



Technology Plan, 2006-2009

June 6, 2006

**Acton Public Schools
Acton-Boxborough Regional School District**

Technology Plan, 2006-2009

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Introduction

The development of a comprehensive technology plan is an opportunity to evaluate the outcomes of the goals and objectives of the past and to develop well-reasoned plans for the future that take into account the needs of the stakeholders and the resources available.

A three-year Technology Plan will be developed initially. Through an annual review process the Districts will formally revisit the plan, make necessary modifications and extend the plan an additional year. The successful development of this concept will have the effect of a perpetual technology plan. It will require the Districts to continually monitor and refine technology plans in light of the changing technology landscape and the changing needs of the stakeholders.

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Mission/Vision

District Mission Statement

Students and staff are a learning community participating
in a global society.

District Technology Vision Statement

By the conclusion of this Educational Technology Plan, the public school systems of Acton and Acton-Boxborough will have established a technology-infused curricula for all "students", regardless of age, in all subject matter areas, and across all disciplines. Technology will be an integral part of the infrastructure of teaching and learning.

The schools will use technology to enable all student stakeholders to think clearly, engage in creative production and participate in civil communication. These skills are essential in order to succeed personally and professionally in an information-based and global society, and necessary to prepare students for lifelong learning, changing employment requirements and full citizenship.

All students and staff will have reasonable access to technologies that reach from every instructional space and office in the schools to worldwide learning resources and all other learning sites. This access will be available anytime and from anywhere. Technology will be used in a learning culture that values safety and responsibility while promoting self-directed and comprehensive learning.

Adopted: January, 2001

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Guiding Principles, Goals, and Objectives

The Guiding Principles that follow are intended as a springboard from which to plan and shape district action in the realm of educational technology. To enact these Principles, planning with the relevant stakeholders and sustained support for necessary resources will be required.

1.0 Guiding Principle: EDUCATIONAL TECHNOLOGY PLANNING

The districts will creatively employ responsive, ongoing planning strategies to implement educational technologies in support of student learning.

1.1 The Districts will maintain, review and annually update their technology plan.

- Establish an initial three-year plan.
- Collect data on an annual basis to maintain up-to-date in-house information regarding the quality of the Districts' Information Technology and Instructional Technology use and to comply with the Department of Education reporting requirements.

1.2 The Districts will effectively solicit support from the public regarding technology planning and initiatives.

- Share information with the community via the Internet, newspapers, cable television, and other media, and at public meetings regarding:
 - Uses of technology in the schools
 - Current technology needs and future plans.
- Publish Acceptable Use Guidelines in all school student handbooks, and in the districts' family handbook and on the districts' website.

1.3 The Director of Information Technology and the Director of Technology Integration and Instruction will collaborate on all aspects of planning, budgeting and purchasing to ensure the successful fulfillment of the District Technology Vision and Goals.

1.4 The Districts will continue to collaborate with other districts and outside entities such as EDCO, MEC and the CASE Collaborative.

2.0 Guiding Principle: BUDGETARY SUPPORT

The districts will address all technology costs via an annual appropriated budget process in order to improve the continuity and public accountability of the planning process.

2.1 The districts will allocate resources annually for the regular replacement, up-grade, and disposal of technology.

2.2 Line items for educational technology will be added to the districts' annual budget.

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3.0 Guiding Principle: STUDENT LEARNING

The districts will promote the integration of technology into curriculum wherever technology integration can enhance student learning.

3.1 Technology outcomes for students will be incorporated in all curricular areas.

- Instructional technology benchmarks will be developed and implemented.
- Technology Integration and Library staff will be involved in District Curriculum Review processes, as appropriate.
- Targets of Opportunity for appropriate and meaningful technology curriculum integration will be identified and technology-infused units will be developed.
- The Districts will strive to comply with the Massachusetts Department of Education's *Technology Benchmark Standards for 2003*.
 - Establish technology benchmarks for K-12 students, teachers, and administrators.
 - Create and implement assessment tools to evaluate progress towards mastery of these benchmarks.

3.2 The instructional use of technology will be implemented to support student learning of academic performance standards.

