



MANASSAS CITY
PUBLIC SCHOOLS

Where Learning Powers the Future

FY 2020-2023 EDUCATIONAL TECHNOLOGY PLAN

July 1, 2019 – June 30, 2023

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INTRODUCTION

Since the 1980's Virginia public school districts have regularly developed, aligned, and submitted division-level technology plans to the Virginia Department of Education (VDOE) for review and approval. Manassas City Public Schools (MCPS) has been no exception as indicated by past versions of its Educational Technology Plans. However, in 2018 the VDoE removed the requirement that districts develop and publish separate plans and instead require affirmation that technology strategies and processes used within the district are consistent with state technology goals. This verification is completed through the Annual Data Collection process typically conducted in the month of July. Rather than necessitate MCPS take a stand-alone approach, the State recognizes that technology should be embedded within all district planning.

The latest Virginia technology blueprint is VDOE's [2018-2023 Educational Technology Plan for Virginia](#), which is comprised of four pillars that maintain the State's emphasis on integrating technology into the classroom and enriching the manners in which students achieve. These include *Learning, Teaching, Leadership, and Infrastructure*.

Though no longer mandated, the MCPS Educational Technology Plan provides a brief overview of the strategies that will be used in meeting these goals. Many other specific processes and approaches that augment the goals contained herein may be found within the contents of the following additional MCPS documents and resources:

- [Career and Technical Education \(CTE\) Strategic Plan](#)
- [Digital Citizenship Program](#)
- [Professional Development Resources](#) (*Note: This URL is accessible on the MCPS Intranet. MCPS login credentials are required for access.*)
- [Strategic Plan 2017-2021](#)
- [STEM Plan](#)
- [Technology User Guidelines](#)

ALIGNMENT

As a school division, Manassas City Public Schools is in alignment with VDOE objectives, having condensed them into three overarching goals:

- **Goal 1: Instructional Environment**
 - *Enhance personalized, equitable student learning experiences with technology*
- **Goal 2: Professional Learning and Leadership**
 - *Support innovative professional learning and leadership practices with technology*
- **Goal 3: Infrastructure**
 - *Develop and maintain a secure and robust infrastructure*

PLANNING PROCESS

Manassas City Public Schools employs an ongoing technology planning process involving feedback from a variety of stakeholders through multiple channels. To assemble the goals, results, actions, and indicators presented in this plan, the following inputs were used.

Technology Advisory Board (TAB)

This consortium of school and department staff members meets regularly throughout the school year to discuss technology initiatives, hardware and software standards, division needs, technology proposals, and long and short-term technology goals. The 2018-2019 school year TAB membership included the following representatives:

Communications <i>Director</i>	Student Achievement <i>Executive Director</i>
Finance & Operations <i>Executive Director</i>	<i>Director of Assessment & Accountability</i>
Human Resources <i>HR Administrator</i>	<i>Director of Instruction</i>
Information Technology <i>Director</i>	<i>Supervisor of Digital Instr. and Innovation</i>
Student Services <i>Executive Director</i>	<i>Supervisor of Professional Learning</i>
<i>Director, Federal Programs</i>	Schools
	<i>Principal – K-4 (Representative)</i>
	<i>Principal – 5-8 (Representative)</i>
	<i>Principal – 9-12 (Representative)</i>

Building-Level Technology Committees

Each school maintains a locally assembled collection of stakeholders with the primary purpose of adapting the division-level technology plan into specific strategies to meet the needs of their school. Membership is typically composed of teachers, administrators, Instructional Technology Training Specialists, and Technology Support Specialists. Committees are established at each of these buildings.

Baldwin Elementary School	Baldwin Intermediate School
Haydon Elementary School	Mayfield Intermediate School
Jennie Dean Elementary School	Metz Middle School
Round Elementary School	Osbourn High School
Weems Elementary School	

Technology Surveys

The Department of Information Technology solicits an annual needs assessment and satisfaction survey for all MCPS staff. The objectives include identifying customer perceptions of technology products and services offered, assessing how well technology team members are meeting expectations, and identifying technology needs at the division and school levels. In addition, groups of students are surveyed, both formally and informally, to provide similar feedback.

Professional Development Reports

Ongoing data from the division's professional learning platform as well as conclusions from annual needs assessment inquiries provide information related to staff development activities that focus on blended/online learning environments and technology integration into the classroom. This data delivers an additional perspective to the frame of reference for technology utilization throughout the division.

