Montgomery County Public Schools

Technology Plan Addendum: 2015-2018

Montgomery County Public Schools

Technology Department

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TABLE OF CONTENTS

Executive Summary

Technology is an integral part of any educational program. However, it should be integrated in all respects and never approached as an "add-on". Throughout the Division teachers have found that when incorporated properly, technology enhances instruction, improves student engagement, and stimulates their achievement. Additionally, operational technology tools have improved efficiency with respect to service, support, and data management. Due to constant reflection and reevaluation, technology planning in MCPS is flexible, yet focused. MCPS works to identify instructional and operational goals, and then seek solutions as evidenced in this 2015-2017 Addendum to the Educational Technology Plan for Virginia: 2010-2015.

The Virginia Department of Education has identified specific items to be included in Division technology plans. The format of the MCPS 2015-2017 Addendum follows the Virginia Department of Education guidelines and provides details about the current status of technology within the Division. Following are details about sections of the MCPS technology plan:

Process – Provides a connection of the work performed by the planning committees in identifying the technology needs to the Division's mission and vision and outlines the future evaluation procedure. Strategies are referenced parenthetically throughout the Plan.

Actions - Identifies the goals, objectives, strategies, and evaluation criteria of the plan. State goals and objectives with local strategies are included, as well as any additional local goals, objectives, strategies, and measures tied to the division mission, vision, etc.

Appendix 1 – Timetable and Budget for goals, objectives, strategies, and measures.

Appendix 2 – Division's Acceptable Use Policy (with most recent date it was amended): As required by law, it must include all elements.

Appendix 3 - Summary of the Internet Safety Program for 2010-2015 (including process for adjusting program based on evaluation).

In addition to the goals listed in the Addendum, MCPS has completed extensive capital improvements with the construction of two new elementary schools, two new high schools, a renovation project that converted an old high school into a new middle school, as well as the renovation of an old middle school into a new alternative education facility.

- Eastern Montgomery Elementary School (2010)
- Price's Fork Elementary School (2011)

- Auburn High School (2013)
- Blacksburg High School (2013)
- Auburn Middle School (2013)
- Montgomery Central (2015)

Each of these buildings is fully equipped with 21st Century Classroom Technology including an interactive white board, projector, document camera, and a voice enhancement audio system. Each school has desktop computers in every room as well as laptop carts available for teacher and staff use. Teachers in each of the secondary schools were also provided tablet technology to enhance instruction. Each school has the latest in network equipment and full wireless saturation. The new secondary schools have a video distribution system that powers digital signage as well as media distribution throughout the building. All of these additional capital projects were completed on time and within budget, and without any additional staffing.

Montgomery County Public Schools, in conjunction with the local first responders, has established a standard for building security systems. This standard includes:

- Audio/visual intercom buzz-in system with electronic locks for main entrances
- Main entrance public view security video monitor
- Keyless/badge entry with centrally controlled electronic locks for high traffic doors and access to the main building mobile units
- Exterior security camera coverage

Through the use of a VDOE security grant and local bond funds, MCPS has been able to complete the first three items at all county schools, and made extensive progress with the installation of exterior security camera systems. MCPS will continue to pursue funding to improve school security, while attempting to build a budget to sustain its student safety agenda.

By participating in the VDOE e-Learning Backpack Initiative, Montgomery County Public Schools began instituting a 1-to-1 Initiative at all 4 high schools during the 2014-2015 school year. The Montgomery County School Board has committed to funding this 4 year project and to provide tablets (or laptops) to all high school students by school year 2020-2021. Currently, all students in the graduating classes of 2018 and 2019 have been assigned a Dell Venue tablet for instructional purposes to use during their 4 years of high school.

MCPS should complete years 3 and 4 of the e-Learning Backpack 1-to-1 Initiative Implementation Plan by: purchasing and distributing student tablets/laptops to the 2020 and 2021 graduating classes, continue providing device and online-learning training for students, continue high-quality and meaningful professional development for high school teachers focused on integration strategies, and continue to provide repair and maintenance services to keep devices working properly and in the hands of students and teachers. To help expedite time for repair and maintenance the hiring of a new technician is planned for the 2016-2017 fiscal year.

Additionally, it is necessary to advocate for funding from the MCPS School Board to continue the 1-to-1 Initiative beyond the 4th year of the e-Learning Backpack Initiative during the 2017 and 2018 school years.

Through a partnership with Interactive Achievement and 11 other Virginia School Districts, Montgomery County Public Schools participated in the VDOE Data System Enhancement Grant in order to assist in the development of a useful longitudinal data system. MCPS has since implemented the use of this system at all levels of instruction and administration. Proposed funding for continued use is being included in the 2016-2017 budget year, and the Division should continue to see increased use and plan to fully fund its cost.

As reflected in the MCPS mission statement, our goal is to graduate students that are career and college ready in order to become productive, responsible citizen. It is upon that platform that we build. Contemporary learning environments call for the utilization of contemporary technologies. To that end we strive to engage, encourage, and empower our students for success in the 21st century.

Process

A.   Connections to MCPS Mission and Vision

The mission of Montgomery County Public Schools is that every student will graduate career and college ready and become a productive, responsible citizen. As evidenced in this technology plan, the MCPS Technology Department provides services and tools that support the mission and vision of the District. The vision for MCPS is to inspire learning by providing a nurturing environment, positive relationships, high expectations, and continuous growth. This is accomplished by:

- Sustaining a nurturing environment that ensures the physical safety and emotional well-being of all individuals within the learning community.
  - o MCPS has always made a concerted effort to protect both the physical and emotional safety of students and staff. However, in general, nationwide, violent acts have both increased in number and changed in nature. As a result, the approach to school safety involves technology to a much greater degree. The MCPS Technology Plan supports Division efforts to protect students in the following ways:
    - Maintaining a comprehensive Internet Safety program that is an integrated part of the MCPS curriculum
    - Participating in a Division Security Project Initiative that places school security technologies (video cameras, visitor badges, buzz-in entrances, classroom telephones, etc.) in all schools, as well as provides necessary training and support
    - Maintaining a crisis plan for technology
    - Maintaining an Emergency Notification System

- Cultivating positive relationships based on mutual trust, respect, and open communications among stakeholders through the following:
  - o Division, department, and school web pages that provide current, pertinent information
  - o Parent/Student portals which allow access to student information such as grades and attendance
  - o Email system which serves as a tool for internal communication as well as a means for staff to communicate with parents, students, and the community
  - o Emergency Phone Notification System (School Messenger), which enables notifications to be rapidly issued either through the phone or a computer to any number of targeted stakeholder groups.

- Holding high expectations for achievement and accountability through effective practices which actively engage students.

  o Technology use is interwoven among curriculum areas. It is not an additional element of instruction. When used effectively, technology is a key factor in instilling enthusiasm for learning and teaching. The MCPS Technology Plan supports enhancement of the instructional environment through technology integration by:

    - Seeking to provide a 21st Century Learning Environment for MCPS students and instructional staff
    - Achieving a 1:1000 ratio of ITRTs to students as required by the Virginia Standards of Quality
    - Keeping abreast of emerging technologies and working to obtain those that are appropriate for MCPS learning environments

- Developing a culture that encourages continuous growth for students and staff:

  o The Division strives to develop lifelong learners among PK-12 students, as well as among staff and the Montgomery County community. The MCPS Technology Plan supports these efforts in the following ways:

    - Exploring the creation of Professional Learning Communities for teachers and staff
    - Providing staff development sessions during summer months and after school hours
    - Encouraging and supporting the development of virtual learning opportunities for students, teachers, and staff
    - Partnering with New River Community College to offer 3 hour credit courses to MCPS teachers
    - Offer technology sessions for community members at school sites

B. **Summary of work of the Planning Committee and its Benchmarks**

Activity	Person(s) Responsible	Timeline
Review the 2010-2015 MCPS Technology Plan and develop a plan for the Addendum Update	Technology Coordinators	Spring 2015
Review MCPS Six Year Plan in order to ensure alignment with the Technology Plan Addendum	Technology Coordinator	Spring/Summer 2015
Review Virginia Department Addendum Guidelines in order to ensure alignment with local plan	Technology Director/Technology Coordinators	Fall 2015
Draft MCPS Plan updates and develop local goals and strategies	Technology Planning Committee	2014-2015 School Year
Final Review of Updates and local goals and strategies	Technology Planning Committee	Fall 2015
Present to Division leadership	Leadership Committee/School Board	Fall 2015
Receive MCPS Technology Plan Addendum for approval	School Board	Fall 2015
Submit School Board approved MCPS Technology Plan Addendum to Virginia DOE for approval.	Technology Director	December 2015

C.   Summary of the Evaluation Process and Planned Update Cycle

The fast pace of technology advancement and the critical nature of the task of educating the nation's youth, requires that the evaluation of the progress of instructional technology in the school system be constant and ongoing. A technology plan tends to have bench marks at various times in its life cycle that will provide points of assessment. However, these should be used to focus on specific targets and not arbitrarily used to evaluate the entire plan.