3.3 Technology course offerings, particularly at the Regional level, will be developed as needed.

3.4 The Districts, working with the community, will provide appropriate student access to technology outside of the normal school day.

- Determine what types of after hours student access are desirable and implement as appropriate and feasible.

4.0 Guiding Principle: CLASSROOM INSTRUCTION

The districts will provide professional development that supports the use of technology to enhance instruction and student learning.

4.1 Develop a K-12 classroom technology integration program to implement the technology benchmarks.

4.2 Establish teacher technology benchmarks necessary to support classroom integration.

4.2 Develop a K-12 technology integration professional development program based on teacher and student benchmarks.

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- 4.3 Create a technology integration-mentoring program.
- 4.4 Create opportunities to share “best practices” of technology integration in our district.
- 4.5 Establish technology integration assessment process.
- 4.6 Foster supervision and evaluation practices which encourage integration of technology in the curriculum.
- 4.7 Develop a systematic approach to identifying appropriate training opportunities for support staff.
- 4.8 The district will implement sufficient technology integration:
- Provide teachers with support for technology instruction.
 - Provide students with technical assistance to ensure their safe and productive use of lab environments
 - The Districts will strive to comply with the Massachusetts Department of Education’s *Local Technology Benchmark Standards for the Year 2003*, which states that “The district provides a least 0.5 FTE staff person to support every 30-60 users (staff only) in their efforts to achieve technology competency and to integrate technology into the curriculum.”

5.0 Guiding Principle: ADMINISTRATIVE SUPPORT

The districts will enhance supports to students by improving administrative efficiency and information flow.

- 5.1 Establish administrative and support services technology benchmarks per district, MA DOE and national standards.
- 5.2 Develop a professional development program to support administrative leadership in the area of technology integration.
- 5.3 Provide administrative technology applications and tools that support educational services.

6.0 Guiding Principle: EDUCATIONAL TECHNOLOGY SERVICE DELIVERY

The districts will maintain, expand and enhance the technical infrastructure to improve user access in support of student learning.

- 6.1 Hardware and software acquisitions will be driven by curricular needs with an emphasis on cross-platform considerations.

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6.2 The districts will provide adequate technical staff to set up, troubleshoot and maintain the technology infrastructure including network equipment, computers and peripherals:

- Maintain network integrity, equipment reliability, and cost efficiencies in the delivery of network operations and support services.
- Establish service levels for technical support in line with the DOE benchmarks.
- Implement a technical support Help Desk.
- Annually review technical support performance in order to make recommendations for addressing deficiencies.
- Provide year-round support staff.
- The Districts will strive to comply with the Massachusetts Department of Education's *Local Technology Benchmark Standards for the Year 2003*, which states "The district ensures that every administrator, teacher, and student receives high quality user and system support so that by the year 2003 there will be at least one FTE person to support 100-200 computers."
- New hardware, software, adaptive technologies and emerging technologies will be tested prior to implementation.
- Investigate the potential value for establishing an adaptive technology center and a test-bed lab, in which innovative or emerging technologies could be field-tested.

6.3 All professional staff will be provided with at least one up-to-date computer connected to the network and the Internet as well as adequate access to printers and other appropriate peripheral devices.

- Assess current status and make recommendations to comply with the guiding principle.
- Provide wireless laptops to teachers when appropriate and necessary.

6.4 All buildings will have classroom size computer labs with appropriate peripherals for instruction.

- For APS: Establish full labs with appropriate peripherals in each building
- For ABRSD: Evaluate the curriculum needs of teams and subject departments and make computer access recommendations.
- For RJ Grey JHS: Purchase a full-sized PC Lab and a wireless mobile laptop lab.
- For both Districts: Provide and encourage the use of wireless AlphaSmarts where appropriate.

6.5 Individual teachers or groups of teachers who would like to enhance their curriculum with technology will be encouraged and supported.

- Establish line items in the appropriated budgets of both districts to fund Technology-Enriched Curriculum (TEC) Grants.
- Make TEC grants available to teachers who propose to use technology in innovative or especially efficacious ways to enhance delivery of the curriculum
- Develop procedures for administering the TEC Grants, including the application, review, selection and evaluation processes for the program.