Technology Inventory Management System

The administration of the technology inventory management system delivers near real-time information as to the state of student, teacher, and administrative computing technologies and peripherals within MCPS. In addition, standard technology profiles for equipment provides a benchmark by which all current inventory is measured. Regular reporting provides important planning and budgeting data for computer refresh cycles and any identified deficiencies.

Industry Research and Reports

Keeping up with technological market trends and industry advancements provides the division with information essential to future planning and anticipation of needs. Through such means as vendor relationships, trade association memberships, and Virginia state reports and memos, MCPS strives to maintain an awareness of current and forthcoming technologies.

RESULTS, ACTIONS, & INDICATORS

Goal I: Instructional Environment

Promote and support student personalized, deeper learning experiences to demonstrate workplace readiness by creatively solving complex problems, thinking critically, collaborating, communicating and demonstrating responsible citizenship.

Result 1: Students will develop deeper learning skills, up to and including mastery, by leveraging technology as a resource or tool to support the construction and application of content knowledge and skills.

Actions	Indicators
<ol style="list-style-type: none"> 1. Provide equitable hardware for all students. Student to device ratio in grades Pre-K and K will be 2:1. Student to device ratio in grades 1-12 will be 1:1 2. Students will have access to the learning management system for communication and collaboration among peers and teachers. 3. Furnish students with various technological platforms to demonstrate their knowledge and maintain digital artifacts. 4. Incorporate technology skills into instruction that utilizes critical thinking, creative thinking, communication, collaboration and citizenship skills (the 5C's). 5. Balance innovation with safety and security by teaching all students digital citizenship. 	<ol style="list-style-type: none"> 1. Student to device hardware ratios in each school meets target. 2. Student account usage in learning management system. 3. Usage of local and cloud-based instructional applications. 4. Students demonstrate mastery of content subjects by utilizing technology for the creation of digital artifacts. 5. Data from digital citizenship instructional curriculum and Internet safety programs.

Result 2: Students will be exposed to career and college opportunities, including those in the technical fields to promote workplace and college readiness.

Actions	Indicators
<ol style="list-style-type: none"> 1. Offer technology-focused career pathways for high school students. 2. Incorporate technology skills into instruction, STEM programs, and extracurricular activities. 	<ol style="list-style-type: none"> 1. Business partnerships supporting student-centered experiences, events, internships. 2. Inclusion of technology standards within curriculum. 3. Opportunities offered through the MCPS Governor's STEM Academy.

Result 3: Educators will leverage current and emerging technologies to increase opportunities for students to follow personalized learning pathways.

Actions	Indicators
<ol style="list-style-type: none"> 1. Increase student opportunities and participation in online and blended course offerings to provide flexibility in learning approaches. 2. Allow students diverse methods to demonstrate mastery of content using technology. 3. Create learning opportunities for school and division leaders to understand, promote, and implement innovative strategies and technology-based resources. 	<ol style="list-style-type: none"> 1. Students accessing online and blended course offerings. 2. Availability of professional development opportunities focused on innovative strategies that utilize technologies.

Result 4: Families will have access to MCPS technology resources and opportunities to learn how to support student learning in a digital world.

Actions	Indicators
<ol style="list-style-type: none"> 1. Families will have access to student records, assessment information, and curriculum resources. 2. Provide in-person and virtual educational opportunities for family and community to learn how to support student learning. 3. Offer stakeholder access to digital citizenship and curriculum resources via school and division webpages and the learning management system. 	<ol style="list-style-type: none"> 1. Parents and guardians accessing resources. 2. Number of educational opportunities offered. 3. Content and links posted on MCPS webpages and within the learning management system.

Goal II: Professional Learning and Leadership

Provide professional learning opportunities that support staff in the implementation of innovative strategies, technology-based resources, and student-centric learning models.

Result 1: Staff will participate in professional learning opportunities that provide robust technology skills and innovative strategies.

Actions	Indicators
<ol style="list-style-type: none">1. Offer professional learning opportunities that focus on the meaningful and appropriate use of technology for all staff members as indicated in the annual needs assessment.2. Administrators and leaders will use data to inform and guide professional learning strategies.3. Provide staff with flexible access to professional learning opportunities (i.e. workshops, webinars, professional learning communities, and collaboration through the learning management system).4. Staff will learn how to identify, use, and support the best practices for utilizing technology within their professional responsibilities.	<ol style="list-style-type: none">1. Annual needs assessment results.2. Professional learning opportunities available in database system aligned with the "Blended & Personalized Learning" and "Technology Support" pathways.3. Staff attendance and completion records for technology-focused professional learning sessions.4. Number and frequency of technology resources utilized for professional learning opportunities.