The Evaluation Process serves as both a means of assessing the success of a plan, as well as an action plan. Each objective has corresponding evaluation strategies. Additionally, the timeline for the technology plan's goals and strategies provides the means of assessing the progress of the Division toward its stated technology objectives. This update cycle also provides the means to evaluate the plan on an annual basis. The Technology Planning Team meets each year to evaluate the progress and accomplishments of the previous year and make adjustments accordingly for the upcoming year.

MCPS uses the following five-year cycle for its technology planning process:

- Year One   –   Implementation of the new Technology Plan
- Year Two   –   Assess and adjust objectives as necessary
- Year Three –   Preliminary assessment/amendments of the Plan as needed
- Year Four   –   Full evaluation and commencement of the writing process for the next Technology Plan.
- Year Five   –   Completion of the new five-year cycle MCPS Technology Plan

This planning cycle results in a dynamic document that will remain current with the needs of the school system.

D.   Conclusions from Needs Assessment

1. Montgomery County Public Schools continues to strive to establish a computer replacement budget that is sufficient to meet the Virginia Department of Education Technology standards without being dependent on outside funds. The Division has been dependent on receiving funds under the State Technology Initiative, which is not guaranteed annual funding. The Division's match of approximately twenty percent is inadequate to fund a replacement cycle and as stated in the 2010-2015 Technology Plan, "Customers that commit a minimum of 3 percent of their annual operating budget to IT asset management programs and tools can expect a 25 percent reduction in total cost of ownership." (GTSI Corp. Technology Lifecycle Management: A Model for Enabling Systematic Budgeting and Administration of Government Technology Programs, p. 5)

2. The Division needs to allocate sufficient funds in order to maintain and grow a wide area network and Internet gateway. Once again the Division needs to provide adequate funding that is not dependent on outside sources in order to cover the projected expenditures for its telecommunication operations. Additionally, the Division must allocate funds for capital improvement of bandwidth infrastructure in order to keep pace with modern standards because the VDOE has subscribed to the SETDA recommendation that by 2017-2018 bandwidth should be "at least 10 Gbps per 1,000 students/staff" for an external connection (Fox, C., Waters, J., Fletcher, G., & Levin, D. [SETDA], p. 3)

3. The Division needs to allocate funds to support the local area network. Using an average figure of $2,500 per server and $25,000 per virtual server setup, the Division should continue to budget at least $97,500 annually to maintain the integrity of its network services.

4. The Division needs to provide for a replacement cycle in order to maintain its network switches. At an average cost of $100,000 per building, the school system needs to continue budgeting for a phased upgrade. In addition, the school system should continue to pursue wireless projects throughout the system, especially where POE switches reduce the cost of providing electricity to the access points. As technology represented by both wired and wireless networks continues to change and improve, this equipment also represents a capital expenditure with a 5 year depreciation schedule. The MCPS budget needs to reflect the monies necessary for the life cycle replacement of network equipment.

5. Montgomery County Public Schools needs to establish a replacement budget (between 3-5 years per server) for current security camera equipment (servers, cameras, etc.). It also needs to perform a feasibility study for installing outdoor cameras at all elementary and secondary schools.

6. Montgomery County Public Schools needs to continue to provide adequate and appropriate staffing in order to maintain the level of service the division has come to expect and demand.

   When the ITRT position was added in 2005, the precedent was set for compensating each for additional hours of work. This was accomplished by issuing a supplemental contract for an additional two weeks work, as well as an extended day, in order to accommodate both the elementary and secondary contract hours. A new salary scale should be created to compensate ITRTs adequately for their job responsibilities. This would ensure that their salary is not impacted by budget reductions, and would also ensure that their entire salary counts toward their VRS retirement, which their current supplemental contract does not.

   The need to add additional steps to the Technician's salary scale in order to retain skilled employees continues. While the current 12 steps in the salary scale can be beneficial for employees where top salary is reached early and earned over the balance of tenure, it also represents a salary cap that does not keep pace with the employment market.

7. The Instructional Technology Resource Teachers should continue to increase awareness of available technology resources.

8. The Division should continue to participate in pilot projects involving emerging technologies, such as the E-Learning Backpack Initiative. It should also continue to explore the integration of Google Apps, cloud-based applications and storage. MCPS should also continue to pursue the expansion of online learning opportunities for students, taking away the barrier of time and place which tend to restrict learning opportunities. Teachers and students should continue to explore and plan opportunities for the integration of technologies in order to promote collaboration and, engagement, and to foster learning.

9. MCPS needs to utilize available technology software and applications and procure more as needed. Technology continues to evolve as instructional and administrative needs change. Since MCPS has adopted the Technology Lifecycle Model for the planning, procurement, implementation, and evaluation of technology-based system, technology should be abandoned when it is no longer cost effective or instructionally effective and newer, more effective, technology pursued.

10. In collaboration with Curriculum Directors and Supervisors, the MCPS Technology Department should continue to work to provide comprehensive professional development for teachers and staff in order to improve and enhance effective instruction and stimulate professional growth among teachers.

11. MCPS should continue to expand virtual education offerings to both students and staff. Currently, the Division runs its online courses through a locally developed and supported learning management system (Moodle). In an effort to expand support to a 24/7 format, MCPS should study and pursue a provider that is capable of providing such support.

   As online education continues to grow and evolve, MCPS should continue to evaluate its current delivery system for online/blended learning. With teachers becoming more comfortable with various platforms for instructional delivery, MCPS should pursue multiple platforms that empower teachers to take control of their online learning environment. Efforts should be made to expand the use of Google Classroom for use by individual teachers wanting to move their classes into a learning management system (LMS) that they can set up, customize as needed, and independently manage. The acquisition of a 24/7 supported and managed LMS would help ensure the integrity and availability of a Division managed platform for locally sanctioned virtual classes, as well as professional development needs throughout the Division.

   The Division should also continue to pursue platforms that allow for synchronous and asynchronous instructional time. It is important to continue pursuing those technologies that permit "real-time collaboration and engagement," which is necessary for learning, interaction, and assessment.

   Partnerships should also be pursued within the community and with public libraries in order to ensure student without home Internet access are able to access the Internet in other ways. These students must not be excluded from virtual courses and online class materials simply because they do not have the necessary resources at home.

   Because virtual education should be available to all ability-level students, MCPS should continue to investigate ways to expand such online opportunities. The continued pursuit of a comprehensive online summer academy is a potential way of achieving this goal.

   MCPS should develop a virtual instructional/operational model that encompasses the full potential of online education.

Actions

(goals, objectives, strategies, and evaluation strategies)

State goals and objectives with local strategies and measures and additional local goals, objectives, strategies, and measures tied to division mission and vision.

Goal 1: Provide a safe, flexible, and effective learning environment for all students.

Objective 1.1: Provide the technical infrastructure necessary to support formal and informal learning environments.

