

*North Star: A Development Project*

**Absolute Priority:** 3) Innovations that Complement the Implementation of High Standards and High Quality Assessments.

*North Star* meets the following three **competitive preference priorities**:

**5) Improve Early Learning Outcomes** through the development of unique, digital, college-ready elementary curriculum and assessments. *North Star* develops critical and creative thinking skills and builds academic success skills required to be a successful life-long learner. Core content and the arts are integrated with thinking and academic success skills. Through cross-curricular connections, students will more readily recall concepts and skills and transfer them to new learning. *North Star* will unleash the natural curiosity of young children and build the habits that mark the academic mind—persistence, questioning, and collaboration. **6) Support College**

**Access and Success** by [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] markable AP examination results, a strong

indicator of college readiness and college graduation. **7) Address the Unique Needs of Students with Disabilities and Limited English Proficient Students** by [REDACTED]

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## **A. Need for the Project and Quality of the Project Design**

### **(1) The extent to which the proposed project represents an exceptional approach**

The need to prepare more students for college and career success, especially students from traditionally underserved communities is well documented. Through an 11-year process of systemic reform, MCPS has learned that the habits of teachers and students that produce a positive academic identity can serve as a *North Star* to guide a student through a lifetime of learning. MCPS is now placing these critical and creative thinking skills and academic success skills at the center of a realignment of its already well-tested rigorous elementary curriculum. By partnering with Pearson, LLC, the world's leading publisher of educational content and assessments, MCPS will be able to standardize its high level curriculum for use in districts across the country and develop assessments that support and measure the elusive habits that contribute to a student's academic identity.

In MCPS academic identity includes a belief in one's readiness for college, but more importantly, academic identity includes the marketable work habits, knowledge, and thinking skills that will carry students forward in any direction they choose. A *North Star* identity is not solely for those who choose a college path. Sadly, many students are woefully unprepared to fulfill the vision of college success even if that is their post-high school vision. Of the approximately 75 percent of the nation's high school graduates who enter college, nearly half are required to take one or more remedial courses (College Board, 2009a). The problem is worse among African American and Hispanic students (Maryland Higher Education Commission, 2008; National Center for Public Policy and Higher Education, 2008; Von Secker, 2008).

MCPS, a majority minority school district with a large and increasing percentage of poverty-impacted students, is among the nation's leaders in preparing students for college (see

Figures 1-3 in Attachment B, Appendix H). AP examination participation and performance can be considered a proxy for college and career readiness and are two of the strongest predictors of college coursework preparation and degree completion (Byrd, 2007; Camara and Michaelides, 2005; Geiser and Santelices, 2004; Morgan and Ramist, 1998). MCPS' analysis of data on recent graduates from the National Student Clearinghouse shows a strong relationship to AP performance and future college graduation. However, even in a district that graduates African American and Hispanic students who outperform the national average for all AP exam-takers, a persistent college completion gap remains. (See Figures 4 and 5 in Attachment B, Appendix H.)

Closing achievement gaps in the primary grades, and monitoring these gaps throughout elementary and middle school is essential for preparing all students to be successful in college and the workplace (ACT, 2008). In an 11-year effort, MCPS attacked the gap in college and career readiness through systemic reforms, including an early childhood initiative that reduced class sizes for schools most impacted by poverty; the implementation of a nationally recognized professional growth system; the breaking down of institutional barriers while expanding AP courses and IB programs; revising the curriculum to prepare *all* students for AP and IB level skills and knowledge; and through an aggressive parent information campaign on the *Seven Keys to College Readiness* that lay out the milestones for students to reach in order to be college-ready. See the attached *Seven Keys to College Readiness* (Attachment C, Appendix H) and the MCPS strategic plan, *Our Call To Action: Pursuit of Excellence* (Attachment D, Appendix H) for detailed processes, goals, and milestones that drove this systemic reform effort.

MCPS carefully studied AP and IB courses and the academic characteristics of students who are successful in advanced level courses and found that AP and IB courses teach students to use knowledge and concepts flexibly. The idea is for students to be producers of knowledge

rather than just consumers of knowledge. Objectives from a variety of AP and IB courses include the following skills: engage in intense discussions; learn to write persuasively; sharpen problem-solving skills; develop study habits necessary for tackling rigorous coursework; be part of a community of learners, solve problems collaboratively; interpret critical perspectives; analyze complex sets of data; determine reasonableness of solutions; and understand connections among a variety of functions. The MCPS curriculum in the core content areas was backmapped with these thoughts in mind. Through these efforts student achievement increased for all groups, but the gap persisted.

