system of education.

But PACE requires a tremendous amount of work on the part of teachers. While most teachers were very supportive of PACE, it was not uncommon for them to comment on the time and effort required to implement the program, including development of tasks and rubrics as well as task administration and scoring. Survey results indicate that approximately one fourth of respondents did not think that the time and effort required by the PACE initiative was worth the benefits.

Recommendations

Our evaluation found that PACE is currently functioning largely as intended. The recommendations included here call for additional monitoring or minor improvements to current processes. As the system expands, more substantial changes may become necessary, but this evaluation does not indicate a need for major modifications at this time.

Recommendation 1: Monitor and Support District Engagement

PACE should regularly gauge local leadership support and target interventions when district leaders voice concerns or reduce their district's involvement with the program. PACE has done this for one district by helping support a PACE coordinator within the district with experienced consultants. As the program expands, these checks and interventions should become more routinized to ensure that all districts maintain adequate support for the educators implementing the program.

Recommendation 2: Evaluate Effectiveness of Collaboration Methods

PACE should evaluate the effectiveness of the new collaboration methods. While task development meetings with teachers from all Tier 1 districts were becoming unwieldy, one of the attributes teachers reported as positive was having direct input into the program. Findings from the survey indicate that those teachers who had not participated in cross-district collaborations tended to have less favorable ratings of PACE. If the new collaboration methods reduce opportunities for cross-district collaborations, then teachers may perceive less personal value in PACE. Regular monitoring and adjustments can help safeguard against this potential issue.

Recommendation 3: Consider Additional Training/Supports for Teachers Not Directly Involved in Common Task Development

As the percentage of PACE participants directly involved in future common task development decreases (either through including a smaller number of teachers in a meeting or by expanding into additional districts), the professional development and training stemming from those activities may need to be supplemented with additional training.

Recommendation 4: Infuse Equity and Accommodations Training into PACE Activities

Include training on scaffolding and accommodations as part of the regular schedule of PACE activities. Despite quality documentation and training, teachers continued to report uncertainty regarding equity issues, especially for accommodating students with disabilities (SWD). Scaffolding should be available to all students, including SWD, and is currently built into task development activities.

Recommendation 5: Investigate the Impact of Reading/Writing Requirements on Accessibility

Investigate the impact of the reading and writing demands of the PACE tasks on accessibility and student performance. If, for instance, we are interested in knowing whether students

understand and can perform computations associated with a mathematics concept, including a long reading passage to set up the task might interfere with a student demonstrating her math abilities. We recommend examining score patterns among the PACE tasks, course grades, and performance on comparison measures (e.g., Smarter Balanced) for students with and without disabilities as one way to investigate whether the reading and writing requirements may be impacting students' scores.

Recommendation 6: Routinize Timely Reviews of Local Performance Tasks

Evaluate the quality of the locally developed performance tasks and rubrics. As the pool of locally developed tasks expands, it is important to ensure that the tasks and rubrics are of sufficient quality to be used to generate student scores and annual determinations. Teachers report that their skill level in developing these tasks improves with each year of PACE participation, so it stands to reason that the validity and reliability of students' scores should improve with time.

Recommendation 7: Plan for Future Research on the Impact of PACE on Teaching and Learning

The positive impacts of PACE on teaching and learning should continue to be externally verified beyond this evaluation. This may be part of a future research agenda when it becomes possible to evaluate the predictive strength of PACE results on college and career performance. In the interim, it may be possible to compare PACE versus non-PACE student performance on Smarter Balanced assessments, college entrance exams, or other measures.

Recommendation 8: Evaluate the Benefit of Time in Program on Outcomes

As the system expands, it may be possible to investigate the benefits of time in the program on instructional practice and student learning. It would not be surprising if there was a direct correlation between years in the program and benefits, both perceived and realized, on assessment practice and student learning. We would not expect this correlation to be perfect, however. Contextual factors such as district size, fidelity of implementation, and the effectiveness of district or school teams could certainly impact the effects of time in the program.

Recommendation 9: Consider Systematically Recycling Tasks

After the operational year, common tasks may still be used in place of, or in addition to, local tasks. PACE should consider some method of systematically repeating tasks across years as another check on the consistency of scoring. If tasks were repeated, previously scored "check sets" of student work from the prior year could be included in the current year. Score consistency across years could then be checked in a more systematic way.

Recommendation 10: Begin Tracking Performance from Year to Year
The PACE system has the potential for variability across years. Comparing performance across years will allow PACE to see where there are large changes in the proportions of students at each achievement level in any district and to investigate potential reasons for those changes. Early reports to USED comparing student performance on PACE with performance on Smarter Balanced within and across years, as well as the data analyses completed for this evaluation, should be repeated annually. This will allow for continuous monitoring and by investigating anomalous results, PACE may be better able to identify potential threats to reliability and validity.