Strategy	Evaluation Strategy	Progress	Evidence of Impact
1.1.1: Facilitate the implementations of 1+Mbps/student and 10+Mbps Wide-Area Network (WAN) connectivity and ubiquitous, high-speed wired and Wi-Fi networks in schools. This is based on the widely accepted standard established by the State Educational Technology Directors Association (SETDA).	**1.1.1:** Determine if students are able to access digital resources when they need to.	**1.1.1:** Ongoing	**1.1.1.a:** Description of State-level efforts to facilitate this objective. **1.1.1.b:** Number/percentage of schools with bandwidth requirements between 2014-2015 through 2017-2018 **1.1.1.c:** Number/percentage of schools with fiber-optic lines from 2014-2018. **1.1.1.d:** Number of schools with infrastructure necessary to create safe and secure school environments.
1.1.2: Work with communities for robust and sustainable networks in and out of school buildings. (Robust defined as progressing toward the SETDA bandwidth targets.)	**1.1.2:** Are students able to connect to the Internet outside of school?	**1.1.2:** Ongoing	**1.1.2.a:** Develop a list of community partnerships geared towards bringing robust and sustainable networks to localities. **1.1.2.b:** List the number of communities with robust and sustainable networks in and out of school buildings and determine if it has increased.
1.1.3: Require that all electronic and information technologies that are developed by the VDOE and deployed within the Division are accessible to people with disabilities based on Section 508 of the Federal Rehabilitation Act.	**1.1.3:** Determine if digital materials created by the VDOE and utilized by the Division are equipped with accessibility features.	**1.1.3:** Ongoing	**1.1.3:** Review the digital resources provided by the VDOE in order to determine if they are accessible to all students.
1.1.4: Develop a comprehensive, 3-year plan that addresses	**1.1.4:** Determine if budgeted funds are adequate to	**1.1.4:** In process through use of	**1.1.4:** Chart progress in growth of maintenance and replacement cycle budgeted funds

instructional server costs, deployment, and maintenance.	address upgrades and replacement.	21st Century Classroom budget, security grant, and e-Rate Category 2 funds.	in order to determine if adequate.
1.1.5: Establish a computer replacement budget that isn't dependent on outside funding sources and is adequate to meet the State's minimum standards for computer replacement and maintain current inventory.	**1.1.5:** Review yearly operating budget to determine if replacement/maintenance budget is adequate to maintain the GTSI corporation technology life-management cycle.	**1.1.5:** In process (FY Budget 2016-2017)/Ongoing	**1.1.5.a:** Current budget reflects necessary funding in order to maintain computer hardware that adheres to the GTSI model. **1.1.5.b:** Annual progress reflects replacement benchmarks of targeted equipmen being met.
1.1.6: Secure adequate local funding to support an effective wide-area-network and Internet connection: • Recognize the full expenditure for projected wide area network and Internet operational needs in the budget process. • Utilize revenue generated from e-Rate reimbursement through the Universal Service program for one-time only technology expenditures. • Ensure the network will meet or exceed standards for infrastructure necessary to participate in online SOL testing and support instructional technology.	**1.1.6.a:** Compare locally budgeted monies to the actual costs related to telecommunication operations for a three-year period in order to minimize dependency of e-Rate monies to fund such operations. **1.1.6.b:** Implement upgrades to achieve 100 mbps to 10 gbps Ethernet throughputs by allocating necessary funds.	**1.1.6:** Commenced FY 2014-2015 and in progress.	**1.1.6.a:** Annual progress of budget should indicate local support for necessary bandwidth increases. **1.1.6.b:** Annual budget reflects progress for the proper recognition of e-Rate revenue. **1.1.6.c:** Progress is evident towards meeting SETDA goals.
1.1.7: Establish a local budget that adequately funds a local area	**1.1.7:** Cite current network server life cycles. Anticipate and	**1.1.7:** In process through use of	**1.1.7.a:** Allocation of funds to support the progress of Category 2 replacement

network in order to ensure the replacement of network servers and switches to: • Continue to study the feasibility of the use and deployment of VM technology • Cycle the HP 4000M switch out of circulation • Begin budgeting for a phased upgrade to 19 buildings at a cost of $100,000 per building.	budget for cost of necessary replacement.	21st Century Classroom budget, security grant, and e-Rate category 2 funds.	cycle. **1.1.7.b:** State CSPA Security Grant efforts should be reflected in budget.
1.1.8: Establish a replacement budget (between 3-5 years per server) for current security camera equipment (servers, cameras, etc.). Perform a feasibility study for installing outdoor cameras at all elementary and secondary schools.	**1.1.8:** Report yearly budget allocations for security camera maintenance.	**1.1.8:** Partially completed.	**1.1.8:** State VSPA Security Grant efforts should be reflected in budget.
1.1.9: Upgrade AES, BMS, CMS, and EMHS security systems to the wireless LAN based system that is currently used throughout the Division. Also, implement keyless entry system for all buildings.	**1.1.9:** Document system upgrades and associated costs.	**1.1.9:** Partially completed. Keyless entry system installed Division-wide.	**1.1.9:** Examine security threats after upgrade to determine system's effectiveness.
1.1.10: Facilitate the implementation of broader access to wireless Internet in every school	**1.1.10:** Report appropriated funds to phase in wireless access points to	**1.1.10:** Ongoing	**1.1.10:** Document the yearly use of wireless student learning devices in order to track growth.

through Category 2 funding.	accommodate wireless network access in each school.		
1.1.11.a: Upgrade existing Digital PBX systems to IP Telephony and SIP trunks. **1.1.11.b:** Budget for and adequately fund district cellphone plan.	**1.1.11.a:** Convert all school PBXs, prioritized based upon system age. **1.1.11.b:** Measure cost savings to offset loss of e-Rate revenue.	**1.1.11:** Ongoing (To be completed by end of FY 2018-2019.)	**1.1.11.a:** Develop list for school conversion to IP Telephony and schedule as necessary. **1.1.11.b:** Examine the cost variance between traditional phone platform and an IP based system.
1.1.12: Deploy VMWare and SANs storage to reduce machine costs while maximizing storage and data protection.	**1.1.12.a:** Measure cost savings **1.1.12.b:** Realize maintenance and management efficiencies.	**1.1.12:** Complete by end FY 2018-2019	**1.1.12:** Perform cost-benefit analysis between traditional and virtual environments.
1.1.13: Convert Division email system to Gmail in order to maximize integration and efficiency.	**1.1.13.a:** Provide professional development for all users. **1.1.13.b:** Increase coverage of email user accounts. **1.1.13.c:** Successfully deploy email archiving system. **1.1.13.**d: Realize maintenance and management efficiencies.	**1.1.13:** Target for completion by end of FY 2016-2017	**1.1.13.a:** Document ITRT professional development sessions. **1.1.13.b:** Chart gains in end user email accounts. **1.1.13.c:** Describe archive system, implementation, and deployment. **1.1.13.d:** Document efficiency improvements and gains over time.
1.1.14: Replace Novell e-Directory with Microsoft Active Directory.	**1.1.14.a:** Greater degree of end user Single Sign On interface. **1.1.14.b:** Reduce directory vulnerability. **1.1.14.c:** Produce a greater degree of application interaction. **1.1.14.d:** Realize management and maintenance efficiencies.	**1.1.14:** Completed by end of FY 2016-2017.	**1.1.14.a:** List gains in number of applications and interfaces that are integrated through Active Directory. **1.1.14.b:** Document efficiency improvements.

1.1.15: Promote safe and secure school buildings through enhanced school security systems.	**1.1.15.a:** Increase number of keyless entry enclosures. **1.1.15b** Install outdoor security cameras at all buildings. **1.1.15.c:** Provide uninterrupted power to all building MDFs. **1.1.15.d:** Cover all main traffic doors with AI-Phone access control.	**1.1.15.** Target 3 schools annually with completion by end of FY 2018 - 2019.	**1.1.15:** Monitor annual progress of efforts under State VSPA Security Grant.
1.1.16: Implement and explore combined Munis applications with county government.	**1.1.16.a:** Target available Munis applications for both county government and school use. **1.1.16.b:** Measure cost and efficiency savings that result from combined services.	**1.1.16:** Annual process	**1.1.16.a:** Document Munis modules that can be used for joint government and education implementation. **1.1.16.b:** Compare license expense for applications added as separate entities versus that of an enterprise. Determine cost savings.
1.1.17: Implement phases 3 and 4 of the "MCPS One-to-One Initiative."	**1.1.17:**	**1.1.17:** Completed by end of FY 2017 – 2018.	**1.1.17:**
1.1.18: Participate on Christiansburg Capital Project Design Team.	**1.1.18.a:** Future building designs to incorporate latest digital classroom instructional standard. **1.1.18.b:** LAN design with capacity for future growth. **1.1.18.c:** Wireless network built with latest available standard.	**1.1.18:** In conjunction with the Design/Bid/Build Process.	**1.1.18.a:** Produce and document state-of-the-art technology specifications for bid process. **1.1.18.b:** Detailed prints are produced for building process in conjunction with electrical engineering firm.

Objective 1.2: Provide the human infrastructure necessary to support formal and informal learning environments.