MCPS redoubled reform efforts to focus on specific, yet complex questions, such as, “Why was the gap closing at kindergarten but returning in higher grades?” A survey of teachers and administrators indicated that key elements of the curriculum across content areas were not attainable in the time available. Specifically, the skills and knowledge developed in science and social studies, which are key to student comprehension of non-fiction texts and their ability to make meaningful connections to the uses of mathematics, was being shortchanged. Further investigation found that teachers had little time to integrate the many required topics through the course of a typical school day. Teachers also expressed frustration with using curriculum guides that came in bulky binders for each content area. Parents have consistently requested more instructional emphasis in science, social studies, physical education, and the arts. During this same time period, MCPS asked principals and teachers to identify the academic characteristics of students who do well in challenging coursework at the elementary level, despite the limits of instructional time. What set them apart? Students successful at advanced work were seen as being able to make connections among ideas and concepts, generate original solutions to problems, and demonstrate persistence when faced with a challenge.

The result of these reflections was the genesis of the Online Elementary Integrated Curriculum (OEIC). Through an iterative process of research, piloting curriculum, professional development, and stakeholder feedback, MCPS found four major blocks to closing the advance-level learning gap in elementary school: (1) the difficulty lower achieving students experience in transferring knowledge and skills among contents; (2) the insufficient teacher knowledge of core content and the role of thinking skills in making connections among contents; (3) the insufficient time for collaborative planning due to the workload teachers have for planning across contents; and (4) insufficient instructional time for content areas other than reading and mathematics. It is important to note that other significant factors have been documented that contribute to the gap in advanced-level work; however, since many such as poverty are beyond the typical control of schools, MCPS chose to focus on school factors that have shown promise in correcting outcomes that may otherwise seem predetermined by race/ethnicity or income.

In 2008 MCPS began development of the OEIC by consulting research on effective integrated curricula and thinking skills development. The result is a college-ready trajectory curriculum for all students unified by critical and creative thinking skills and academic success skills that are threaded through the disciplines. (See attached Thinking Skills and Academic Success Skills Framework for the research, rationale, and scope and sequence [Attachment E, Appendix H].) MCPS did not choose a thematic organizational model due to the limits themes place on meeting content standards in each of the disciplines.

In 2009 MCPS field-tested the kindergarten beta version of the OEIC in 90 of its 131 elementary schools (See Attachment F, Appendix H for screen shots). Key features include an online learning community, a preplanned integration of contents via thinking and academic



MCPS seeks i3 funds to fully develop this innovative curriculum model [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Key to this

expansion is Pearson, LLC. Pearson provides decades of successful assessment and professional

development experience, not to mention the leading network for textbook and instructional

resource adoption. Through this partnership with Pearson, LLC the OEIC [REDACTED]

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[REDACTED]

[REDACTED]

[REDACTED]

**(2) Project goals and an explicit strategy**

***North Star Goal: Increase the number of graduates in MCPS and across the nation who are college ready and eliminate the disproportionality in college-ready graduates by race/ethnicity or income.***

The attached Project *North Star* Objectives, Strategies and Timeline (Attachment G, Appendix H) includes the detailed strategies to achieve each of the objectives outlined below. This attachment also includes the rollout year for each strategy and individuals and teams responsible for completing the strategy.

**Objective 1: Develop a Kindergarten through Grade 5 curriculum and assessments that integrate the four core subjects, along with the arts, around critical thinking and academic**

success skills that are hosted through an online learning community and can be adopted by school districts nationally.

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**Objective 3: Increase percentages of traditionally underrepresented students performing at advanced levels along the *Seven Keys to College Readiness*.**

With the support of i3 funding MCPS will be able to roll out the curriculum and assessments to 62,161 elementary students and 5,560 elementary level teachers, paraeducators, and administrators. MCPS and Pearson, LLC will scale up this project to a total of 20 additional school districts during the grant period. Pearson, LLC projects a total of 500,000 students being impacted by this unique project within five years.

As indicated in the Objectives, Strategies, and Timeline attachment, one measure of the success of this project will be the increase of the number of students who are achieving at advanced levels along the *Seven Keys to College Readiness* in MCPS and the equivalent assessments in partner districts. As the curriculum is implemented, more African American, Hispanic, and students from low-income families will be prepared for and receive advanced-level instruction on the route to college readiness.

