

Office of the Superintendent of Schools
MONTGOMERY COUNTY PUBLIC SCHOOLS
Rockville, Maryland

November 8, 2011

MEMORANDUM

To: Members of the Board of Education
From: Joshua P. Starr, Superintendent of Schools
Subject: Curriculum 2.0 Implementation Update

Introduction

In an era of narrowing curriculum, Curriculum 2.0 holds the promise of broadening instruction to engage the whole child. Ten subject areas at the elementary level—art, health education, information literacy, mathematics, music, physical education, reading, science, social studies, and writing—have been refocused around the skills students need for a lifetime of learning. Three major features outline the promise of Curriculum 2.0:

- **New internationally driven standards in mathematics, reading, and writing**
Mathematics, reading, and writing are based on new strengthened standards, also called the Common Core State Standards (CCSS). These standards, adopted by Maryland last year, describe the content that students must learn at each grade level and are designed to help U.S. students compete favorably with students around the world.
- **A renewed focus on teaching the whole child**
The curriculum provides more instructional focus on subjects such as the arts, information literacy, physical education, science, and social studies by blending them with mathematics, reading, and writing. Students will receive instruction across all subjects in the early grades.
- **Integrated thinking, reasoning, and creativity**
The curriculum is designed to do an even better job of teaching Montgomery County Public Schools (MCPS) students the academic, creative, and critical thinking skills that build confidence, generate success, and prepare children for a lifetime of learning.

Implementing a powerful initiative during a time of diminishing resources creates several challenges. The *Transition Team Report* identified alignment of resources, communication, ability to support schools, and professional development as challenges to reaching a consistently

high level of implementation. This memorandum updates the status of implementation and plans for expansion, describes staff implementation concerns, outlines steps taken to resolve concerns so far, summarizes parent feedback, and discusses changes in mathematics.

Background

MCPS' curriculum frameworks in English and reading/language arts, mathematics, science, and social studies were approved in 2001, setting a stage for systemwide curriculum reform. In 2006, frameworks were approved in art, health education, music, and physical education, following Maryland State Department of Education's (MSDE) approval of standards in those areas. In 2007, as part of the curriculum review process, work began to integrate the existing MCPS curriculum at the elementary level. MCPS responded to research and ongoing stakeholder feedback, including comments from parents, to design a new model for curriculum implementation that included the following:

- Creative and critical thinking, as well as academic success skills
- Integrated curriculum to maximize instructional and planning time
- Small group instruction in reading and mathematics
- State curriculum requirements in all content areas
- An all-electronic platform for disseminating curriculum

The Integrated Kindergarten Curriculum was developed in 2008, and was piloted in 90 schools during the 2009–2010 school year. Last year, the Elementary Integrated Curriculum (EIC) was voluntarily implemented in Kindergarten and Grade 1. Feedback from teachers, parents, and administrators was collected and changes were made based on that feedback. The new integrated model provides teachers with instructional strategies and resources for all content areas including reading, writing, mathematics, science, social studies, art, music, physical education, health education, and information literacy. Professional development resources also are included for all subject areas. The content for all subjects in the EIC is sequenced and organized to maximize the natural connections among content areas. In addition, during each marking period, the work in the integrated curriculum is tied together through the study of critical or creative thinking skills and academic success skills.

In June 2010 MSDE adopted the internationally-driven CCSS in mathematics, reading, and writing. These standards have been incorporated into the Grades K–2 curriculum and are the standards for the Grades 3–5 curriculum now under development. The mathematics CCSS are the most significant change for MCPS, as detailed later in this memorandum. The CCSS in reading are similar to the previous MCPS goals for elementary reading, though some changes have been required to create a balance of fiction and nonfiction reading. The CCSS in writing provide a more detailed development of writing and expands writing well beyond the short answer responses found on many standardized tests. In the summer of 2010 the EIC was redesigned to support the CCSS writing standards by treating writing as a content area of its own—separate from the traditional elementary reading/language arts arrangement. In the setting of an integrated curriculum this allows students to deepen their writing skills in multiple content

areas and for multiple audiences and purposes. In addition, the incorporation of Information Literacy standards has created a renewed emphasis on writing and researching using 21st Century literacy skills.

Managing change requires attention to the details of the process, but more importantly, it requires attention to the individuals involved in the change. MCPS has made significant changes in curriculum over the last 10 years. Instead of upgrading isolated academic subjects, EIC integrates thinking and academic success skills across all disciplines. Even positive changes create uncertainty and confusion. Implementing the new curriculum with a high degree of fidelity will take time, professional development, and support. As William Bridges noted in *Managing Transitions*, “It’s fine to talk about the vision or the big picture, but remember that most people live at a much more practical level that is full of details. That is the level at which they are going to either contribute to the change or get in the way of it.” MCPS will spend this year studying how the upgrades are being implemented, making adjustments based on feedback, and supporting staff as they deal with the myriad details that comprise our elementary students’ experience.

