

POLICY

BOARD OF EDUCATION OF MONTGOMERY COUNTY

Related Entries: ABA, ABA-RA, EGB-RA, EGB-EA, IIB, IIB-RA

Office: Deputy Superintendent for Instruction
Deputy Superintendent for Planning, Technology and Supportive Services

Educational Technology

A. PURPOSE

1. To affirm the Board of Education's strong commitment to prepare today's students for life in the 21st century and ensuring a technologically literate citizenry and an internationally competitive work force
2. To articulate a vision and goals ensuring that educational technology is appropriately and equitably integrated into instruction and management to increase student learning, enhance the teaching process, and improve the operations of the school system

B. ISSUES

1. Technology in Society

Computers, television, consumer electronics, electronic publishing, and telecommunication technologies are rapidly merging to create a new medium, the information superhighway. As these technologies merge into a single interactive information industry, changes in access to and use of information services and tools will profoundly influence educational goals, content, and structure.

2. Technology in Education

Technology is essential to the success of students and the effective management of education for three reasons:

- a) Development of Technology Skills

There is a societal expectation that students should learn to use technology. Two

of the essential workplace competencies identified by the U.S. Department of Labor are the ability to use information and the ability to use technology.

b) Integration of Technology in Instruction.

Technology must become an integral part of the curriculum, the physical environment, and the delivery of instruction.

c) Effective Management of Education

Efficient administration of the school system requires up-to-date technological tools for both the direct and indirect support of instruction. Effective management of education requires that student performance and background data be available to administrators and teachers on demand, that clerical work be performed with minimal time and effort, and that tools such as electronic grade books, multi-year and multimedia student portfolios, optically-stored instructional materials and lesson plans, and classroom-based access to administrative systems be widely available.

3. Equity

Without equitable access to information, disparities in educational opportunities will grow larger. Students in all schools should have equitable access to information technologies and be provided the educational opportunities to learn to use these techniques. This will require that all schools receive support to be equipped with technological tools similar to those that have been available previously only to new and modernized schools.

4. Staff Skills and Training

The effective integration of technology assumes that teachers are facilitators of learning, designers of individualized programs, and learners themselves. Efficient operation and management requires staff skilled in the use of technological tools. Ongoing training and access to information technologies are essential.

5. Students with Special Needs

Students with special needs, including those with identified disabilities, benefit greatly from use of technology. For many students with disabilities, technology removes barriers to learning and facilitates their active participation in the least restrictive environment.

C. POSITION

1. Vision

The Board of Education is responsible for preparing students to access, analyze, apply, and communicate information effectively so that they will become successful, contributing members of a changing, information-based global society. A key to preparing students for the 21st century is equitable access to information. All MCPS classrooms, media centers, and offices should be electronically connected and equipped, providing all members of the learning community -- students, staff, and parents -- with equitable and easy access to information technologies for teaching, learning, management, and support of schools. An instructional profile of each student will be available from databases for use in diagnosing student needs, analyzing student performance, and reporting student achievement to enhance the delivery of instructional services and to ensure student success.

2. Educational Technology Tripod

Implementing the information superhighway concept in MCPS requires that information (text, data, audio, and video) be transmitted easily to and from every classroom, media center, and office. The base for ensuring equitable access to information technologies is a tripod that consists of staff support, hardware and software, and connectivity.

a) Staff Support

Training and support strategies will be provided to ensure that staff has the appropriate competencies and continuous support needed to use educational technology to deliver and support instruction.

b) Hardware and Software

To accelerate the pace at which schools/offices are provided full access to information technologies and to address the present disparities, a baseline configuration that allows access to sufficient equipment and software will be provided to every school/office.

c) Connectivity

The potential of educational technology will remain unrealized without a communications network, or highway, to link users and information. A multi-tiered network and communications strategy will be designed and developed to provide

for electronic communication within and among schools, homes, offices, and databases located anywhere in the world.

3. Administrative and Instructional Merger

MCPS must integrate administrative and instructional uses of technology. Staff support, hardware and software, and connectivity strategies will be applicable to all MCPS uses of technology.

4. Advanced and Emerging Technologies

Changes in technology require frequent reassessment of implementation strategies and the development of strategies based on systemwide standards for communications, hardware, and software that provide for assessment of the cost-effective replacement and/or adaptation of both obsolete and soon-to-be obsolete hardware and software.

D. DESIRED OUTCOMES

1. Educational technology will be appropriately and equitably integrated into instruction and management and used by all students and staff as an essential element of school improvement and student success. Improving student performance and achievement, increasing staff productivity, and assuring efficiency of the day-to-day operations of the school system are the essential reasons for the use of technology in MCPS.
2. All classrooms, media centers, and offices will be electronically connected and equipped, providing all members of the learning community, including students, staff, and parents, with equitable and easy access to information technologies for teaching, learning, management, and day-to-day operations.
3. Skill expectations will be established and required for both students and staff in using and integrating information technologies.
4. MCPS units responsible for technology planning will work collaboratively with each other, as well as with county, state, and government groups, to investigate current, advanced, and emerging commercial technologies and to identify or develop if necessary efficient, cost-effective applications.
5. The broadest possible access to the system is to be promoted, acknowledging and respecting the security of records that are accessible through such a system; and safeguards are to be in place to ensure that security is maintained.

6. MCPS will utilize to the maximum extent possible hardware consistent with MCPS standards made available by other government agencies and/or the private sector.

E. IMPLEMENTATION STRATEGIES

1. The superintendent will develop and maintain a comprehensive and continuous long-range MCPS educational technology implementation planning process. This process should be designed to plan, guide, and assess the effective implementation of all aspects of this policy. The superintendent shall present this plan to the Board for its review and approval and shall from time to time develop and present to the Board for its approval revised plans.
2. The superintendent will direct staff to develop implementation strategies which include but are not limited to the following:
 - a) Consult and collaborate on a continuing basis with education, business, community, and government groups both locally and nationally.
 - b) Identify student competencies in using educational technologies to access, analyze, apply, and communicate information.
 - c) Identify staff competencies required for integrating and applying information technologies in instruction and support (e.g., E-Mail).
 - d) Establish and continually update an ongoing staff development program to implement this policy.
 - e) Identify educational management tools to be acquired and implemented.
 - f) Establish baseline standards to ensure that all schools and offices have adequate and appropriate hardware, software, multimedia materials, and communications capabilities as rapidly as available resources permit.
 - g) Identify, document, and evaluate core processes that need improvement or re-engineering to maximize the productivity and educational benefits from technology investments.

F. REVIEW AND REPORTING

1. An annual report will be made to the Board of Education on the progress of implementing this educational technology policy during its first three years.

2. This policy will be reviewed every three years in accordance with the Board of Education's policy review process.

Policy History: Adopted by Resolution No. 863-93, December 8, 1993.

Note: 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.