**B. Strength of Research, Significance of Effect, and Magnitude of Effect**

**(1) *Research-based findings that support the proposed project***

A growing body of research justifies the design of *North Star's* curriculum (Siegler, 1998; Westwater & Wolfe, 2000; Fogarty, 2002; Paul & Elder, 2006; Partnership for 21st Century Skills, 2007) its instructional strategies (Jass Ketelhut et al., 2010; Papadouris & Constantinou, 2010; Mitchell, 2010) and studies connecting *North Star's* features to student achievement in the Science, Technology, Engineering, and Mathematics (STEM) disciplines (Martin & Kasmer, 2009; Besson, 2010; Ismail, et al., 2010; Mitchell, 2010; National Council of Teachers of

Mathematics, 2009). Pirnay-Dummer (2010) and others have acknowledged the importance of developing assessments to accurately measure growth in critical and creative thinking skills.

Von Secker, Zhao, Liu, and Powell (2009) established the reliability of the *Seven Keys* benchmarks as indicators of college readiness after examining studies for U.S. students in general and analyzing patterns of achievement outcomes for MCPS students specifically. Their findings supported earlier research that showed the correlation between advanced reading levels and achieving at advanced levels in subsequent grades (Schatz & Gheen, 2007; Schatz, Gheen, & Rethinam, 2007; Scammacca & Dodd, 2005).

The strong and positive correlation between AP examination scores and college degree attainment has been shown by Dodd et al. (2002); Dougherty, Mellor, & Jian (2006); Ewing, M. (2006); Hargrove, Godin, & Dodd (2008), Scammacca & Dodd (2005); Dougherty, Mellor, & Jian (2006), Morgan & Klaric (2007) and others. Von Secker and Liu (2010) showed that AP success has an even greater impact on African American and Hispanic students. Reference citations are included in Attachment A and E in Appendix H.

***(2) Promising results from prior limited implementation.***

In 2009 MCPS researchers Modarresi and Wade (in press) examined the impact of the integrated curriculum on the reading performance of 900 kindergarten students at 20 MCPS elementary schools, 10 that implemented the integrated curriculum and 10 that implemented the traditional MCPS curriculum. All students took the MCPS Assessment Program Primary Reading (MCPSAP-PR), a research-based assessment that measures mastery of reading concepts and skills, e.g., accuracy oral and written comprehension at selected text levels.

***(3) Magnitude of the effect on improving student achievement or student growth.***

Students' scores were compared on the winter reading assessment for 10 treatment schools and 10 non-implementing schools. Students attending the 10 treatment schools (implementing the *North Star* integrated curriculum) were significantly more likely ( $p=0.02$ ) to meet the May reading benchmarks (Text Level 4) on the winter reading assessment than were students who attended control group schools, after controlling for demographics, service receipt, and previous test results. At the treatment schools, students receiving special education services were 60 percent more likely, Asian Americans 40 percent more likely, and African American 30 percent more likely to meet the end-of-year reading benchmarks in winter than were students in the comparison schools. The same analyses revealed that Hispanic students, students receiving Free and Reduced-price Meals System (FARMS) services, and those receiving ESOL services in treatment schools were 30 percent more likely to meet end-of-year kindergarten reading benchmarks in winter than their peers attending the comparison schools while white students were 10 percent more likely to meet the benchmarks.

These findings clearly demonstrate that the *North Star* curriculum will increase the likelihood that students will score at the advanced levels associated with the *Seven Keys to College Readiness* by the end of kindergarten (Text Level 6), end of Grade 1 (beyond Text Level 16), and the end of Grade 2 (beyond Text Level M).

### **C. Experience of the Eligible Applicant**

#### ***(1) Past performance of applicant in projects of the size and scope proposed***

As detailed in the recent book authored by researchers at Harvard University, *Leading For Equity: The Pursuit of Excellence in the Montgomery County Public Schools*, MCPS has a proven track record of implementing complex systemic reforms that result in positive outcomes for students. Two notable projects, a systemic revision of all curriculum based on a college-ready

trajectory for all students and the development of new professional growth systems, demonstrate MCPS' capacity to bring high-quality reform to scale.