Status of Implementation and Plans for Expansion

The first marking period for Grade 2 was opened and available to all staff in April 2010, marking the earliest MCPS has released a major curriculum change before implementation. All marking periods for Kindergarten and Grade 1 were available earlier due to their use in the pilot years. In July 2011, MCPS renamed EIC to Curriculum 2.0 and implementation was expanded to include all Kindergarten and Grade 1 classrooms. Curriculum 2.0 also was available for voluntary implementation in Grade 2. The 25 elementary schools implementing the electronic report card were required to implement Curriculum 2.0 in Grade 2 to minimize the number of different types of report cards at the elementary level. In all, 119 (out of 125) elementary schools are implementing Curriculum 2.0 in Grade 2.

EIC was changed to Curriculum 2.0 to clearly communicate that MCPS is upgrading its strong and successful curriculum. Many upgrades are included, such as new internationally driven standards in mathematics, reading, and writing; a renewed focus on teaching the whole child; and the integration of thinking, reasoning, and creativity for a lifetime of learning.

Another upgrade for staff members is the development of the Instruction Center (IC) on *myMCPS*. This technological innovation contains all curriculum resources organized by week and marking period for all elementary subject areas K–2. The IC also allows staff members to upload and share their own materials, ask questions, provide feedback, and evaluate the usefulness of centrally developed curriculum and professional development resources. The IC is averaging 4,209 unique users per school week at the K–2 level and 387 users per day on weekends. This significant technology upgrade also is being used at the secondary level for the development of all new courses. Staff members in the Office of the Chief Technology Officer (OCTO) have consistently upgraded the IC based on user feedback and are developing a new instructional planning tool to aid teachers in their use of the IC.

During the last two years, professional development was provided to school leaders through the monthly Principal Curriculum Update meetings. School-based specialists in areas such as art, information literacy, music, physical education, reading, mathematics, and staff development also were provided introductory training during their meetings. Beginning in January 2011, three Core Team Training sessions were provided to key instructional leaders in each school. Topics included navigation of the IC; changes in reading, writing, and mathematics due to the CCSS; collaborative instructional planning; school scheduling for effective planning; integration of content areas; and integration of thinking and academic success skills. A webinar focused on navigating and planning instruction was provided for all staff members at the beginning of the 2010–2011 school year and online professional development resources were made available for all staff members.

Current plans for expansion in the future are focused on rolling out one grade level per school year—that would mean adding Grade 3 in the 2012–2013 school year. Earlier plans included the possibility of adding Grades 3–5 in 2012–2013. While Grades 4–5 may be available for limited testing, school staff capacity and central office staff capacity to support adequate professional development must be considered before choosing a more aggressive implementation schedule.

Resolving Implementation Concerns

During spring 2011, as elementary schools shared feedback on pilot experiences and prepared for expanded implementation, three topics were consistently raised as concerns from multiple stakeholders—communication, professional development, and assessment.

During the 2010–2011 school year, central office staff members met with teacher representatives from the Councils on Teaching and Learning (CTL) to collect feedback and recommendations for implementation in 2011–2012. CTL teachers reported they liked having access to the curriculum before implementation. They appreciated that central office staff members incorporated their ideas into planning and implementation. Many members valued the high level of collaboration, two-way communication, and honest responses to their questions. CTL members also identified areas for improvement, including having specific details about the rollout, providing the additional time needed to adjust web-based curriculum, striving for consistency in implementation expectations, and proposing the need for a clear message for mathematics acceleration. In response to this feedback, the Office of Curriculum and Instructional Programs (OCIP) drafted a frequently asked questions list to clarify system messages regarding implementation. CTL members helped identify the questions and provided additional feedback on draft responses before they were disseminated to all schools. CTL members also expressed concerns about equal access to technology and instructional materials. In addition, they underscored the need for common planning time, greater professional development, and substitute coverage and stipends for additional planning. Many administrators also shared these concerns with staff members during professional development meetings.

