

Strategic Technology Plan—Creating 21st Century Learning Spaces Questions and Answers

1. Who is getting what and when will they get it?

Our plan is to deploy approximately 30,000 devices in Grades 3, 5, and 6 in the 2014–2015 school year and approximately 10,000 devices for social studies classes at the high school level. In future years, we will deploy computers to the next grade levels or other content areas to ensure that as students articulate to the next grade level, they will continue to have access to these mobile learning technologies. For Grades 3 through 12, Chromebooks will be the primary device while Android-based tablets will be the principal device for Kindergarten through Grade 2. This next phase of our technology rollout includes the integration of mobile, cloud-based, and collaborative technologies together with technology enriched learner-centered teaching practices to transform classroom communities. This initiative will leverage the power of the cloud-based Google Apps for Education platform to provide dynamic resources that promote effective communication and collaboration among students and staff.

2. How are we funding this technology?

The Tech Mod Project approved by the County Council in the Fiscal Year (FY) 2015–2020 Capital Improvements Program (CIP) and funding approved in the FY 2015 Operating Budget enable us to move forward with this important initiative. The County Council’s funding of our technology initiative will not only support the purchase of mobile devices and enhance warranty coverage, but also will provide instructional software and resources for students along with providing software that enables teachers to support students and ensure appropriate use of the technology.

The County Council’s approval of the Tech Mod Project assumed that in the first two years of the CIP, the Board of Education would request supplemental appropriations to expend E-Rate reimbursement funds to make up the difference between our request and the amount the County Council funded. The CIP in FY 2015 is \$2.047 million less than our request and the CIP in FY 2016 is \$3.0 million less than our request. Funding this initiative is sustainable with County Council support for the district’s existing practice of using E-Rate reimbursements through the supplemental appropriation process and the same level of funding in the operating budget.

3. How will teachers use this technology this year? How will the classrooms look different?

This next phase of our technology rollout includes the integration of mobile, cloud-based, and collaborative technologies infused with enriched learner-centered teaching practices to transform classroom communities. This initiative will leverage the power of the cloud-based Google Apps for Education platform to provide dynamic resources that promote communication and collaboration among students and staff. The assigned student and staff accounts will enable document sharing, collaborative work, and assessment opportunities in this cloud-based platform.

4. Will students, staff and visitors be able to use their own devices in schools?

Yes, the technology infrastructure will allow for students and staff to access the Montgomery County Public Schools (MCPS) network with their personally owned devices. Wireless networks are an essential element of this initiative. A robust wireless infrastructure paves the way for the integration and expansion of mobile technologies in our classrooms. This initiative includes the use of mobile devices provided by MCPS as well as staff- and student-owned devices. The ability for students to bring and securely use their own devices is an essential element in the long-term affordability of the initiative. The wireless network at the school will be available to visitors as well (Internet only access).

5. How does this mobile technology relate to the Promethean technology in our classrooms?

Google Apps for Education and Promethean interactive whiteboards can work together seamlessly in many ways. Students can share files from their Google Drives with the class to showcase their work or present information to the class. ActivEngage 2 allows voting via a URL so that students can vote on ActivInspire flipcharts via a Chromebook or mobile device. The interactive whiteboard can continue to be used to support small group or station activities. Teachers still can use the interactive whiteboard to model specific resources such as websites or virtual manipulatives, as well as share resources applicable for all students such as multimedia clips, digital stories, or online curricular resources. The interactive whiteboards also can be used to display student screens as a way to monitor online interactions.

6. How are we providing support to schools to integrate and maintain this technology?

The successful implementation of technology in the classroom requires a comprehensive, differentiated, and sustained plan for professional development and support. To that end, staff in several central services offices is collaborating on designing a variety of professional learning experiences and options to assist teachers with implementing high quality instructional practices that effectively integrate digital technologies and mobile

devices in teaching and learning. Central services instructional specialists have begun to meet with Grades 3, 5, and 6 teachers and high school social studies teachers in schools scheduled for Tech Mod this summer. Through these meetings, teachers will be provided an orientation to this initiative and have an opportunity to explore these interactive, mobile technologies. In addition, teachers will be provided options for summer professional development and ongoing, job-embedded coaching supports that they can expect at the beginning of next school year.

7. How will we address the issue of equity and the concern for families that do not have devices or access to the internet at home?

First, we are addressing this issue by ensuring that at school, students are able to participate fully in our growing digital learning community. Second, we recognize that we must partner with other public and commercial organizations in addressing the issue of broadband and device access when our students are not at school. We identified this as one of the strategies in the Strategic Technology Plan and work already is underway to cultivate these partnerships. We are committed to closing the digital divide for MCPS students by working with community organizations and service providers to create greater access to Internet services and technology. The ability for students to bring and securely use their own devices is an essential element in ensuring access for students who do not have these resources at home.

8. How will we provide the professional learning for teachers who will receive this technology in FY 2016 and FY 2017? How are we going to ensure that classroom teachers receive the professional development to prepare them to use this technology in their classrooms? What will we do when teachers are reluctant to use this technology?