**Curriculum Revision Process.** In 2000, Phi Delta Kappa, International completed an audit of the MCPS mathematics curriculum and found the absence of a consistently implemented curriculum and ineffective teaching practices and instructional leadership in mathematics. As a result of the audit findings, numerous staff members in the curriculum office were realigned to provide leadership for the design and implementation of an updated curriculum by 2002. The goal was to have a comprehensive mathematics curriculum with a scope and sequence for each individual grade, indicating what students need to know and be able to do. The curriculum was aligned with state, national, and international standards and included a continuous cycle of instruction and assessment to monitor students' learning and inform instruction. Professional development was incorporated into the curriculum implementation plan to support teachers and administrators to meet the needs of diverse learners. A new staff development program and new teacher professional growth system, already in place at the time, were addressing issues of performance standards on an individual basis.

A 30 member multistakeholder instructional planning team, including teachers, principals, parents, employee association representatives, and central office staff members oversaw the revision of the curriculum and the instructional program over three years. The Pre-K–Grade 8 curriculum frameworks for English/language arts, mathematics, social studies, and science were approved by the Montgomery County Board of Education. To validate the alignment of the English and mathematics frameworks with state and national standards, MCPS contracted the College Board who noted a strong alignment of skills and content representing

backmapping from AP and IB courses. Clear evidence of a continuum of skill development and content knowledge was cited.

As grade-level curriculum was rolled out over a period of three years, instructional guides and formative and summative assessments were implemented and the required professional development for all 11,500 teachers and more than 500 administrators was provided during the summer and throughout the school year. Local school staff development teachers and central office support teams provided job-embedded professional development to schools throughout the year, significantly reducing any variability in instruction.

**Professional Growth Systems.** Another critical element to MCPS' success has been the development of a comprehensive professional growth system (PGS) for all employees. In 2000, in collaboration with its three employee associations, MCPS embarked on an ambitious improvement strategy to transform schools and offices into professional learning communities through PGS implementation. The PGS provides a systemic approach to hiring, inducting, and mentoring, along with professional development, support, and the evaluation process. The training and development programs for teachers are research-based, job-embedded, and results-oriented.

This comprehensive initiative began with the development of a PGS for teachers composed of six elements: (1) A common language and framework for teaching gained through the courses *Studying Skillful Teaching and Observing* and *Analyzing Teaching*; (2) A standards-based evaluation for teachers based on the six performance standards from the National Board for Professional Teaching Standards; (3) A focus on continuous improvement of professional skills through job-embedded professional development supported by a staff development teacher in each school; (4) A continuous examination of personal professional growth through individual

professional development plans; (5) A Peer Assistance and Review (PAR) program, which includes a PAR panel and consulting teachers to support teachers new to teaching and underperforming experienced teachers, as well as a mechanism to remove them from the classroom should they fail to improve their teaching; and (6) Staff development time provided by substitute teachers to support job-embedded professional development.

The plan was rolled out over three years to all 11,500 teacher-level positions in more than 190 schools and central offices. The PGS Implementation Team composed of key district leaders, representatives of the three employee associations, and members of Research for Better Teaching (an organization that provided technical assistance to the district throughout the development and implementation of the teacher PGS) served as a steering committee, making corrections to ensure that the system remained true to its goal.

Several evaluation studies of the implementation were conducted by Gross and Alban (2001) and Koppich (2004). Koppich reported through surveys that 92 percent of elementary, 96 percent of middle, and 100 percent of high school administrators concurred that the implementation of the PGS was moving the district in a positive direction, citing time for teachers to plan together, the staff development teacher program, and the use of staff development substitutes as the three most important features of the PGS. When teachers were asked the same question, 78 percent of elementary, 75 percent of middle, and 66 percent of high school teachers agreed. In a system the size of MCPS, to have the vast majority of professional staff believing that the district is moving in the right direction is a remarkable achievement. Koppich cited that administrators and teachers report a stronger and more consistent use of data to drive instruction, and the PGS has increased use of specific instructional practices.

Over the past ten years, nearly 400 underperforming teachers have been dismissed or chose to retire or resign after being identified as underperforming. Some teachers in PAR resign prior to a PAR panel recommendation for dismissal. In summary, the teacher PGS is promoting the evolution of professional learning communities in MCPS schools where student achievement will not be predicted by race/ethnicity, socioeconomic status, or language differences.

Following the successful implementation of the teacher PGS, the Administrative and Supervisory PGS was developed and implemented in 2003–2004 with 50 principals. Full implementation occurred two years later in 2005–2006 for all 800 school-based and central office administrators.