6.6 Cross-platform productivity software will be provided whenever appropriate and necessary.

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- Provide the current version of *Microsoft Office* in the following areas:
 - School computer labs
 - Classroom teacher stations
 - Library computers
 - All office workstations
- Provide the current version of *AppleWorks* on all school Macintosh and PC computers and make the software available for teachers to install on their home computers.
- Provide the current version of *FileMaker Pro* where appropriate and necessary.

6.7 The Districts will be compliant with all copyright laws in the use of all software.

- Establish and comply with policies and procedures for software acquisition and copyright licensing.
- Maintain an accurate inventory of software licenses.
- Use *Asset Trustee* to track software use and deployment.

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Technology Professional Development

To effectively integrate technology as a teaching and learning tool, teachers need access to a wide-range of professional development opportunities. One goal of the Integration and Instructional Technology Department is to provide a variety of experiences for teachers to build their instructional technology capacity and to ensure that all educators and students master the Massachusetts Technology Standards.

District Technology Professional Development: Instructional Technology courses integrate content and technology standards. Each class is structured for specific technology skills acquisition –actual “seat” time, and classroom application or “follow-up.” Carefully documented handouts are customized for the participants as reference guides after the conclusion of the class. Participants receive credit based on instructional implementation, or “product.”

District Technology Graduate Course: *Enhancing Education with Technology* is a graduate course offered to teachers who would like to earn graduate credit from Fitchburg State College by an adjunct faculty member. The weekend format course explores the major concepts related to instructional computing as well as the impact technology has in education. Participants probe the role of technology within the K-6 learning environment by focusing on instructional, management, and communication tools.

District Technology Mentor Program: When funding is available, the district has offered the Technology Mentor Program.

Online Technology Skills Modules: eResources Teacher Tools provides teachers and administrators with an opportunity to participate in self-paced online professional development targeting specific technology skills and applications. Participants receive credit based on the successful completion of the modules as demonstrated by the assessment component.

School-Based Technology Professional Development: School-based courses are provided to staff to meet the needs of a particular school. These customized workshops are provided on an as needed basis. Whenever possible, carefully documented handouts are customized for the participants as reference guides after the conclusion of the class. Participants receive credit based on instructional implementation, or “product.”

Online Course with EDCO: APS and AB collaborate with EDCO districts to participate in online courses through EDC.

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Technology Policies and Procedures

As part of the process of developing the Districts' Technology Plan the TRC Staff will review and/or create recommendations for Policies and Procedures in the following areas to guide the use of technology in the Districts.

Policy/Procedure	Status	Comment
Acceptable Use Procedure – Internet Use	Printed on web site and student handbooks of each school	Should be reviewed and revised as necessary to ensure full compliance with the CIPA laws
Web Publishing Guidelines	Written and distributed to Administrative Council	Adopted by ABRHS
E-mail Accounts	To be developed	Consideration of student accounts; AUP for staff and students
Technology Equipment Loans by the Districts	Written and distributed to staff on an as-needed basis	Reviewed current loan agreements and revised as necessary
Donation Policy	Published on Web Site	Reviewed and updated
Help Desk procedures	Online Tech Request System in place	All tech request are submitted via our email system.
Disposal of Equipment	School Committee Procedure exists	Reviewed and updated
Use of Privately Owned Technology within the School Environment	To be developed	CIPA considerations Support considerations Tech Support considerations Liability considerations Acceptable Use Policy
Internal Operational Procedures	In process, online technical how-to modules are being developed	Job aids for internal staff

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Technology Initiatives and Reports

Technology Initiatives Educational Rationales are included in the Appendix
Each request for technology is supported by an educational rationale. An educational rationale template, which documents the reason for the request, impact on student learning, and support/resources needed, was developed and adopted by the district.

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Junior High Laptop (2005-06)
High School Building Project Technology Requests

Acton Public Schools
Douglas Palm Pilot
Conant Technology Upgrade

School Committee Reports
APS
ABRHS