

POLICY

BOARD OF EDUCATION OF MONTGOMERY COUNTY

Related Entries:

ABA, ACA, ACF, BFA, COA-RA, COG-RA, DJA-RB, EGB-RA, EGF-RA, IGT-RA, IIB, IIB-RA, IKA, IKA-RA, ITA-RA, JHC, JHC-RA, JHF, JHF-RA, JOA-RA, KBA, KGA-RB

Responsible Divisions/Offices: Division of Technology Services; Division of Office of Teaching, Learning, and Schools Leadership and Improvement; Division of Teaching and Learning Division of Technology Services, Office of Engagement, Innovation, and Operations

Emerging Technologies in Educational Technology

A. PURPOSE

1. To set forth guiding principles for the effective, appropriate, and strategic integration of emerging technology resources in support of teaching, and learning, and as well as the essential operational functions of Montgomery County Public Schools (MCPS)
2. To reaffirm the commitment of the Montgomery County Board of Education to equitable access and opportunity for all students and staff to use technology to communicate, collaborate, create, and innovate safely and responsibly in support of teaching, and learning, and operations

B. ISSUES

Educational agencies at the national and state levels have set forth Such standards to guide the comprehensive integration of emerging technology to promote academic excellence throughout in school districts across Maryland and throughout the United States. These standards Education agencies at the national and state levels have set forth standards to address the use of information technology and digital learning tools by students, educators, and educational leaders.

Maryland digital learning standards identify key principles and priorities issues to be addressed in policies for the safe, legal and ethical use of digital information and

educational technology; to enhance the achievement of learning goals through the appropriate use of educational technology; to ensure equitable access to appropriate digital tools; and to promote and model responsible social interactions related to the use of technology and information.

C. **POSITION**

Innovations in ~~The ability of technologies~~ available to meet instructional and operational needs changes rapidly over time. ~~Nonetheless, The Board~~ MCPS is committed to use emerging technology in MCPS to the best advantage and to replace outdated technology in a timely manner through ~~strategic careful analysis of emerging technologies appropriate for education and analyses of~~ technology infrastructure needs, balanced with available resources. ~~The Board affirms~~ The following principles shall to guide the integration of ~~emerging technologies~~ resources to support teaching, and learning, ~~and as well as the essential~~ operational functions of MCPS:

1. Curriculum, Instruction, and Evidence of Student Learning

- a. ~~Emerging technologies~~ shall be evaluated for their positive contribution and impact on ~~is an integrated in~~ part of the teaching, curricular objectives, and the integrity of learning processes ~~and that supports of curricular objectives goals~~.
- b. Technologies selected for use in MCPS shall support original, authentic and active learning, assess higher-order thinking, as applicable, and limit or detect academic dishonesty.
- c. MCPS shall foster inquiry and equip staff and students learners with skills to access and authenticate information, think critically to curate information from digital resources using a variety of tools, and to maximize the achievement of learning goals through the provision of media-rich resources.
- d. MCPS staff will be empowered professional learners who preserve human judgment and decision-making into the ~~appropriate use of educational use educational~~ technology for ~~in~~ the delivery and support of instruction and operations.

2. The Board recognizes the transformative potential of generative artificial intelligence (AI) technologies for enhancing instruction and operations within

MCPS, provided that it augments, rather than replaces, active, teacher-led instruction and authentic learning.

- a. For the purposes of this policy, *generative AI* refers to any technology capable of producing original content, including text, images, audio, video, or simulated data, based on inputs or patterns.
- b. The Board acknowledges the risks associated with generative AI, including but not limited to algorithmic bias, dissemination of misinformation or disinformation (e.g., “deep fakes”), threats to academic integrity (e.g., plagiarism and lessening of authentic learning), and adverse effects on student development through overreliance on automated tools.
- c. All uses of generative AI in MCPS must uphold the principles set forth in this policy, as well as principles of transparency and authenticity, with a consistent expectation of human decision-making and the exercise of responsible judgement about the appropriate use and disclosure of generated content.
- d. Teachers and staff may use generative AI tools to support instruction, personalize learning, and expand access to educational and operational resources.
- e. Student use is subject to oversight to support active, authentic learning and transparency about AI-content in student work.
- f. Guidelines for students and staff shall be reviewed and revised on a regular basis to respond to the rapidly evolving nature of AI.