The Supporting Services PGS was the third and final program to be developed and implemented, beginning in July 2006 with full implementation during 2009–2010. This group includes about 8,000 school-based and central services employees who comprise almost 40 percent of the district’s workforce, in approximately 500 different position classes.

The PGSs have been studied by private organizations, school districts, and highlighted in the media both nationally and internationally as models of district/employee association collaboration, and are seen to significantly contribute to the district’s outstanding academic performance and organizational results.

***(2) Data demonstrating closure of the achievement gap and other significant improvement.***

**Kindergarten Reading.** By 2006, 80.9 percent of all students met or exceeded the Text Level 4 benchmark by the end of kindergarten. For Asian American and White students, the percentage meeting or exceeding the benchmark was 86.2 and 85.3 percent, respectively. African American and Hispanic students met the benchmark at 76.7 and 71.7 percent respectively. In 2009, 91.1 percent of all students met or exceeded the benchmark. White and Asian American

students met the benchmark for 95.7 and 95.3 percent of students, respectively. African Americans met or exceeded the benchmark for 88.5 percent of students and 83.1 percent of Hispanic students met or exceeded the benchmark. While gains for all students were 10.2 percentage points over a three-year period, noteworthy were the gains for ESOL students, 16.1 percentage points, and for students receiving FARMS services 13.0 percentage points.

**Grade 5 Mathematics.** Grade 5 student achievement on the 2003 Maryland School Assessment mathematics shows that 84 percent of Asian American, 82 percent of White, 48 percent Hispanic, and 43 percent of African American students scored proficient or advanced. In 2009, all subgroups improved significantly—Asian American students (96%), Whites (94%), Hispanics (76%), and African Americans (72%). There was an increase of 12 percentage points for Asian American and White students from 2003 to 2009. African American students increased by 29 percentage points, and Hispanic students' scores increased by 28 percentage points over the same period of time.

**Grade 8 Algebra Completion.** In 2001, 43.1 percent of all Grade 8 students completed Algebra 1 in Grade 8. Performance by race/ethnicity revealed that 60.6 percent of Asian American, 55.5 percent of White, 21.2 percent of African American, and 16.4 percent of Hispanic students completed the course. In 2009, 65.5 percent of all Grade 8 students completed Algebra 1 by Grade 8, with 84.6 percent Asian American, 80.1 percent White, 55.5 percent African American, and 45.8 percent Hispanic students completing the course. Gains from 2001–2009 were significant for all racial/ethnic groups. Scores for African American and Hispanic students increased by 34.3 and 29.4 percentage points, respectively. Scores for Asian American and White students increased by 24.0 and 24.6 percentage points, respectively.

**Advanced Placement Examination Participation and Performance.** A historic high of 28,575 AP examinations were taken by MCPS students in 2009. Students scored a 3 or higher on 72.3 percent of AP examinations taken, compared with 61 percent for Maryland and 57 percent for the nation. In 2009, nearly 48 percent of AP examinations taken by MCPS African American students scored a 3 or better, significantly higher than 28 percent for Maryland and 25.2 percent for the nation. MCPS African American students represent 10% of the total African American public school population in Maryland, but had nearly 40% of the AP examinations that scored a 3 or higher. In 2009, 64.4% of MCPS graduates took at least one AP examination, compared with 26.5% nationally and 40% in Maryland. See Figures 1 to 3 of Attachment B in Appendix H for more details.

**Graduation Rate.** With a graduation of 80.7 percent, MCPS tied for first among the nation's 50 largest school districts according to *Education Week's* June 2009, *Diploma Counts*.

**Highly Qualified Teachers.** Of the 20,182 core academic subject classes taught by MCPS teachers as of December 1, 2008, 93 percent, (18,957) were taught by teachers designated highly qualified and 6.1 percent (1,225) were taught by teachers who were not yet designated highly qualified. The percentage of core academic subject classes taught by highly qualified teachers increased by 19.3 percent since December 1, 2004, when 74.6 percent of core academic subject classes were taught by highly qualified teachers.

**National Board Certified Teachers (NBCT).** In 2009, MCPS had 453 NBCT, far surpassing all other counties in Maryland. MCPS also ranks among the top 20 districts in the nation in the number of new and cumulative total of NBCT.