Result 2: Staff will leverage professional learning opportunities to implement technology practices that support continuous growth and promote deeper student learning.

Actions	Indicators
<ol style="list-style-type: none">1. Educational leaders will develop a vision for teaching and learning that includes the appropriate use of technology.2. Create learning opportunities for school and division leaders to understand, promote, and implement innovative strategies and technology-based resources.3. Address the importance of using technology in a balanced way that promotes a collaborative and engaging learning environment in all professional learning.	<ol style="list-style-type: none">1. School professional development plans include "Blended & Personalized Learning" and "Technology Support" pathways.2. Increase in the number of teachers utilizing technology tools to engage students in personalized learning.3. Students demonstrate mastery of content subjects by utilizing technology for the creation of digital artifacts.

4. Monitor student progress to personalize learning and inform instructional practices. 5. Model the integration of technology as a teaching tool through different types of professional learning experiences.	
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Goal III: Infrastructure

Promote and support a secure and robust technology infrastructure to support access, adequacy, and equity.

Result 1: Students and staff have equitable access to secure and robust networks that provide high quality, reliable access to the Internet and other networks.

Actions	Indicators
1. Provide available, reliable, and sufficient Internet bandwidth for students, staff, and MCPS guests. 2. Maintain high quality, modern wired and wireless networks in all schools and offices. 3. Use robust monitoring tools to ensure reliability and availability of technology resources.	1. Sustained Internet bandwidth is less than 75% of total capacity. 2. Network equipment lifecycles. 3. Network equipment configuration files. 4. Network availability at or above 99%.

Result 2: Students and staff have equitable access to computing devices and other digital resources, including assistive technologies.

Actions	Indicators
1. Maintain six-year replacement cycle for student and staff computers. 2. Provide equitable hardware for all students. Student to device ratio in grades Pre-K and K will be 2:1. Student to device ratio in grades 1-12 will be 1:1. 3. Equip all classrooms with presentation systems. Provide all other instructional spaces with, or with access to, presentation systems. 4. Provide students with access to software and applications needed to support the educational process. 5. Provide staff with access to software and applications necessary to support job-specific duties and tasks.	1. Percentage computers less than six years old. 2. Technology inventory reports. 3. Student to device hardware ratios in each school meets target. 4. Number of presentation systems installed and/or accessible. 5. Technology survey results. 6. Division software database. 7. Semi-annual Windows system images.

Result 3: Best practices are used that comply with federal, state, and industry guidelines and recommendations to minimize network threats and vulnerabilities and protect organizational data.

Actions	Indicators
<ol style="list-style-type: none"> 1. Maintain Acceptable Use Policies (AUP) for students and staff to preserve integrity of technical resources. 2. Ensure content filtering system meets CIPA requirements. 3. Establish and maintain disaster recovery and business continuity processes. 4. Conduct project assessments and software/application reviews for new initiatives. 5. Add, modify, and replace technology policies, regulations, and adopted procedures as necessary. 	<ol style="list-style-type: none"> 1. Signed Acceptable Use Policies. 2. Content filtering reports. 3. Division software database. 4. Published technology-focused policies, regulations, and notices.

Result 4: Students and staff are provided with the appropriate technical and human resources necessary to deliver a technology-enhanced, reliable, and innovative instructional and operational environment.

Actions	Indicators
<ol style="list-style-type: none"> 1. Meet or exceed the Standards of Quality (SOQ) staffing requirements for Instructional Technology Resource Teachers (ITTS). 2. Meet or exceed the Standards of Quality (SOQ) staffing requirements for Technology Support Specialists. 3. Provide all students and staff with responsive technology support services 4. Maintain division and building-level technology committees to support learning and operational environments. 	<ol style="list-style-type: none"> 1. Departmental organizational charts. 2. IT support ticket acknowledgment and completion rates. 3. Technology committee minutes.

Result 5: Increased reporting of equitable and continuous access to secure and reliable networks by students, educators, and leaders as indicated by the Technology Usage Survey.

Actions	Indicators
<ol style="list-style-type: none">1. Provide real-time monitoring, intrusion prevention, intrusion detection, and incident mitigation on network perimeter interfaces.2. Maintain endpoint protection on all Windows-based MCPS devices, to include off-premise solutions for devices taken outside of the school system.3. Deliver relevant reports to school and division leadership related to inventory distribution, Internet usage, and other student and staff technology behaviors.	<ol style="list-style-type: none">1. Email and onscreen alert notifications from MCPS systems and/or third-party security partners.2. Central configuration management system reports for endpoint protection.3. Content filtering reports.4. Technology inventory reports.