Strategy	Evaluation Strategy	Progress	Evidence of Impact
1.2.1:a: Fully fund and support ITRTs as specified in the Standards of Quality in order to provide high-quality professional development to assist educators in evaluating and integrating technology tools in ways that foster effective students use.	**1.2.1:** Considering the purpose of the ITRT is to increase the pace of technology adoption and innovation, determine if we support more innovative teaching as a result of the ITRT presence. Describe the types, scope/extent, and accessibility of the professional development offered and how it assists educators in evaluating and integrating technology tools in ways that benefit student learning, and the State's role in providing professional development opportunities.	**1.2.1:** Ongoing	**1.2.1.a:** List the resources and support provided by the State in order to reach this objective. **1.2.1.b:** Determine the number of teachers with access to an ITRT for professional development, mentoring, and follow-up and track increases from the 2014-2015 through 2017-2018 school year. **1.2.1.c:** Determine technology proficiency of teachers, as measured by local technology competency instruments in order to determine increases through 2017-2018.
1.2.2: Place ITRTs on an appropriate salary scale that reflects their additional contract hours.	**1.2.2:** Document the salary scale.	**1.2.2:** Still in progress.	**1.2.2:** Review yearly records in order to determine ITRT employee retention.
1.2.3: Fully fund Technical Support Personnel as specified in the SOQs in order to provide timely and effective support to ensure that all tools and the network that supports them are installed and maintained properly.	**1.2.3:** Determine if the number of technical issues experienced in the schools which interrupt learning are fewer because of the number of Technical Support Personnel .	**1.2.3:** Ongoing	**1.2.3.a:** List resources and support provided by the state to reach this objective. **1.2.3.b:** List reporting a decrease in the time between when a technical issue occurs and the time it is resolved. **1.2.3.c:** As reported by schools, determine if disruptions in the use of technology because of a technical issue are reduced continually through the year 2018.

1.2.4: Add additional steps to the Technician's Salary Scale in order to bring them more in line with comparable technician salaries in other jobs.	**1.2.4:** Document the additional salary steps.	**1.2.4:** In progress.	**1.2.4:** Review technician employment records to determine employee retention.
1.2.5: Fully fund Assistive Technology Resource personnel according to the federal IDEA and the Regulations Governing Special Education Programs for Children with Disabilities in Virginia.	**1.2.5:** Assess the number of required personnel to provide any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device.	**1.2.5:** Ongoing	**1.2.5:** List the resources and support provided by the VDOE to reach this objective.
1.2.6: Leverage public/private/nonprofit partnerships to provide professional development focused on technology integration strategies and the development of teacher's and administrators' 21st century skills.	**1.2.6:** Assess instructional staff to see if they are changing the way they teach using technology to take advantage of the tools available for improving learning. Assess administrators as well to see if they are changing their approaches to leading and supervising, taking advantage of the capabilities provided by technology.	**1.2.6:** Ongoing	**1.2.6:** Assess the quantity and quality of professional development opportunities for teachers and administrators in order to track growth between the 2014-2015 and 2017-2018 school years.
1.2.7: Review and Update the Technology Standards for Instructional Personnel (TSIP)	**1.2.7:** Survey teachers in order to determine if the new standards inspire them to expand their use of technology in order to take advantage of the strengths of available tools for improving learning.	**1.2.7:** Ongoing	**1.2.7:** Utilize relevant standards to measure the technology proficiency of educators.

1.2.8: Identify and train instructional staff interested in using online resources to teach online and/or utilize blended/hybrid instruction, especially in those content areas that often become barriers to graduation. Course should adhere to iNACOL standards.	**1.2.8:** Conduct informal surveys of teachers in order to determine those interested in teaching online.	**1.2.8:** Ongoing	**1.2.8:a:** Maintain a current list of instructional staff and their content area(s) interested in teaching online. **1.2.8.b:** Document ongoing training sessions. **1.2.8.c:** Survey staff to gauge effectiveness of course.
1.2.9: Develop additional NRCC Professional Development courses that emphasize technology use and integration and assist teachers with appropriate courses for re-certification.	**1.2.9:** Survey teachers to identify needs for continual and additional offerings.	**1.2.9:** Ongoing	**1.2.9:** The number and variety of professional development offerings increase from 2016-2018.
1.2.10: Continue to fully fund and support/train virtual learning lab coaches who manage and ensure the daily operations of an online learning environment and a traditional lab setting.	**1.2.10:** Survey virtual lab coaches in order to determine training needs.	**1.2.10:** Ongoing	**1.2.10.a:** Document ongoing training sessions. **1.2.10.b**: Document increase of virtual lab Coache's knowledge and skills as evidenced through decrease in number of support requests throughout the year.
1.2.11: Provide ongoing just-in-time support to assist teachers in effectively integrating a variety of technology-based tools into teaching and learning.	**1.2.11.a**: Maintain records of the types of ongoing and just-in-time support. **1.2.9.b:** Survey staff to determine effectiveness of support provided in order to benefit student learning.	**1.2.11.a:** Ongoing	**1.2.11.a:** Review records in order to evaluate growth in support requests from 2016-2018. **1.2.11.b:** Review surveys to determine staff's perception of support and adjust as necessary.

Objective 1.3: Develop sound policies and procedures for the acquisition and management of technologies.

Strategy	Evaluation Strategy	Progress	Evidence of Impact
1.3.1: Employ both formal and informal means to communicate with school divisions and to answer specific questions regarding policies and procedures for acquiring and managing technology, including assistive technology.	**1.3.1:** Determine when guidance from the VDOE is being utilized by the school division.	**1.3.1:** In progress	**1.3.1.a:** Develop a system for measuring the extent of informal communications with the VDOE. **1.3.1.b:** Determine the most effective way to assess the use of available resources in the acquisition and management of technology.
1.3.2: Leverage partnerships with public entities, state agencies, state and national organizations, and private entities to support all stakeholders who are responsible for policies and procedures at the division level.	**1.3.2:** Develop a system to determine if the partnerships and projects entered into are being used to increase flexibility in school.	**1.3.2:** In progress	**1.3.2:** Develop a narrative describing the partnerships entered into and the results of those efforts.

Goal 2: Engage students in meaningful curricular content through the purposeful and effective use of technology.

Objective 2.1: Deliver appropriate, rigorous, and challenging technology-enhanced curricula to support formal and informal learning experiences.

Strategy	Evaluation Strategy	Update/Progress	Evidence of Impact
2.1.1: Expand course offerings for students through virtual and blended learning.	**2.1.1:** Determine new opportunities available for students as a result of course expansion. Determine as well if web sites used meet 504 accessibility standards.	**2.1.1:** Ongoing	**2.1.1:** Determine the number of students taking courses in order to determine the increase from 2014-2018.
2.1.2: Enhance the appeal of Virtual Virginia courses in order to promote greater flexibility and engagement of learners.	**2.1.2:** Determine the number of students who stay with the online class rather than drop as they might have a more traditional class.	**2.1.2:** Ongoing	**2.1.2:** Assess the number of students who complete the new, flexible, and engaging courses added to the Virtual Virginia offerings.
2.1.3: Provide student access to VDOE's web-based content, tools, and colloaborative spaces to enable blended learning and informal learning initiatives.	**2.1.3:** Determine the number of students and the school in which they are enrolled to determine their frequency of access to web-based content, tools, and collaborative spaces.	**2.1.3.** Ongoing	**2.1.3:** Analyze use data to determine frequency of access to web-based content, tools, and collaborative spaces.
2.1.4: : Provide student access to VDOE's web-based content, tools, and colloaborative spaces to enable participation for students with disabilities.	**2.1.4:** Assess the number of students taking advantage of VDOE resources who: are blind or vision impaired; are deaf and hard of hearing; have motor impairments; or have reading disabilities.	**2.1.4:** Ongoing	**2.1.4:** Analyze use data to determine frequency of access to web-based content, tools, and collaborative spaces by students with disabilities.