#### **D. Quality of the Project Evaluation.**

*(1) The extent that methods of evaluation are appropriate to project's size and scope*

*North Star's* evaluation will use a multi-method design guided by the What Works Clearinghouse's *Procedures and Standards Handbook* (December 2008). The major goals of the evaluation will be to examine the extent to which the *North Star* project achieved its objectives as described in the project design (Attachment G, Appendix H). Through a competitive bidding process, MCPS will hire a qualified evaluator to provide semiannual informal reports, annual reports covering implementation and outcomes, and a summative report at the end of the 36-month grant period.

A quasi-experimental design will be used to guide the analyses of mathematics and reading achievement along with indicators related to the *Seven Keys to College Readiness* (MCPS, 2009). All reports on students will be disaggregated into standard demographic variables and will use the 2009–2010 school year as the baseline. In the project's second and third years, a value-added outcome study will be conducted to measure effects of the new integrated curriculum and online professional development on student achievement. The outcome measures will include district assessments, as well as assessments integrated into *North Star's* design that measures the development of critical/creative thinking and academic success skills along with curriculum content. Analysis of covariance (ANCOVA) will be employed to compare achievement gains of all students and subgroups of students across two consecutive years. Logistic regression will be used, as appropriate, to test the effects of dichotomous outcome measures between successive student cohorts. Propensity scores based on initial abilities and other variables will be calculated and divided into five categories and incorporated as categorical covariates in each of the statistical models to control for preexisting differences among the students. As appropriate, covariates may include teachers' qualification status. Yearly project effect sizes for each grade level will be computed from the statistics calculated by ANCOVA and

Logistic regression. Measures of the impact of professional development on teacher knowledge and practices will be based on structured surveys, interviews, and classroom observations, per Guseky (2000); and Bartram and Gibson (1999). In addition to comprehensive implementation and outcome studies across schools, case study research will be conducted for in-depth analyses of the project's implementation and outcomes.

**(2) *Extent that evaluation provides high-quality implementation data...***

Using methods described by Greene, Caracelli, and Graham (1989), *North Star's* formative evaluation reports will be based on surveys, classroom observations, individual and focus group interviews, and archival research. These reports will address questions such as:

- (1) Are the integrated curriculum activities and/or features being disseminated as proposed?
- (2) Are the implemented curriculum project features consistent with the proposed features?
- (3) Are the integrated curriculum instructional practices developing the skills that benefit students and closing the achievement gap? and
- (4) What challenges or unanticipated outcomes have been identified through the project's implementation? Evaluators will share data collected with project staff to allow for mid-course corrections in a timely manner.

**(3) *Extent that evaluation suffices to facilitate further development, replication, etc...***

To facilitate the project's replication and testing in other settings, qualitative and quantitative analyses of project implementation and outcomes will be included in annual reports. The same data collection methods will be used across time with different cohorts of students in multiple districts to see if the findings are replicable in different districts. For the quantitative measures, descriptive statistics will be used to summarize close-ended survey items, classroom observations, and training information that demonstrate accordance between designed and

implemented project components, instructional practices/strategies, and the status of all major project activities.

Furthermore, a description of the project's features/components that were unique and/or effective will be identified for future replication. Examples of questions that districts replicating the project may deem salient to their efforts may include: (1) How consistent was the level of project implementation across grade levels and schools? (2) What strategies were most/least effective in achieving the project's goals and objectives? (3) Did the project improve student achievement at the each grade level? and (4) Were there differential patterns of achievement across grade-levels, student subgroups, and schools?

*(4) The extent to which the proposed plan included sufficient resources.*

[Redacted content]

**E. Strategy and Capacity to Further Develop and Bring to Scale**

(1) [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

(2) [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

(3) **Replication** [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

(4) **The per student cost** [REDACTED]

[REDACTED]

[REDACTED]

(5) **MCPS staff will disseminate information** [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

## **F. Sustainability**

### ***(1) Extent to which applicant has resources as well as support from stakeholders***

MCPS employs experts in curriculum writing and teacher training. While a core group will be detailed full time to the project, many other staff will assist on all phases of the project (see Organization Chart, Attachment H, Appendix H). The MCPS Office of School Performance will help the *North Star* project staff to successfully pilot test the program in schools, working directly with teachers and school administrators to support project objectives, provide data about student performance and teacher participation in professional development, and keeping project staff apprised of issues that arise during implementation. MCPS also has a staff of research experts to oversee and support the projects outside evaluator. Finally, staff in the MCPS Department of Management, Budget, and Planning and the Office of the Controller will monitor the use of grant funds, ensuring that all financial reports are submitted on time and accurately accounting for outside funds contributed to the project. Teachers and school administrators have been enthusiastic about the design of the online integrated kindergarten curriculum and have requested additional grade levels. The district's Curriculum Advisory Assembly, a multistakeholder group of internal staff and parents and community members, reviewed the integrated curriculum design and provided positive feedback on the integration of all core content areas, the arts, and thinking and academic success skills. In two public meetings, the Montgomery County Board of Education indicated their support for the online integrated curriculum.