End Goal: Students are College and Career Ready
Graduating students who are college and career ready is the ultimate goal of PACE. While we have found considerable evidence supporting the interim goals of PACE, it is still too early to evaluate college and career readiness. Once PACE has matured sufficiently and there are students who experienced both the PACE program and at least one year of college or career, we recommend that PACE support an ongoing research agenda to investigate claims under this ultimate goal.

The PACE Story
PACE has lofty ambitions. Ideally, PACE will lead to an integrated competency based education system that is unbound by time in class, age, location where learning takes place, and other artificial methods of categorizing students. Instead, the system would focus on a core set of competencies and move students to the next phase of their education irrespective of when, where, or how the student achieves those competencies. The system will incorporate a large number of ways for students to demonstrate the competencies, and demonstration will take place in an on-demand way, where students can choose to complete a performance event (not necessarily limited to the current task format) when they are ready, rather than on a school calendar. Instruction would be more individualized and targeted toward the next competency the student needs to master. Such a system would represent a dramatic shift from the traditional system of schooling.

PACE, as it is implemented currently, has taken steps toward this ideal. The PACE districts have begun identifying important competencies and they have designed performance tasks to measure those competencies. They have begun to build a bank of high-quality performance tasks that can be drawn on throughout a student's academic preparation. They have moved toward a more integrated system of curriculum, instruction, and assessment. Assessment is being woven into all aspects of teaching and learning, and the consideration of assessment when planning curricular sequence and planning lessons have increased among teachers since joining PACE. Students, even those who don't like PACE, describe the tasks as complex and difficult, but as strong measures of their knowledge, skills, and abilities.

But there is still a long road ahead if PACE is to realize all of its bold goals. First, PACE has to prove to be sustainable. The program is relatively new and a few highly-motivated districts have been instrumental in implementing the system. As new districts join PACE, there will be challenges. Getting new staff members oriented to such a complex new way of educating students takes considerable time and effort. If the experienced teachers train the new ones, they will need time to do so.

The sustainability of PACE will rely on demonstrating that the benefits of PACE continue to outweigh the challenges. For this to happen, PACE will require continuous feedback and improvement as the system expands.

In addition to sustainability, PACE must also prove that it is scalable. New districts are joining PACE, but NH DOE recognizes the considerable challenges involved in scaling PACE statewide as it is currently conceived. PACE is currently adopted at the district level. This is, in part, because New Hampshire districts are extremely autonomous. It is, after all, the "Live Free or Die" state.

In New Hampshire, PACE began with a few highly motivated districts and is expanding carefully. This model seems to be effective for a system like PACE, and if the system is transported outside New Hampshire, other states may want to adopt a similar implementation plan.

NH DOE Response to HumRRO's Recommendations

The PACE leadership team has been working to address the recommendations offered by HumRRO in their very useful evaluation report. We highlight just a few of the activities below.

Recommendation 1: Monitor and Support District Engagement
- ✓ Ongoing
  - The monthly PACE Leadership meetings provide a regular check on district engagement. If any concerns or issues are detected, more directed actions are taken with the district.

Recommendation 3: Consider Additional Training/Supports for Teachers Not Directly Involved in Common Task Development
- ✓ This year
  - PACE Teacher Leaders within districts to better transmit institutional knowledge to all teachers.
  - Investment in online intranet for all PACE teachers to share key documents and resources.

- ✓ Next year
    - ▪ Expanding high quality performance assessment development training within Tiers 2 and 3.
    - ▪ Developing set of common resources for assessment literacy across all three tiers of PACE.

Recommendation 4: Infuse Equity and Accommodations Training into PACE Activities
- ✓ Ongoing
    - ▪ This is a continuing area of work and emphasis for the PACE leadership. All content leads (the teacher leads responsible for task development) have been trained on the use of Universal Design for Learning (UDL) and the use of accommodations and/or other supports are listed on the task templates. Additionally, the project assessment leaders have provided additional training tools on the use of UDL to support increased fairness and accessibility.

Recommendation 6: Routinize Timely Reviews of Local Performance Tasks
- ✓ This year
    - ▪ The NHDOE is now reviewing one major assessment per competency for each PACE course in all of the participating districts.
    - ▪ Contract with Stanford University to review all local performance assessments
- ✓ Next year
    - ▪ NH DOE will provide feedback to districts related to their assessment systems and targeted supports for those districts in need of additional guidance.

Recommendation 7: Plan for Future Research on the Impact of PACE on Teaching and Learning
- ✓ On-going
    - ▪ Annual evaluation of student performance on standardized assessments. 2016 yielded some early indications of success.
- ✓ Next year
    - ▪ Seeking funding from Hewlett to more deeply understand the connection between learning and engagement in complex performance assessments.
    - ▪ Begin to longitudinally track trends in career and college readiness (e.g., persistence in college).

Recommendation 8: Evaluate the Benefit of Time in Program on Outcomes
- ✓ This year
    - ▪ We have begun conducting research into the potential influence of time in PACE on student outcomes. However, due to the non-random inclusion of districts/schools in PACE, we must approach such analyses cautiously.