2.1.5: Translate the MCPS Model for Effective Instruction into an instructional model that encompasses the full potential of online instruction.	**2.1.5:** Collect data at school level regarding the reason(s) student(s) enrolled in a virtual course. **2.1.5.b:** Survey students in order to gauge effectiveness of virtual course instruction.	**2.1.5:** Ongoing	**2.1.5.a:** Examine surveys to determine student satisfaction level. **2.1.5.b:** Determine virtual enrollment numbers to see evidence of growth between 2015 to 2018.
2.1.6: Explore the establishment of a virtual school program.	**2.1.6:** Locate, study, and evaluate available research on existing virtual high school(s) including issues related to daily operations, instructional models, partnerships, cost, vendors, maintenance, staffing, etc.	**2.1.6:** Ongoing	**2.1.6:** Document yearly progress.
2.1.7: Explore the creation of a comprehensive "Summer Virtual Academy."	**2.1.7.a:** Determine course offerings from prior summers in order to identify curriculum content gaps. **2.1.7.b:** Examine previous summer academy online enrollments. **2.1.7.c:** Review exit surveys to determine student satisfaction.	**2.1.7:** Ongoing	**2.1.7.a:** Determine student enrollment trend between summer 2016 to summer 2018. **2.1.7.b:** Conduct curriculum gap analysis to determine comprehensive nature of program. **2.1.7.c**: Determine level of student satisfaction at end of each summer program.
2.1.8: Ensure all instructional leaders (Principals, assistant principals, coaches, department chairs, etc.), teachers, students, and parents are aware of virtual learning opportunities for students and then provide support for implementation.	**2.1.8:** Cite the number and frequency of related communications regarding virtual education via Student Handbook, newsletters, workshops for students, parents, staff, and the number of students/parents/staff who report participating in virtual learning opportunities.	**2.1.8:** Ongoing	**2.1.8.a:** Document number and types of media used to inform all stakeholders of virtual learning opportunities. **2.1.8.b:** Document growth of virtual learning opportunities between 2016-2018.

2.1.9: Support pilot projects and grants to help educators better understand the impact of new and emerging technologies on the learning environment and develop strategies to integrate them effectively into schools.	**2.1.9.a:** Document efforts to support pilot projects, as well as new emerging technologies and strategies for technology integrations in schools. **2.1.9.b:** Describe the number, types, locations, and scope/extent of pilot projects.	**2.1.9:** Ongoing	**2.1.9:** Evaluate the impact of pilot project(s) on student achievement over time.

Objective 2.2: **Provide resources to support personalized learning for all students.**

Strategy	Evaluation Strategy	Progress	Evidence of Impact
2.2.1: Identify and disseminate information and resources to assist schools in evaluating the interactive and universal design features of technology and digital resources.	**2.2.1:** Inventory technology devices and resources that support student learning of all needs in order to evaluate the effectiveness of purchasing decisions.	**2.2.1:** Ongoing	**2.2.1:** Determine the means the division uses in order to identify and disseminate information about the evaluation of technology and digital resources.
2.2.2: Provide best practices in the use of technology to personalize instruction.	**2.2.2:** Assess the use of alternative and new practices for instruction for all students. Determine if the school division is using Assistive Technology (AT) considerations to make decisions for students with disabilities.	**2.2.2:** Ongoing	**2.2.2.** Document efforts to disseminate best practices throughout the division.
2.2.3: Provide professional development support that focuses on the use of digital resources to effectively personalize student learning.	**2.2.3:** Evaluate the teacher use of digital resources from various sources in order to personalize learning for their students.	**2.2.3:** Ongoing	**2.2.3:** Analyze data in order to determine if there is an increase in the quantity and quality of professional development opportunities for instructional staff.

| 2.2.4: | Establish a central repository for managing courses with instructional resources with web-based documentation. | 2.2.4: | Record where and how teachers access instructional resources. | 2.2.4: Ongoing | 2.2.4: | Analyze data to determine teacher use. |

Goal 3: Afford students with opportunities to apply technology effectively to gain knowledge, develop skills, and create and distribute artifacts that reflect their understanding.

Objective 3.1: Provide resources and applications that encourage creativity, collaboration, and problem solving.

Strategy	Evaluation Strategy	Progress	Evidence of Impact
3.1.1: Provide resources developed by the VDOE and in partnerships with other entities (eMedia, Sketch Pad, etc.) by disseminating these to division stakeholders via the Internet.	3.3.1: Inventory these resources throughout the division in order to determine student access to these resources that encourage creativity, collaboration, and problem solving.	3.3.1: Ongoing	3.3.1: Describe how students access these resources and the frequency of access.

Objective 3.2: Develop and evaluate technology policies to effectively balance the need for instructional innovation with safety and security.

Strategy	Evaluation Strategy	Progress	Evidence of Impact
3.2.1: Identify and disseminate resources to help the School Board and administrators develop and evaluate policies to balance safety and security issues while allowing for instructional innovation, leveraging partnerships with other statewide organizations and entities as appropriate. Ensure Internet safety programs comply with state and federal regulations while enabling students to pursue innovative ways of learning.	**3.2.1:** Review current policies and procedures in order to balance out innovation and security/safety within the division. Revise as necessary.	**3.2.1:** Ongoing	**3.2.1.a:** Describe the identification and dissemination procedures that would help the School Board develop and evaluate technology policies. **3.2.1.b:** Maintain a record of any events that support the School Board and/or administrators in determine best practices regarding safety and security.
3.2.2: Identify and disseminate best practices and resources to promote the integration of Internet safety and security throughout the curricula.	**3.2.2:** Maintain record of resources distributed and/or accessed.	**3.2.2:** Ongoing	**3.2.2.a:** Review record of accessed resources to determine effectiveness. **3.2.2.b:** Review violations of AUPs to determine adherence to Internet safety procedures and assess need for further training.
3.2.3: Promote the safe and responsible use of social media.	**3.2.3:** Document division efforts to promote safe and responsible use of social media.	**3.2.3:** Ongoing	**3.2.3:** Review discipline incidents in order to evaluate effectiveness of division efforts regarding proper use of social media and direct future plans.

3.2.4: ITRTs will strive to increase awareness of Internet safety by providing professional development, assisting in the creation of technology-integrated lessons, modeling technology-integrated lessons, and providing resource information in newsletters and on the division website.	**3.2.4:** Maintain a record of the number of Internet Safety web-based and hard-copy materials made available, as well as workshops conducted and communications disseminated. Determine feedback method(s).	**3.2.4:** Ongoing	**3.2.4.a:** Review records/feedback to determine effectiveness of Internet Safety resources and revise as necessary. **3.2.4.b:** Survey workshop participants to assess strengths and weaknesses.

Goal 4: Provide students with access to authentic and appropriate tools to gain knowledge, develop skills, extend capabilities, and create and disseminate artifacts that demonstrate their understandings.

Objective 4.1: Provide resources and support to ensure that every student has access to a personal computing device.

Strategy	Evaluation Strategy	Progress	Evidence of Impact
4.1.1: Seeks ways and means to provide tools that extend student's capabilities can be customized to meet individual needs and preferences, and support learning.	**4.1.1:** Survey students in order to determine if they have access to tools that expand learning opportunities that meet individual needs and preferences. Determine the best way to survey students with disabilities in order to ensure each has access to appropriate technologies that provide comparable experiences to those received by general education students.	**4.1.1:** In progress/ongoing	**4.1.1:** Determine the frequency of personal computing devices distribution, focusing on two specifics: (a) how personal computing devices are customized and (b) how the options for customization support learning.
4.1.2: Provide best practices in the use of "bring your own technology" (BYOT) models.	**4.1.2:** Survey teachers and students in order to determine if BYOT initiatives are resulting in expanded learning opportunities for students. Determine as well if accommodations are being made	**4.1.2:** Ongoing	**4.1.2:** Documentation provides evidence that information is being provided throughout division schools regarding the use of BYOT initiatives.

	for students with disabilities to use their own accessible technology.		
4.1.3: Utilize each schools Site-Based Technology Committee in order to help secure and effectively integrate instructional technology.	**4.1.3:** Describe school's procurement procedures for planning for the integration of instructional technology.	**4.1.3:** Ongoing	**4.1.3:** Review school's annual technology inventory in order to determine if it is being properly maintained.
4.1.4: Provide Cloud-Based computing and support with the Google Apps for Education Suite. ITRTs are primarily responsible for training, while Technology Coordinators will monitor usage.	**4.1.4.a:** Monitor Google Analytics for Google usage. **4.1.4.b:** Monitor user information and the amount of data storage utilized by students, teachers, and staff.	**4.1.4:** Ongoing	**4.1.4:** Determine increase/decrease in usage through 2018. Plan accordingly.

Objective 4.2: Identify and disseminate information and resources that assist educators in selecting authentic and appropriate tools for all grade levels and curricular areas.