In June, Dr. Frieda K. Lacey, deputy superintendent of schools, convened a cross-functional team of teachers, school administrators, and central office staff members to help clarify and resolve the implementation issues. While the team commended the direction and vision of the

upgrades and having Grade 2, Marking Period 1 ready well in advance, team members expressed concerns about timely and consistent communication with staff members and parents. Team members praised the multiple opportunities for students to demonstrate understanding on assessments, valued Sample Learning Tasks that specifically aligned with curriculum indicators, and supported the focus on deeper understanding without lengthy unit assessments, but questioned how MCPS would be able to consistently monitor instruction during the transition to CCSS mathematics standards. Team members also supported the professional development vision (outlined in greater depth later in this paper) and liked the availability of online professional development resources, but expressed concerns about staff capacity to fully understand these changes and implement them without additional professional development.

Staff members in OCIP, OCTO, the Office of Communications, the Office of Shared Accountability, and the Office of School Performance triangulated the feedback from the Montgomery County Council of Parent Teacher Associations (MCCPTA) Curriculum Committee; the Curriculum Advisory Assembly (CAA); CTL; the cross-functional team; employee organization leaders; and informal feedback from parents, teachers, and school leaders to address the key areas of concern—communication, assessment, and professional development.

Communication

To address the concern regarding clarity of system messages, a communication campaign was developed to reach all stakeholders. Schools distributed a letter and flyer to families, describing the major upgrades to the curriculum. A new website was created for Curriculum 2.0 and included frequently asked questions, parent guides, videos, and descriptive information about the philosophy and related research. Schools were provided videos and PowerPoint presentations to use at their Back-to-School Nights and other events related to the curriculum. The communication materials articulated the most important points about Curriculum 2.0, CCSS, mathematics, and grading and reporting. Teachers also received a set of posters for display that identify the thinking and academic success skills in student-friendly language. When materials are posted, translated print materials also are available in the five most frequently spoken languages in MCPS (Spanish, Chinese, French, Vietnamese, and Korean). The Department of Family and Community Partnerships (DFCP) and OCIP are collaborating to host eight parent academy nights that provide detailed explanations about the upgrades included in Curriculum 2.0. Future plans for the IC includes creating a parent portal to the IC for families and students.

Assessment

With the transition to Curriculum 2.0, MCPS is moving away from the idea of assessment as an event and moving toward a vision of assessment as an ongoing part of instruction. However, part of this vision is dependent on the benchmark and state assessments still under development outside MCPS. The assessment system MCPS uses at the primary level for reading is well aligned to the CCSS and is continuing in Curriculum 2.0. In mathematics, the unit assessments, which form much of the data basis for individual, group, and systems decisions, were found to be too far out of alignment with the CCSS to continue their use. To help teachers measure student

progress toward the CCSS goals, formative assessment items were realigned with new standards and indicators and were provided for each marking period in K–2. MCPS also is investigating use of a nationally normed assessment to serve as a benchmark for student growth. These assessments, along with ongoing formative assessments and checks for understanding, would provide data for instructional use, system monitoring, and reporting to parents. This school year, schools may pilot Northwest Evaluation Association’s Measures of Academic Progress–Primary Grades (MAP-P) assessment on a voluntary basis. MAP-P, like its cousin the Measures of Academic Progress–Reading (MAP-R), is a computer-adaptive assessment that is administered two to three times per year. MAP-R has been in use in MCPS Grades 3–8 since 2004. MAP-P is designed to measure student understanding of mathematics in K–2. A small number of schools also are piloting Measures of Academic Progress–Mathematics (MAP-M), a similar assessment of mathematics designed for Grades 3–5. MCPS is collecting feedback on administration of these assessments and will analyze results to make recommendations for future use this school year.

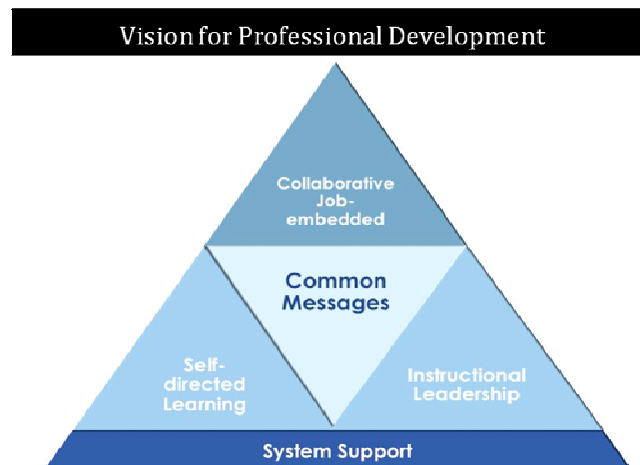
MCPS also is closely monitoring developments at the state and national level as assessments are developed to measure the CCSS. Maryland is a member of the Partnership for Assessment of Readiness for College and Careers (PARCC), a consortium of states designing the assessments. Early projections that these new assessments would have multiple assessments throughout the year are being scaled back. Current information from MSDE indicates that some PARCC test items will be included on state assessments in 2012–2013 and 2013–2014, and that in 2014–2015 the first full PARCC assessments would replace the Maryland School Assessment. Kindergarten students currently experiencing Curriculum 2.0 will be in Grade 3, the earliest grade level assessed by MSDE, in 2014–2015.