The successful implementation of technology in the classroom requires a comprehensive, differentiated, and sustained plan for professional development and support. Staff in several central services offices is collaborating on designing and delivering a variety of professional learning experiences and options on implementing high quality instructional practices that effectively integrate digital technologies and mobile devices in teaching and learning. Throughout the summer and next school year, school leaders will be using these technologies in their professional learning experiences. In addition, there will be professional learning experiences for staff development teachers, school leadership teams, and administrators. We will provide our teachers with the professional learning opportunities that will enable them to use these mobile and collaborative technologies to differentiate and scaffold learning opportunities that meet the needs of all our students.

Teachers will be provided an orientation to this initiative and have an opportunity to explore these interactive, mobile technologies. Teachers will choose among options for summer professional development and ongoing, job-embedded coaching supports that they can expect at the beginning of next school year. Staff will collect feedback from

teachers and evaluate the effectiveness of these new resources during the 2014–2015 school year.

9. How do we ensure the proper use of technology by students and how does this align with our cybercivility efforts?

MCPS students and staff will be assigned secured accounts to the learning environment. Students and staff will be able to access their accounts through any web-enabled device using any mainstream web-browser. The assigned student and staff accounts will enable document sharing, collaborative work, and assessment opportunities in this cloud-based platform. Student engagement will be monitored via a learning management system integrated into the platform that allows teachers to send information to students, offer real-time feedback, and monitor progress on activities.

However, students will be restricted to sending and receiving messages only from other authorized MCPS account holders. This means that only authorized MCPS staff will have access to communicate with students. We are working with Google to ensure all precautions and configurations are enabled to protect the privacy and confidentiality of all student and staff information, and to restrict access to Google Apps for Education to students and staff in a closed and secure environment that is not accessible to anyone outside of MCPS. Furthermore, MCPS access to the Google Apps for Education platform is governed by Google’s detailed privacy policy and security measures. MCPS is working with Google to ensure that this environment complies with MCPS standards, as well as applicable laws, including the *Family Educational Rights and Privacy Act* (FERPA) and the *Children’s Online Privacy Protection Act* (COPPA) regulations.

The Strategic Technology Plan’s Strategy 3, identifies Respectful, Ethical Engagement in Virtual Communities as a priority for ensuring a vibrant, safe, and welcoming digital learning community. This includes developing curricular materials that teach students and staff to advocate and practice safe, legal, and responsible use of information technology. Our goal is to foster a culture that reflects a positive attitude toward using technology that supports collaboration, learning, productivity, and civility and demonstrates personal responsibility for lifelong learning. The efforts of the Cybercivility Task Force, which is one of many elements, will be considered as we move forward.

10. How are the resources of all MCPS offices being coordinated to support schools implementing this initiative?

Throughout the summer and next school year, school leaders will use these technologies in their professional learning experiences. Working with the offices of Curriculum and Instructional Programs and School Support and Improvement, professional development sessions during Resource Teacher Week, the Montgomery County Education Association Curriculum Writing Academies, the Literacy and Leadership program, curriculum

training, school library media programs, and the Principals' Curriculum Update meetings will include the use of these technologies to promote these districtwide initiatives. Further, collaboration with the Department of Instructional Leadership Support and the Leadership Development Unit and the Office of Special Education and Student Services is underway and is being coordinated to design professional learning experiences for staff development teachers, school leadership teams, special education teachers, and administrators.

11. Are there guidelines that need to be developed for acceptable use of technology including bring your own devices, and are changes needed to any MCPS policies or regulations?

Yes, acceptable use guidelines will be developed to include “bring your own devices” and the ways in which students engage with their devices during the school day. Additionally, work is underway to amend MCPS Regulation COG-RA, *Portable Communication Devices*, which established the procedures for possession and use of portable communication devices by students on school property and when engaged in school sponsored events. MCPS Regulation IGT-RA, *User Responsibilities for Computer Systems, Electronic Information, and Network Security*, which established user responsibilities for computer systems, is being revised.

12. How does this initiative align with the Interim Instructional Services plan?

Interim Instructional Services uses a variety of venues to connect with and teach students who are unable to attend school. This initiative makes additional technologies available that allow for easier connections between school and home, the ability for teachers to push assignments to students, and for students to see what they are missing during class time. In addition, there are more opportunities for collaboration through virtual venues, including the Google platform. These technologies provide Interim Instructional Services with a broader range of options for serving students who are unable to attend school. The offices of the Chief Technology Officer, Curriculum and Instructional Programs, and Special Education and Student Services are collaborating and providing deeper planning and coordination on meeting the learning needs of these students.

13. What was the procurement process that was followed to purchase mobile devices?

The procurement of these mobile devices (as is the case with our other technology purchases) was executed in compliance with state law and resulted in favorable pricing for the district. Specifically, prequalified vendors were asked to submit bids for the specified mobile products and services. Twenty vendors that were qualified through two competitively bid consortium contracts (Maryland Education Enterprise Consortium—MEEC and National Joint Powers Alliance—NJPA) received the specifications and invitation to bid. Six of the vendors responded and one vendor was selected. As an added

safeguard, the specifications included the provision that enables MCPS to change the brand and/or model of the mobile device as products and our requirements evolve.

The ability to leverage the combined purchasing power of state, regional, and federal consortia procurements and contracts remains an established procurement best practice. In previous state legislative audits, MCPS has been commended for this practice. Undoubtedly, purchasing from contracts resulting from multi-entity and state solicitations reduce the cost of the procurement and enable the district to negotiate deeper discounts. These contracts also are used routinely by MCPS and other school systems to purchase computers, peripherals, and technology services.