Strategy	Evaluation Strategy	Progress	Evidence of Impact
4.2.1: Identify and disseminate information about new and emerging technologies, including software and assistive technology. .	**4.2.1:** Determine if the division is taking advantage of new and emerging technologies that effectively meet current and future needs. .	**4.2.1:** Ongoing	**4.2.1.a:** Describe methods of identifying and disseminating information about new and emerging technologies, including software and assistive technologies. **4.2.1.b:** Inventory resources provided through various channels and in partnership with other statewide organizations and entities.
4.2.2: Design and implement pilot projects to evaluate new technologies	**4.2.2:** Evaluate new technologies in order to determine the value that the technologies provide to teaching and learning, as well as to determine accessibility, with results being disseminated in ways that are useful to division schools.	**4.2.2:** Ongoing	**4.2.2.a:** Document the processes of designing and implementing the pilot projects. **4.2.2.b:** Describe the number, types, locations and scope/extent (breadth and depth) of the pilot projects. **4.2.2.c:** Describe how the results of pilots conducted by the school division are shared.
4.2.3: Leverage partnerships with private industries and other organizations to provide industry certification with the use of technology delivery systems.	**4.2.3:** Determine if all students have opportunities to earn industry certifications through internships with private industry and organizations, ensuring those students with disabilities have equal access to courses and assessments.	**4.2.3:** In process/Ongoing	**4.2.3:** Document the partnerships available to divisional schools that provide industry certifications to students through technology delivery systems.

Goal 5: Use technology to support a culture of data-driven decision making that relies upon data to evaluate and improve teaching and learning.

Objective 5.1: Use data to inform and adjust technical, pedagogical, and financial support.

Strategy	Evaluation Strategy	Progress	Evidence of Impact
5.1.1: Model the use of data to inform strategic plans and purchases.	**5.1.1:** Determine how Division schools use data to develop sound policies leading to student success.	**5.1.1:** Ongoing	**5.1.1:** Describe how to use State models to inform strategic Division plans and purchases.
5.1.2: Provide support for educators on how to use data, particularly from formative assessments, to improve teaching and learning.	**5.1.2:** Assess the use of data by teachers and administrators, to assist in personalizing learning for students.	**5.1.2:** Ongoing	**5.1.2:** Detail efforts made to disseminate information and/or professional development regarding the use of data to improve teaching and learning.
5.1.3: Provide best practices in the use of technology to assess student achievement.	**5.1.3:** Determine how teachers and administrators use technology tools to help collect and interpret assessment data in order to help improve student learning.	**5.1.3.** Ongoing	**5.1.3:** Detail efforts made to disseminate information regarding effective assessment tools and practices.
5.1.4: Expand use of Power School by making student data available to MCPS parent(s)/guardian(s): • Assess parent training needs • Secure parent access • Provide web-based documentation	**5.1.4:** Record the frequency of Parent Portal access to student data.	**5.1.4:** Ongoing	**5.1.4:** Track parent access from 2016-2018 to determine usage increase/decrease.

Strategy	Evaluation Strategy	Progress	Evidence of Impact
5.1.5: Expand the use of Power School by making individual student data accessible to MCPS students.	**5.1.5:** Record the frequency of student Portal access to student data.	**5.1.5:** Ongoing	**5.1.5:** Track student access from 2016-2018 to determine usage increase/decrease.
5.1.6: Identify and disseminate resources to assist ITRT's in training teachers to disaggregate, interpret, and use data for instructional improvement. Describe the types of resources disseminated and the process by which they are provided.	**5.1.6:** Document how these resources help ITRT's use student achievement data to inform teachers about ways to improve instructional technology to enhance student learning.	**5.1.6:** Ongoing	**5.1.6a:** Track resource access by instructional staff to determine increase/decrease in usage. **5.1.6.b:** Compare student achievement from 2016-2018 to determine progress as a result of using data to inform instruction.

Objective 5.2: Promote the use of technology to support the design and implementation of next generation assessments.

Strategy	Evaluation Strategy	Progress	Evidence of Impact
5.2.1: Design and implement pilot projects that support technology-based assessments, including simulations and game environments, innovative delivery platforms, and multiple ways for students to demonstrate understanding.	**5.2.1:** Determine how division schools assess students with a wider variety of instruments that result in an evaluation of competency and functional literacy instead of memorization of information.	**5.2.1:** Ongoing	**5.2.1.a:** Document the processes of designing and implementing the pilot projects. **5.2.1.b:** Describe how the results of pilots conducted by division schools are shared. **5.2.1.c:** Survey students and teachers on the effectiveness of the pilot projects.
5.2.2: Provide best practices in the use of technology to support competency-based approaches.	**5.2.2:** Determine how educators use technology-based assessments to support competency-based education.	**5.2.2:** Ongoing	**5.2.2:** Detail efforts made to disseminate information regarding competency-based approaches.

Appendix 1: Timeline and Budget

Funding Source	2015-2016
State Grant (VPSA)	$709,985
Telecommunications	$506,748
Software Contracts	$308,118
Technology Maintenance	$107,572
Copier Lease	$239,643
Technology Replacement	$55,376
New Technology	$12,445
21st Classroom CIP	$250,000
Instructional Technology	$46,409
TOTAL	$2,236,296

Strategies and Measures	Timetable	Budget Source
1.1.1:	Ongoing	NA
1.1.2:	Ongoing	NA
1.1.3:	Ongoing	To be established
1.1.4:	Ongoing	21stCent/State Grant/e-Rate
1.1.5:	Ongoing	School Board FY Budget
1.1.6:	Ongoing	School Board FY Budget
1.1.7:	Ongoing	School Board FY Budget
1.1.8:	Ongoing	School Board FY Budget
1.1.9:	Ongoing	School Board FY Budget
1.1.10:	Ongoing	School Board FY Budget
1.1.11:	2018-2019 School Year	School Board FY Budget
1.1.12:	2018-2019 School Year	School Board CIP Funds
1.1.13:	2016-2017 School Year	School Board CIP Funds
1.1.14:	2015-2017 School Years	School Board FY Budget
1.1.15:	2015-2019 School Years	School Board FY Budget
1.1.16:	2015-2016 School Years	NA
1.1.17:	2015-2017 School Years	State VPSA Grant
1.1.18:	Ongoing	School Grant/School Budget
1.2.1:	Ongoing	State SOQ basic aid
1.2.2:	Ongoing	State SOQ basic aid
1.2.3:	2015-2017 School Years	State basic aid/Local Budget
1.2.4:	Ongoing	School Board FY Budget
1.2.5:	Ongoing	State basic aid
1.2.6:	2015-2016 School Years	School Board FY Budget
1.2.7:	2015-2017 School Years	NA

1.2.8:	Ongoing	School Board FY Budget
1.2.9:	Ongoing	NA
1.2.10:	2015	School Board FY Budget
1.2.11:	Ongoing	NA
1.3.1:	Ongoing	NA
1.3.2:	Ongoing	School Board FY Budget
2.1.1:	Ongoing	State/Local Budgets
2.1.2:	Ongoing	NA
2.1.3:	Ongoing	State basic aid
2.1.4:	Ongoing	NA
2.1.5:	2015-2016	Curriculum Budget
2.1.6:	Ongoing	NA
2.1.7:	2016-2018	NA
2.1.8:	Ongoing	School Board FY Budget
2.1.9:	Ongoing	NA
2.2.1:	Ongoing	NA
2.2.2:	Ongoing	ITRT program
2.2.3:	Ongoing	ITRT program
2.2.4:	Ongoing	School Board FY Budget
3.1.1:	Ongoing	State basic aid
3.2.1:	Ongoing	NA
3.2.2:	Ongoing	NA
3.23:	Ongoing	NA
3.2.4:	Ongoing	NA
4.1.1:	2014-2018	State Grant/Local Budgets
4.1.2:	Ongoing	NA
4.1.3:	Ongoing	NA
4.2.1:	Ongoing	NA
4.2.2:	Ongoing	School Board FY Budget
4.2.3:	Ongoing	School Board FY Budget
5.1.1:	Ongoing	NA
5.1.2:	Ongoing	NA
5.1.3:	Ongoing	NA
5.1.4:	Ongoing	School Board FY Budget
5.1.5:	Ongoing	School Board FY Budget
5.1.6:	Ongoing	School Board FY Budget
5.2.1:	Ongoing	School Board FY Budget
5.2.2:	Ongoing	NA

Appendix 2:

Montgomery County Public Schools

Book   Section 6: Instruction

Section   Article 3: Instructional Programs

Title   Technology Use

Number   6-3.13

Status   Active

Legal   Code of Virginia, 1950, as amended, §§2.2-3700, et seq.,
2.2-3803,
                18.2-372, 18.2-374.1:1, 18.2-390, 22.1-70.2; 42.1-76, et seq.,
                18 U.S.C. §§ 1460, 2256; 47 U.S.C. § 254

Adopted   April 1, 2004

Last Revised   August 4, 2015

The responsible use of computers and computer networks is a powerful tool in support of the instructional program. The Montgomery County Public Schools' computer network is a wide-area network linking the schools and the administrative offices to the Internet.