During the transition to new assessments, teachers and administrators have expressed concerns about measuring mathematics aligned to the new standards. The CCSS suggest that ongoing formative assessments and informal collection of data concerning student progress is preferable to a system composed solely of summative assessments. With Curriculum 2.0, MCPS has embraced this vision of ongoing formative assessment as the most effective way to use assessment to help build a strong foundation of understanding. Curriculum 2.0 contains mathematics formative assessment items organized by marking periods and grouped by measurement topics. These formative assessment items also contain rubrics that show how to measure to the depth expected in the strands of mathematical proficiency—Understanding, Computing, Applying, Reasoning, and Engaging. These formative assessment items serve as useful benchmarks and models for assessment, but teachers have expressed concerns that they are not sufficient to collect ongoing data to thoroughly assess a student. Curriculum 2.0 also contains Checks for Understanding within each Sample Learning Task aligned to specific indicators to help with ongoing formative assessment. In response to concerns expressed by members of the cross-functional team, data collection tools were created to help teachers track student progress on measurement topics. These tools are in alignment with tools being used by schools implementing the electronic standards-based report card.

Through its partnership with Pearson, MCPS also will have access to the first assessments that measure student thinking and academic success skills. These performance-based assessments will be part of a student's educational experience in a content area, not a typical paper-pencil assessment. MCPS kindergarten teachers will have the opportunity to pilot these assessments on a limited voluntary basis in 2012–2013. As MCPS selects a benchmark assessment and new state measures are put in place, professional development will be necessary on the effective use of assessment in building student understanding.

Professional Development

A widely shared concern has been the need for systemic and systematic professional development regarding the many aspects of Curriculum 2.0. The professional development vision for Curriculum 2.0 shared with the cross-functional team and in subsequent messages to principals includes the development of key messages for all staff members, a focus on job-embedded collaborative professional development supported through building capacity of instructional leadership and individual staff members through self-directed learning.



Several decades of research suggest that the most effective form of professional development is job-embedded collaborative planning for instruction. To this end, Core Team Training sessions have focused on using the resources in the IC to collaboratively plan for effective instruction. For teachers to effectively participate in collaborative instructional planning they may use the self-directed learning opportunities included in the IC. These opportunities include short videos, interactive presentations, graphics, and written information to help teachers understand curriculum goals, content, and expectations. Although MCPS has embraced the collaborative planning model for many years, building instructional leaders will need to expand their capacity to facilitate collaborative planning and arrange schedules to maximize teacher common planning time. Teachers and building leaders indicate that availability of time to plan and learn the new system has been the most significant impediment to implementing the curriculum upgrades. Budget reductions over the last few years have constricted the substitute time needed for teachers to learn and begin planning in an effective collaborative manner. Reductions to the staff

development teacher position have limited the key personnel necessary to facilitate this change in some schools. The funds received from the MCPS partnership with Pearson have provided some support—Pearson funds are being used to provide implementing teachers with 1.5 days of substitute or stipend hours for collaborative planning. Budget priorities this year will need to consider additional support for professional development related to Curriculum 2.0.

Parent Feedback

Parent feedback shaped the development of Curriculum 2.0 since its inception as the Integrated Kindergarten Curriculum. Early feedback included the need to include subject areas such as science and social studies while maintaining a strong focus on reading and mathematics. During the 2010–2011 school year, meetings were held in schools piloting the curriculum and through CAA and MCCPTA to share the vision and rollout plan. Feedback about the general direction was positive and supportive, applauding the addition of thinking and academic success skills and the renewed emphasis on teaching the whole child. In these meetings, parents also expressed concern regarding changes in mathematics due to adoption of CCSS.