Recommendation 9: Consider Systematically Recycling Tasks
- ✓ This year
  - ▪ We will be working with the PACE content leads to develop plans for task recycling. This includes relying on the larger number of teachers involved in task development to develop and field test multiple tasks for each subject/grade combination during this year's task development cycle.
- ✓ Subsequent years
  - ▪ We will continue this process of adding to the task bank each year in order to continue to grow the number of tasks available for local use. Such tasks will include the rubrics, teacher materials, and annotate samples of student work. The highest quality tasks will be reserved from the main task bank for potential reuse as operational tasks.

Recommendation 10: Begin Tracking Performance from Year to Year
- ✓ On-going
  - ▪ This has become a regular part of our analyses, both in terms of tracking student longitudinal performance, especially as students move from PACE to the state summative assessment and vice versa, as well as changes in cohort performance at the school and district levels.

New PACE Initiatives

The state of New Hampshire and its local district partners are engaged the in innovative work of designing and implementing a new kind of system of assessments and accountability that builds that capacity of local educators and serves local assessment information needs in order track student progress and inform instruction while also meeting federal requirements for comparable annual determinations necessary for school accountability. Because the ultimate goal of PACE is to scale statewide and become a sustaining system within the state for measuring and improving student achievement and college and career readiness, the PACE leadership is committed to a continuous improvement process. State and district leaders work together to make incremental improvements to the pilot in reaction to formative feedback—such as the recommendations received in the HumRRO report—and new ideas for strengthening the system. The initiatives highlighted below represent the result of on-going efforts to continue to bolster the viability of the PACE system for the years to come.

Designing Custom Technology

New Hampshire is in the process of actively seeking a flexible and custom technology solution that will contribute to the long-term success and sustainability of the pilot. We are actively seeking to work with design partners to build a system that can manage not only the data generated from the assessment system, but the processes that comprise the PACE system itself. Examples of functionality we are looking to include in our technology system are:

- ✓ Collaborative synchronous and asynchronous performance assessment development
- ✓ Warehousing of high-quality tasks along with accompanying administration documentation
- ✓ Distributed double-blind scoring for the purposes of calibration and monitoring inter-rater reliability
- ✓ Secure uploading, storage and sharing of student portfolios of work
- ✓ Data capturing system that works seamlessly with a diverse set of district learning management systems to transfer student-level task scores, competency scores, and teacher judgment scores.

The development of this new technology platform will allow us to ease the data burden on participating districts by automating many of the data collection tasks that are currently completed manually. Additionally, this technology solution will facilitate the scaling of the PACE system across the state in that collaborative, cross-district task development and scoring can be managed virtually, rather than requiring teachers meet in-person for every step of task development.

Improving Access to PACE Resources across the Tiers of PACE
In the trend of personalized learning, the PACE system has designed a system to support schools that are ready to enter into PACE through a variety of pathways. The supports offered to Tier 3 districts are now fully customizable to the district needs, with districts choosing to participate in as many of the working groups and resources available to them as they wish. Each of the following New Hampshire PACE-associated activities has a number of PACE leadership members working to curate and disseminate resources to support districts in moving toward implementing performance assessment for competency education. Any district leveraging these resources is now considered to be a Tier 3 PACE district.

- PACE CTE
- PACE Arts
- School ReTool Leadership Engagement
- Competency Education & Competency Writing Support
- Local Development of Performance Tasks
- Student Co-Developed Performance Tasks
- K-2 Performance Assessment
- Multi-grade Classrooms (No Grades/No Grades: NG2)
- Student Demonstration & Exhibition of Learning
- Work Study-Practices (Skills & Dispositions Learning and Assessment)
- 65/25 & Career Pathways Model

To improve the quantity and quality of performance assessment training received by Tier 2 districts in PACE, teachers in those districts are now invited to participate in all of the Tier 1

professional development activities including the Summer Institute and common task development. Tier 2 teachers will be fully integrated into the Tier 1 supports, with the only difference being they do not yet implement the PACE system for the purposes of accountability.

In addition to the lead role that all teachers play in the development of the assessment tasks, teachers who emerge as peer leaders are given additional training in performance assessment literacy and facilitation that enables them to take the role of content lead, peer facilitator and lead teacher, both in their own schools and district and statewide. This group is almost doubling in this coming year. In this way, New Hampshire is supporting a new generation of leaders in its educational community. Teachers from Tier 2 schools and districts will be invited to participate in a year of beginning teacher leader training prior to becoming an active content lead.

PACE is supported by expertise from the NH DOE, the Center for Assessment, and The New Hampshire Learning Initiative (NHLI). In addition to managing the foundation support of PACE, staff from the NHLI has doubled this year to provide expertise in leading a variety of the PACE working groups as well as providing collaborative coordination and design of the PACE performance task development process.

As we continue to expand the number of Tier 1 districts implementing the full PACE assessment and accountability model, we strive to maintain and improve the quality of services offered. We believe the new system of supports offered under the PACE umbrella in the two lower Tiers will improve district readiness for entering Tier 1.