Liability

The School Board makes no warranties for the computer system it provides. The School Board shall not be responsible for any damages to the user from

use of the computer system including loss of data, non-delivery or missed delivery of information, or service interruptions. The school division shall not be responsible for the accuracy or quality of information obtained through the computer system. The user agrees to indemnify the School Board for any losses, costs or damages incurred by the School Board relating to or arising out of any violation of this policy. MCPS technology staff will not repair, configure, or be responsible for personal equipment of staff members.

Internet Privacy Statement – Montgomery County Public Schools

The Montgomery County School Board maintains and operates a Web site for the dissemination of information about the school division. The School Board does not collect any information from persons who access its Web site, including personally identifiable information. The School Board Web site does not automatically place a computer file - commonly known as a "cookie" - on any person's computer who accesses the Web site.

Acceptable Internet Use and Internet Safety Policy

Generally

The Montgomery County School Board adopts this Acceptable Use Policy, which outlines appropriate uses, ethics and protocol for the School Board's electronic communications network. Every two years, the School Board shall review, and amend if necessary, and approve the school division's Acceptable Use Policy. The division superintendent or designee shall post the Acceptable Use Policy on the division website. The school division shall certify compliance with the requirements of Virginia Code Section 22.1-70.2 annually to the Virginia Department of Education.

1. The division superintendent or his/her designee shall select and operate technology that protects against, filters or blocks access through school division computers to visual depictions that are –

    a. child pornography, as set out in Virginia Code § 18.2-374.1:1 or as defined in 18 U.S.C. § 2256;

    b. obscenity, as defined in Virginia Code § 18.2-372 or 18 U.S.C. § 1460; and

   c. material that Montgomery County Public Schools deems to be harmful to juveniles, as defined in Virginia Code § 18.2-390, material that is harmful to minors, as defined in 47 U.S.C. § 254(h)(7)(G), and material that is otherwise inappropriate for minors.

2. The technology protection measure shall be utilized and enforced during any use of the division's electronic devices by minors.

3. The school administration shall monitor online activities of minors.

4. The division superintendent or his/her designee shall select and operate technology and take administrative measures to protect the safety and security of minors when using Montgomery County Public Schools' network.

5. The division superintendent or his/her designee shall ensure that the Montgomery County Public Schools include a component on Internet safety for students that is integrated in the division's instructional program and that is consistent with the guidelines for instructional programs related to Internet Safety issued by the Superintendent of Public Instruction.

The failure of any student, teacher or administrator to follow the terms of this Policy may result in the loss of Montgomery Public Schools' network privileges, disciplinary action and/or appropriate legal action.

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ACCEPTABLE USE AND
INTERNET SAFETY
POLICY
Staff

</div>

1. MCPS staff shall use the division's computer equipment and communications services solely for educational purposes.
2. MCPS staff network account owners are responsible for all activities under this account, so staff shall not share network passwords.
3. MCPS staff shall not use the division's computer equipment and communications services for sending, receiving, viewing or downloading inappropriate and/or illegal material via the Internet and World Wide Web.
4. MCPS staff shall not use the division's computer equipment and communications services as part of any illegal activity defined as a violation of any local, state, or federal laws.
5. MCPS staff shall monitor online activities of minors.
6. MCPS staff shall report any instances of Cyberbullying, Cyberthreats, inappropriate or illegal activity to school administrators.

7. MCPS staff shall not disclose, use, or disseminate confidential information regarding students.
8. MCPS staff shall require students to have a signed Acceptable Use Policy (AUP) before using computers or accessing the network.
9. MCPS staff shall not use computers for commercial, political, or entertainment purposes during the school day.
10. MCPS staff shall be held responsible and accountable for damage to district equipment or network as a result of improper or unauthorized usage.
11. MCPS staff may access the MCPS public, wireless network, but shall not install any devices on the MCPS private, wired network.
12. MCPS staff shall comply with all applicable copyright regulations.
13. MCPS staff shall comply with the retention of electronic public or student records as governed by the Virginia Public Records Act, Virginia Code § 42.1-76, et seq. Record retention schedules, which identify various documents and how long they must (or need to) be saved, may be accessed at the Virginia Library's website: www.lva.lib.va.us.
14. MCPS staff shall integrate Internet safety into their curriculum.

ACCEPTABLE USE AND
INTERNET SAFETY
POLICY
Grades K-5

With the permission of your parent or guardian, Montgomery County Public Schools offers you the opportunity to use the Division's network which allows access to the Internet, as well as a variety of electronic devices. We expect you to use the Internet and computer based technology while at school for educational purposes. This use is a privilege, not a right, and we may discipline you or take away your right to use the Internet and computer technology at school if you misuse this privilege. You are responsible for your own actions while you are on the Internet and are also accountable for any online activities that occur by others if you allow them to use your account. Any communications through the use of the Division's network, including electronic mail on the MCPS e-mail system or other electronic files, is subject to the Student Code of Conduct and the Acceptable Use and Internet Safety Policy, and may be monitored or read by school officials.

1. I will read the rules for using the Internet that are given below and will ask an adult at my school if I do not understand what any of them mean. I also know that if I do not use computers and equipment in the right way, my teacher or Principal may need to discipline me. In fact, I may not be allowed to use computers and equipment again at school.

2. I will only use computers and equipment for educational . I know that my teacher and my Principal want me to use the Internet to learn more about the subjects I am studying in my classroom. I will not use the Internet for any other reason. For example, I will not search for a comic book site when I am supposed to be looking for something in science.

3. I understand that I am responsible or liable for any damages that I cause while using technology.

4. I will be polite to other people when communicating with them while I am on the Internet. I will not use curse words or any language that my teacher or parent would not want me to use in my classroom.

5. I will never give my name, my home address, any personal information about me or my family, or my telephone number to anyone I write to or communicate with on the Internet. I know that I should never share personal information with strangers no matter how nice they seem to be.

6. I will not cyberbully. "Cyberbully" means using the computer to threaten, harass, or intimidate another person. I will tell an adult if I see any cyberbullying, cyberthreats, or inappropriate activity.

7. I understand that sometimes I may see a site on the Internet that has pictures or words that my teacher or parents would not want me to see. I will not try to find those sites and, if I see one of them by accident, I will leave it as soon as I can. For example, if I am searching for a type of animal and find a picture that only adults should see, I will quickly use my forward or backward keys to take me to another site. I will not continue to look at the site with the bad picture and will not show it to others around me. I also will not print out or save the picture.

8. I will not use the words or pictures I see on an Internet site without giving credit to the person who owns the site. For example, I will not copy information from the Internet and hand it in to my teacher as my own work.

9. I will never give out private information about others or myself; including last name, address, phone numbers, or school information.

10. I will tell an adult right away if anything comes up on the screen that makes me feel uncomfortable.

I agree to follow the rules listed above. If I do not, my technology privileges may be taken away.

Student Name: _____

Student Signature: _____

Parent Name: _____

Parent Signature: _____

Date: _____

ACCEPTABLE USE AND INTERNET SAFETY POLICY

Grades 6 - 12

With the permission of your parent or guardian, Montgomery County Public Schools offers you the opportunity to use the Division's network which allows access to the Internet, as well as a variety of electronic devices. We expect you to use the Internet and computer based technology while at school for educational purposes. This use is a privilege, not a right, and we may discipline you or take away your right to use the Internet and computer technology at school if you misuse this privilege. You are responsible for your own actions while you are on the Internet and are also accountable for any online activities that occur by others if you allow them to use your account.
Any communication through the use of the Division's network, including

electronic mail on the MCPS e-mail system, or other electronic files, is subject to the Student Code of Conduct and the Acceptable Use and Internet Safety Policy, and may be monitored or read by school officials. User shall be held personally liable for the content of any electronic message they create. Downloading any file attached to an electronic message is prohibited unless the user is certain of that message's authenticity and the nature of the file.