3. Data privacy and data security

The Board ~~affirms its~~ is committed to the privacy and security of student and staff information as set forth in Board Policy KBA, *Public Information*, and ~~to compliance~~ with all applicable state and federal laws regarding data collection, privacy, and secure data storage and handling.

4. Learning Interests, Needs, and Modalities

- a. ~~Emerging Technology selected for use in MCPS shall supports students in meeting the diversity of student learning needs and enable them to~~

~~pursuing a range of interests. The Board recognizes the potential for strategically selected Emerging technologies to support students' diverse learning needs, facilitate them in pursuing a range of interests, offer the possibility of multi-tiered interventions to~~ and supplement and complement traditional instruction with multi-tiered interventions, additional support, as well as accelerated and enriched instruction.

- b. Instructional practices ~~shall~~ will appropriately balance the use of educational technologies with a variety of instructional methods and modalities in support of active, engaged, meaningful, and socially interactive learning. In so doing, MCPS will take into consideration the age and developmental level of students and recognize the importance of human oversight and monitoring of the amount of time spent with digital content, and provide a variety of learning methods and environments.
- c. MCPS ~~shall~~ utilizes a variety of instructional modalities in response to ~~these~~ equity implications, as appropriate, and ~~takes~~ carefully consideration of, not only readily apparent connectivity concerns, but also the support students may have for using such educational technology independently and effectively, when required outside of the school setting.
- d. The Board ~~MCPS~~ is committed to providing students, teachers, and other staff members with the technology and support they need to engage fully in virtual learning when circumstances warrant.
~~Technology shall supports students in meeting diverse learning needs and pursuing a range of interests.;~~

5. Equity

- a. MCPS will integrate technology into instruction and operations in alignment with the principles of equity set forth in –
 - i. Board Policy ACA, *Nondiscrimination, Equity, and Cultural Proficiency*;
 - ii. state and federal requirements for accessibility as set forth in the Americans with Disabilities Act, as well as state laws and regulations; and
 - iii. the accessibility standards of Universal Design for Learning.
- b. The strategic integration of digital tools in support of instruction shall

considers the equity implications of students' access to technology and the disparate challenges students may face when required to use educational technology outside of the school setting.

6. Evidence-based selection and integration of technologies

- a. ~~It is the Board's expectation that MCPS shall~~ takes a systemic approach to the acquisition and use of effective, appropriate, sustainable, and fiscally responsible technology in the service of high-quality MCPS instructional programs and operations.
- b. Consistent with Maryland standards and Board policies and goals for student learning, MCPS shall rely on evidence-based strategies and methods for the effective **selection and integration** ~~use~~ of educational technology for instruction.
- c. MCPS shall monitor and align educational technology resources to intended instructional outcomes. Evidence-based instructional best practices will guide –
 - i. the development and/or identification, selection and acquisition of emerging educational technology products; and
 - ii. the purposeful and strategic integration of such resources to support and enhance teaching and learning via multiple learner pathways, which may include direct instruction, blended learning, and distance learning.

7. **Ethical and Responsible Use**

- a. The Board ~~affirms its intention to support~~ the **Maryland technology standards for student and staff technology literacy** ~~of students and staff in alignment with state standards~~. It is the Board's expectation that staff and students use technology resources capably, purposefully, and responsibly.
 - i. For the purposes of this policy, *technology literacy* means the ability to work independently and with others in a technology environment; and to responsibly, appropriately and effectively use technology tools to access, manage, integrate, evaluate, create and communicate information.
 - ii. ~~In addition, it is~~ **The Board's intends for interest that our MCPS**

students and staff ~~should be able to~~ utilize technology as informed decision-makers and creators of knowledge; and to be informed and flexible in their ~~appropriate and ethical~~ application of technology to solve problems.