### ***(2) Potential and planning for the incorporation....at the end of the grant***

Project *North Star*'s objectives are at the nexus of the curriculum and professional development strategies for the next decade of MCPS system reforms. MCPS will sustain the

program's momentum and impact in the following ways: (1) *North Star* curricular materials will be continuously refreshed and enhanced as teachers contribute new examples, ideas, and supplemental materials to what is currently available; (2) MCPS technology staff will launch new materials on the online platform and keep the system operational, monitoring its use by teachers; (3) MCPS will use its local school staff development teacher to focus on effective implementation of *North Star* and teacher use of the collaborative online learning community; (4) MCPS evaluation and research staff will continue to analyze data points along the *Seven Keys* trajectory for changes in student performance attributable to the integrated curriculum.

Through its work in other large school districts, Pearson, LLC has demonstrated its ability to sustain the program outside of MCPS and provide the ongoing implementation support that other districts would need. Pearson, LLC officials have committed their company's support of this project because their work in school districts across the country has shown clearly that *North Star* will indeed provide the tools and strategies that teachers need to enable all students to pass the challenging AP/IB and STEM courses that prepare them for college. Pearson, LLC's national business development and support personnel will carry this message across the country and provide the support that Local Education Agency's (LEA) will need to replicate the success that MCPS achieves.

**G. Quality of the Management Plan and Personnel (up to 10 points).**

*(1) Adequacy of management plan to achieve objectives on time and within budget*

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

*(2) Qualifications of project director and key personnel to manage project...*

**Erick Lang**, MCPS associate superintendent in the Office of Curriculum and Instructional Programs will be *North Star's* program manager. Mr. Lang has over 14 years of successfully managing grant-funded programs affecting hundreds of students and teachers across the county. **Martin Creel**, director of Enriched and Innovative Programs, as direct supervisor of the Integrated Curriculum Development Team's leader will guide and monitor the project. Mr. Creel has an outstanding record of implementing innovative instructional programs. **Theresa Cepaitis** will lead the Integrated Curriculum Development Team for all three years of the project. For more than 10 years, Ms. Cepaitis has supervised large, technology-rich, curriculum and professional development projects and mathematics instruction in MCPS. **Karen Dwyer**, supervisor of Quality Assurance for the Department of Strategic Project Management and Planning, is responsible for aligning technology-related initiatives.

**Renee Foose**, director of the Office of Shared Accountability, will ensure that the evaluator receives what is needed to develop an objective and accurate assessment of the project's implementation and outcomes. Dr. Foose supervises a staff of 45 data collectors, auditors, and quantitative research experts.

Pearson, LLC's Executive Vice President, **Emily Swenson**, will oversee the project for Pearson. Formerly the president of *Weekly Reader* and CEO of Children's Television Network, Ms. Swenson is responsible for approximately \$900 million in revenue per year. Pearson, LLC's project lead, **Betsy Niles**, will work closely with Terry Cepaitis to coordinate the work of Pearson, LLC and MCPS. Ms. Niles has managed product development projects for 15 years at Pearson, LLC, including a major digital writing program. Program manager **Julia Healy** will monitor progress and quality. Ms. Healy has worked on large curriculum development projects, including a \$90 million project for the Chicago Public Schools. Pearson, LLC's director of Professional Development, **Claire Hollenbeck**, will ensure that the embedded training and professional development within the program supports teachers in implementing the program with fidelity. Ms. Hollenbeck has 20 years of success in the publishing industry and has worked on multiple product lines. **Richard Heater** and **Fred Donnelly** will bring the project to scale across the U.S. Mr. Heater will be in charge of product marketing and distribution, Mr. Donnelly will manage all financial aspects of national distribution. Mr. Heater manages multiple product lines whose combined revenue targets exceed \$180 million. Mr. Donnelly has 20 years experience in educational publishing finance and has provided financial support for programs budgeted at \$1–150 million.