As part of the 2011–2012 communication plan, DFCP and OCIP are hosting eight parent academies dedicated to sharing detailed information about Curriculum 2.0 as well as to obtain feedback from parents. OCIP staff members also are collecting anecdotal feedback via principals after they have hosted local back-to-school or curriculum nights. Overall, most parents say they are pleased with upgrades to the curriculum. Parents support the integration of academic and critical and creative thinking skills across subjects and the deeper teaching with appropriate connections across content areas. At the same time, parents had questions about differentiation and enrichment in mathematics. Many parents applauded the effort to “dig deeper and build a stronger foundation in mathematics” and support MCPS’ efforts to emphasize depth of understanding over speed of acquisition. Some parents of students previously advanced a grade level in Kindergarten or Grade 1 expressed concern that CCSS in Grade 1 and Grade 2 are not sufficiently challenging and that teachers have not been provided adequate professional development on differentiation. Others have expressed skepticism that small group differentiated instruction would work with mathematics despite MCPS’ successful track record using this model with reading.

Mathematics Learning Progressions

Staff members analyzed CCSS upon their release in June 2010, and found they provide a deeper and more rigorous approach to mathematics at every grade level compared to the Maryland State Curriculum standards. In the 2001 curriculum, MCPS had to provide pathways for acceleration through the Maryland standards to reach a sufficient level of rigor at each grade. As detailed in the *Mathematics Work Group Report* this practice of acceleration to reach rigor led to some students skipping essential mathematics understandings. CCSS reach rigor through depth of understanding rather than acceleration. This means most students will no longer need to skip or advance a grade level in mathematics in order to access engaging and challenging curriculum.

However, as staff members analyzed CCSS at each grade level and reviewed existing student performance, they felt that CCSS alone would not challenge every child sufficiently. MCPS researched best practices in mathematics acceleration and consulted with CCSS authors to develop a model of acceleration and enrichment through CCSS within a grade level. Developed over the last year and put in place for the first time in August 2011, the model of acceleration and enrichment provides teachers with directions on how to accelerate or enrich a student who has shown deep mastery of a concept or topic. This model is based on learning progressions, or a careful sequencing of the building blocks that make up deep student understanding. By mapping out these building blocks, as MCPS has, teachers can easily determine the next logical enrichment or acceleration experience for a student. Since learning progressions are at the foundation of CCSS, this model shows promise for challenging each child in a way that will not develop “holes” in their understanding as skipping or grade-level advancement may. MCPS is committed to challenging every child and anticipates even with this additional acceleration and enrichment, a very small number of students may still need to advance a grade level in mathematics in order to receive sufficient challenge.

The learning progressions, combined with the Universal Design for Learning (UDL) architecture of Curriculum 2.0, also will serve students who are struggling in mathematics. By moving down the learning progression in the opposite direction, teachers will be able to determine the building blocks a struggling student may be missing to reach grade-level proficiency. Close study of this model will be necessary as teachers and students work to implement Curriculum 2.0 over the next few years.

Next Steps

Grade 3 curriculum is in development with the first marking period expected to be available in January 2012. However, there are a number of key next steps that must be completed to ensure support for implementation.

1. Continue ongoing collection of feedback from instructional staff and parents.
2. Continue to identify major issues through feedback, seek resolutions, and communicate frequently about issues.
3. Collect data on MAP-P and MAP-M pilots and analyze results to make a recommendation for benchmark assessments in mathematics.
4. Review i3 grant evaluation early feedback regarding implementation to make adjustments based on feedback.
5. Design and implement plans to expand staff participation in uploading and reviewing resources and providing feedback options in the IC.
6. Continue Core Team Training and Staff Development Teacher, Principal Curriculum Update, and subject area specialist meetings focused on Curriculum 2.0. Use feedback from sessions as a data point to help determine needs for next year.
7. Finalize implementation and professional development plans for the 2012–2013 school year.

Conclusion

Although there are challenges associated with implementing Curriculum 2.0, the breadth and vision of this initiative avoids a piecemeal approach in dealing with state curriculum mandates and budget reductions. The implementation of the CCSS and PARCC assessments without Curriculum 2.0 would further narrow instructional focus to only reading/language arts and mathematics at the elementary level. Instead of sidelining the subjects so many students find engaging, Curriculum 2.0 embraces the strengths of art, music, physical education, information literacy, health education, science, and social studies. In developing thinking and academic success skills across many subject areas, MCPS positions its students to be well prepared for future assessment changes and a lifetime of learning.

In *Managing Transitions*, William Bridges cautioned that a lofty vision only can be achieved by attending to the myriad of details that comprise the vision. As instructional staff, parents, and students transition to Curriculum 2.0 over the next several years, MCPS leadership is committed to carefully handling the large and small details that make up the greater vision. Ongoing feedback from parents and staff, and resolution of identified issues, will be essential to building the trust and commitment that will deliver the promise of Curriculum 2.0.

At the table for today's presentation is a panel of central office and school staff members to answer your questions.

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