- b. It is the Board's intention that students and staff recognize the rights, responsibilities, and opportunities of living, learning, and working in an interconnected digital world, and act in ways that are safe, legal, and ethical. Students ~~and staff~~ should –
- i. cultivate and manage their digital identities and reputations and be informed of the short- and long-term implications of creating, obtaining, and distributing personal information in digital communication;
 - ii. engage in positive, safe, legal and ethical behavior when using technology, including social interactions;
 - iii. demonstrate an understanding of and respect for the rights of others and the obligations of ~~appropriately and legally~~ using and sharing intellectual property; and
 - iv. manage their personal data to maintain digital privacy and security, recognizing that there are data-collection technologies that may be used to track their navigation online.

~~The Board affirms its intention to support the information literacy of students and staff in alignment, as appropriate, with state standards.~~

~~It is the Board's expectation that staff and students use technology resources capably, purposefully, and responsibly. ¶~~

D. IMPLEMENTATION STRATEGIES

1. The superintendent of schools will establish ~~and regularly update~~ regulations or other administrative procedures necessary to implement this policy.
2. MCPS ~~shall provide~~ a comprehensive and functional technology infrastructure to support instruction, operations, and communications with the community, ~~and~~ ~~¶~~
 - a. ~~MCPS will~~ establish baseline standards to ensure that all classrooms, media centers, and offices will be connected and equipped with

appropriate infrastructure, providing all schools and offices with equitable and easy access to technologies for teaching, learning, management, and day-to-day operations;▪

- b. ~~MCPS~~ provides broad access to systems and networks, acknowledging and respecting the security of records that are accessible through such systems and networks. Safeguards are to be in place to ensure that security is maintained, in compliance with all applicable laws;▪ and
- c. ~~MCPS~~ leverages technology to develop and expand collaboration and communication to connect classrooms, to provide opportunities for learning beyond the school setting, and to cultivate collaborative relationships, as appropriate, between and among students, teachers, staff, parents/guardians, and members of the community-partners.

3. Technology shall be an integrated part of the teaching and learning process that supports curricular goals.

- a. MCPS units responsible for educational technology planning will work collaboratively with each other, as well as with county, state, and nationalgovernment groups, to investigate current, advanced, and emerging commercial technologies and to identify, or develop if necessary, efficient and cost-effective applications.
- b. MCPS employs a multiple-measures approach to monitoring evidence of student learning and student achievement of learning objectives. Continuous monitoring of students' progress ensures that students have timely and appropriate support, focused interventions, acceleration, and enrichment. Further-aAggregate reporting on the performance of specific focus groups of students on specific measures shall allows for be consistent with ongoing accountability for equity, and—the data-informed-driven analyses of access, opportunity, and success of all students.
- c. MCPS will assess, develop, and/or select, as appropriate, educational technology to support learner pathways inside and outside the classroom, including, but not limited to, distance learning or blended learning, that address the diverse interests and needs of students.
- d. MCPS shall identify competencies required and provide appropriate professional learning and support strategies needed for staff to preserve human judgment, instructional leadership, and capably integrate

technologies in instruction, consistent with state and federal requirements for accessible educational materials in instruction.

- e. Textbooks, digital devices, and print and digital learning resources will be selected, acquired, distributed in a way that makes them usable across the widest range of individual variability.