While using technology as a student in Montgomery County Public Schools:

1. I will only use the technology and equipment in the manner for educational purposes. I understand that I may be held responsible for any or all damage incurred as a result of my negligent or inappropriate behavior.

2. While online, I will not use language, which may be offensive to other users. I will treat others with respect. The written and verbal messages I send while on the Internet will not contain profanity, obscene comments, sexually explicit material, or expressions of bigotry, racism, or hatred.

3. I will not cyberbully. "Cyberbully" means using the computer to threaten, harass, or intimidate another person. I will tell an adult if I see any cyberbullying, cyberthreats, or inappropriate activity.

4. I will not place unlawful information on the Internet, nor will I use the Internet illegally in any way that violates federal, state, or local laws or statutes. I will never falsify my identity while using the Internet.
5. I will not use the Internet for non-school related activities.

6. I will not engage in Internet activities that cause congestion on the MCPS network.

7. I will not use the Internet to buy or sell, or to attempt to buy or sell, any service or product.

8. I will not change any computer file that does not belong to me.

9. I will not use copyrighted materials or software from the Internet without permission of the author. I will cite the source where appropriate.

10. I will never knowingly give my password to others, nor will I use another person's password.

11. I will never use the Internet to send or obtain pornographic or inappropriate material or files.

12. Except for the usual information contained in the headers of my electronic mail, I will never give out personal information such as name, address, phone number, or gender.

13. I will never knowingly circumvent, or try to circumvent, security measures on either Montgomery County Public Schools' computers or on computers at any remote site.

14. I will never attempt to gain unlawful access to another person's or organization's resources, programs, or data.

15. I will not make, or attempt to make, any malicious attempt to harm or destroy data of another user on the Internet, including the uploading, downloading, or creation of computer viruses.

16. I understand that the school system is not responsible or liable for any harm, damages or charges that result from my use of the system's technology, including loss of data, interruption of services, corruption of files or programs, purchases, hacking or other violations of this Acceptable Use Policy.

I will report any violations of this Acceptable Use Policy that I have knowledge of to my teacher or principal.

Student's Agreement

I have read the Acceptable Use Policy for Internet Access, as written above, and understand fully and agree to follow the principles and guidelines it contains. If I did not understand the meaning of part of it, I asked an adult to explain it to me. I agree to follow these rules at all times when at school.

Student Signature: _____

Parent's Agreement

As the parent or guardian of this student, I have read the Acceptable Use Policy for Internet Access and Computer based Technology as written above. I understand that computer access at school for students of Montgomery County Public Schools is provided for educational purposes only. I understand that employees of the school system will make every reasonable effort to restrict access to all controversial material on the Internet, but I will not hold them responsible for materials my son or daughter acquires or sees as a result of the use of the Internet from school facilities. By signing this document and/or the student handbook in which this policy is contained, I give my permission to Montgomery County Public Schools for my son or daughter to use computer equipment and the Internet while on school property.

Parent Signature: _____

If I do not consent to the above rules, or I do not wish for my child to access computer equipment and the Internet, I have indicated my desire on the signature page to be contacted by the school to arrange for alternative instruction for my child.

Parent Signature: _____

Guidelines for Employee E-mail

The School Board provides computer-based electronic information services for the sole purpose of carrying out the mission of the school division. The purpose of this section is to define the appropriate use of the Montgomery County Public Schools electronic mail system. However, this section does not enumerate all possible acceptable and unacceptable uses. This policy applies to all persons who have been provided an MCPS e-mail account, including, but not limited to, MCPS employees. By using the MCPS e-mail system, users agree to do so only in compliance with this Policy and all applicable state and federal laws, including laws related to copyright and obscenity.

Appropriate Use

Access to the MCPS e-mail system shall be:

(1) for educational purposes that are consistent with School Board objectives and (2) for legitimate school business. Responsible use of electronic

communication requires discretion and professionalism. Users are solely and individually responsible for all communication transmitted via their MCPS e-mail accounts and shall not:

(1) forge, intercept or interfere with electronic mail messages;
(2) use obscene, lewd, profane, threatening or disrespectful language;
(3) distribute personal information about others without their consent; and/or
(4) distribute chain mail, solicitations, political statements, or religious messages.

When communicating via MCPS e-mail, users are expected to abide by generally accepted rules of etiquette.

<u>Personal Use</u>

The MCPS electronic communication systems are to be used for school system business purposes. Incidental personal use is permissible, so long as it does not:

(1) interfere with instruction;
(2) interfere with staff productivity;
(3) burden the school division with identifiable costs;
(4) preempt any school division activity or interfere with the efficient operation of the County's computing facilities or electronic mail services.

<u>Privacy</u>

As a matter of general practice, the MCPS administration will not regularly monitor e-mail messages. However, MCPS e-mail system users shall not have any expectation of privacy in anything that they create, store, send or receive on the MCPS e-mail system. The MCPS administration reserves the right without prior notice to access any e-mail message.

<u>Management Practices</u>

The individual user account of any employee shall be removed upon the employee's resignation or termination of employment.

On July 1 of each year, the MCPS technology department shall remove all e-mail messages from the system that are more than one year old.

<u>E-mail Confidentiality</u>

In general, e-mail messages from the MCPS e-mail system are public documents under applicable law and, therefore, are not confidential. Under

the Virginia Freedom of Information Act, e-mail messages must be produced if a citizen requests them with reasonable specificity. The general public shall have access to MCPS e- mail messages as provided in Virginia Code § 2.2-3704.

E-mail messages that contain personally identifiable, non-directory information about an MCPS student ore employee are confidential and may be exempt from public disclosure under Virginia Code §§ 2.2-3704(G) and 2.2- 3705.4(1). In addition, e-mail messages that contain personally identifiable information about a student are covered by the Family Educational Rights and Privacy Act ("FERPA"), 20 U.S.C. §1232g, and only persons with a legitimate educational interest may have access to them without written prior informed parental consent. MCPS employees that use the e-mail system to convey information to individuals that do not have a legitimate educational interest may be in violation of FERPA.

E-mail Record Retention

The School Board recognizes that e-mail messages may qualify as public records or student records under applicable law, and therefore are governed by the Virginia Public Records Act, Virginia Code § 42.1-76, et seq. Record retention schedules, which identify various documents and how long they must (or need to) be saved, may be access at the Virginia Library's website: www.lva.lib.va.us. The MCPS administration does not archive messages from the division's e-mail server. It is the responsibility of each individual MCPS employee to comply with the Library of Virginia's schedules for the retention of electronic messages, based on the categories of
documents for which the e-mail messages qualify. For example, in cases where e-mail messages are relevant to a student's cumulative record, the message must be printed and retained for five years.
Adopted: April 2004

Revised: September 2005, August 2006, August 2007, June 2010, August 2012, August 2015

Appendix 3:

Summary of Internet Safety Program for 2010-2015
(Including process for adjusting program based on evaluation)

The Internet has become a powerful tool for research and learning. MCPS is dedicated to providing the safest possible environment for teachers and students to use the Internet to its fullest potential. As a result of Virginia's Department of Education (VDOE) initiative, MCPS is implementing a comprehensive program that integrates Internet Safety into all areas of study. The MCPS Internet Safety Program provides support and resources to teachers, administrators, and the community.

In developing an Internet Safety Program, MCPS staff:

- Developed a program for increasing community awareness of Internet safety. The program provides information of the positive uses of the Internet, the dangers that the Internet poses, tips on safe Internet use, and tips on how to talk with children about the dangers of the Internet.

- First delivered a presentation to the community at the Montgomery County Community Safety Forum in November of 2006. Since that time MCPS has presented to the PTA presidents of Montgomery County and at PTA meetings in various schools throughout Montgomery County.

- Created informational materials in the form of a CD and pamphlet that provide tips and resources for parents.

- Maintains a webpage devoted to Internet Safety. The Internet Safety webpage provides resources, tips, and lessons to help the community become safer Internet users.

To fulfill the commitment MCPS has made to keeping students safe while using the Internet, staff must:

- Continue to maintain and update lesson plans and resources
- Continue to maintain and update Website
- Continue to provide Community Outreach through public meetings
- Monitor and convey the latest information concerning Internet Safety
- Encourage and facilitate integration of Internet Safety into the regular curriculum
- Promote the safe and responsible use of social media.