4. Data privacy and security, digital citizenship and responsible use:

- a. The commitment to data privacy and security includes making informed decisions when MCPS chooses instructional technologies to use with students.
- b. MCPS shall require products and vendors to comply with the Federal Educational Rights and Privacy Act (FERPA), the federal Children's Online Privacy Protection Rule (COPPA), and the Maryland Student Data Privacy Act; and prohibit surveillance-based use.
- c. MCPS shall promotes, models, and establishes guidelines for the safe, legal and ethical use of digital information and technology, and takes appropriate action to address, resolve, and prevent inappropriate uses of such information.
 - i. MCPS shall dedicates appropriate resources to protect information and information systems from unauthorized access, use, disclosure, disruption, modification, or destruction, while keeping such information appropriately highly available for teaching, and learning, and school system operations.
 - ii. MCPS develops specific systems, protocols, and guidance for protecting student and staff data.
- d. Staff engage in ongoing professional learning regarding the use and handling of personally identifiable information and other sensitive data.

- 5. MCPS will engage with multiple stakeholders to shape, advance, and accelerate the Board's vision for empowered learning with educational technology, digital content, and learning opportunities to meet the diverse needs and range of interests of all learners. MCPS will collaborate build and maintain partnerships with parents/guardians and community groups to appropriately extend students' access to educational technology and support for using such technology within and outside of the school setting.

MCPS provides a comprehensive and functional technology infrastructure to support instruction and operations; and MCPS will engage with multiple stakeholders to shape, advance, and accelerate the Board's vision for empowered learning with educational technology, digital content, and learning opportunities to meet the diverse needs and range of interests of all learners.

E. DESIRED OUTCOMES

1. Emerging educational technologies will be appropriately, effectively, sustainably, and equitably integrated into MCPS instruction and operations and in support of student performance and achievement, staff productivity, and efficiency of the day-to-day operations.
2. The development and/or selection of emerging educational technologies will consider implications of technology investments on equity, access, and the appropriate integration of educational technology into sound pedagogical practice.
3. Staff and students shall use technology resources capably, actively, and responsibly.
4. All schools and offices will have equitable and appropriate infrastructure and communications capabilities, as available resources permit, and MCPS will reassess such infrastructure and communications capabilities regularly.

F. REVIEW AND REPORTING

1. The superintendent of schools will monitor, evaluate, and annually report to the Board periodically on the implementation of this policy.
2. This policy will be reviewed in accordance with the Board of Education's policy review process and Board Policy BFA, *Policysetting*.

Related Sources:

Family Educational Rights and Privacy Act, 20 U.S.C §1232g; Protection of Pupil Rights Amendment (PPRA), 20 U.S.C. §1232h, 34 CFR Part 98, (2000 and Supp. IV 2004); Section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. Sec. 794; *Americans with Disabilities Act* (ADA), 42 U.S.C. 12131 et seq.; *Children's Internet Protection Act* (CIPA), 47 U.S.C. §254(h)(5)(B)-(C), 254(l); *Children's Online Privacy Protection*

Act of 1998 (COPPA), 15 U.S.C.6501-6505, 16 CFR Part 312; *Public Information Act of Maryland*, Ann. Code of Maryland, General Provisions Article §§4-101 through 4-601; *Maryland Student Data Privacy Act of 2015*, Ann. Code of Maryland, Education Article, §4-131 and 7-443; Code of Maryland Regulations §13A.03.02.03.B(8) and §13A.06.05.02-.04, .06; *Maryland Digital Learning Standards*, Maryland State Department of Education (MSDE), May 2019; *Technology Education Standards: Grades 6-12*, MSDE, January 2016; *Health and Safety Best Practice Guidelines: Digital Devices*, MSDE, July, 2019; International Society for Technology in Education Standards Administrators, Education Leaders, Educators, and Students

Policy History:

Prior to Resolution No. 863-93, this topic was governed by the following: Instructional Use of Computers, adopted by Resolution No. 995-83, December 13, 1983, reformatted in accordance with Resolution No. 333-86, June 12, 1986, and Resolution No. 458-86, August 12, 1986; rescinded by Resolution No. 863-93, December 8, 1993. Reconstituted Policy IGS was adopted by Resolution No. 863-93, December 8, 1993; amended February 9, 2020.