

Brushton-Moira Central School

Brushton, New York 12916

Technology Plan

2007-2010

Revised June 2007

**Approved by the Board of Education on
June 11, 2007**

MISSION AND VISION STATEMENT

Mission Statement

The mission of Brushton-Moira Central School District is to foster a united community working cooperatively for the intellectual, physical and personal development for all our students so that they will become responsible, caring citizens prepared to meet future challenges.

Technology Mission Statement

Brushton-Moira Central School District will use technology to empower the educational community and enhance the learning environment for all. This environment will enable the educational community to develop the essential skills associated with problem solving, critical thinking, ethical practice, data retrieval, data manipulation and effective presentation of ideas. By establishing local, national and international linkages, the Brushton-Moira Central School District will stay current with technological advances, make the understanding of technology as important as the use of it and foster our interactions with the global community.

Technology Vision Statement

We believe that all children can learn and that the use of technology will enhance the learning experience of each student. Using technology is a skill that will help students become lifelong learners capable of critical thinking and problem solving. All students and staff will employ technology as a tool of access, analyze and utilize information. Classroom teachers will become guides directing students in learning activities, rather than being the conveyors of facts and information.

To this end, students in our school will:

- Use community resources to enhance classroom instruction;
- Collaborate on projects with other learners worldwide;
- Identify and use information sources and resources available in the school, community, state, nation and global society;
- Apply critical thinking, communication, and listening skills; and,
- Create, access, exchange and analyze information readily from electronic sources.

Lifelong learners will have access to a technology rich environment which will allow them to develop their maximum potential for leading productive and fulfilling lives in a complex and changing society.

Policy and Procedures

Brushton-Moira Central School has recognized that the use of technology requires new policies and procedures. The major change we have seen has been due to increased Internet use. We have addressed this issue by adding an Acceptable Use Policy. Our current Acceptable Use policy is shown in Appendix A.

The district has responded to the issue of security for both our network and the Internet. All users have access to the system by using passwords.

Needs Assessment

Current Environment

Teachers in Brushton-Moira Central School District completed a Technology Survey in the Spring of 2007. They responded to current technology knowledge and use, as well as future professional development and technology needs according to their *perceptions*. At this time, the district has a plan to update computers on a rotational basis.

Technology Survey Summary Report Teacher Responses

1. The Teachers have reported, and the data indicate, that the technology applications most frequently used by teachers are the Internet, word processing, and email. Over seventy percent (75%) of Brushton-Moira teachers are using these resources.
2. The teachers also have reported their technology usage for databases, spreadsheets, presentation and authorizing/multimedia tools. Fifty-five percent (55%) report that they sometimes use these tools.
 - » These skills are necessary in meeting the following National Educational Technology Standards: Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning. Teachers apply technology to develop students' higher-order skills and creativity; databases, spreadsheets, presentation and authorizing/multimedia tools are strategies that can enhance student learning.
3. Teachers report an increased use of on-line resources, daily internet use increased from 18% to 68%. Teachers report their use of authoring/multimedia tools at 30%.

Technology Survey Summary Report
Gap Analysis Summary
Other Interesting Perceptual Data
Teacher Use and Student Use

1. The teachers have reported, and the data indicate, that there is a high use of the Internet, e-mail, word processing and online educational resources by teachers. Student use of the same technology in the classroom is higher in the computer lab than it is in the classroom due to availability. Responding teachers also identified a low need for professional development in these areas for themselves. One recommended goal of the new technology plan is to close the gap between teacher knowledge and the use of technology tools and student knowledge and technology use.
2. In addition, few teachers have reported that they are using data bases and spreadsheets to address National Educational Technology Standards. These programs assist students with problem solving across many content standards, and involves higher order thinking skills. Another recommended goal of the new technology plan is to offer professional development in the integration of these technology tools.
3. Teachers have reported a need for professional development in the area of multimedia and presentation technology and reportedly this is the lowest area of use by both teachers and students. Another recommended goal of the new technology plan is to offer professional development in the integration of these technology tools as this is a common identified need for both teachers and students.

Measurable Outcomes or Results from the Use of Technology

Network Plan

Brushton-Moira Central School has developed a comprehensive network-wiring plan, which will integrate all the parts of the district. Assisting in this project has been the Northeastern Regional Information Center (NERIC).

The current plan calls for the District to use Windows as the standards for file and print service. Windows will run using Internet Protocol (IP), and all parts of the network will have Internet access through a router.

Application servers will be attached to the network as needed.

Administration Plan

Brushton-Moira Central School has established a student records system using the Starbase program. We continue to investigate upgrading to a more comprehensive system that will tie together student record keeping, health records, grading, and attendance records. The Star Web student management system will be implemented in the near future.

We have enlarged our budgetary control plan (e.g. inventory, equipment and supplies, payroll) by upgrading to Win Cap.

By using internal e-mail over the network, we will enable academic and administrative communications. In addition, we are searching for software that will allow calendar and meeting information to be kept on the network. With faculty and staff e-mail access, we have been able to maintain an on-line staff directory.

Technology Inventory/Assessment

As of the date of this plan, the district affords students and staff members access to 300 computers, with the vast majority of them being Dell computers. What is more, the utilization of computers are complemented by the presence of 11 color laser printers, 10 black and white laser printers, 110 ink jet printers, and 15 multimedia projectors. The district has updated routers and hubs throughout the course of the project with the provisions of the five wiring closets as well as several servers for various functions carried out within the district. 100 percent of the district's classrooms have access to the Internet through a T – 1 line. On a related note, the district has televisions in most classrooms.

Technology Support Staff and Skills

A part-time NERIC Technology Coordinator, Level III, provides support for both academic and administrative computer users. A staff member provides part-time academic instruction in an Introduction to Computers class.

BOCES and NERIC provide additional support for network and Internet problems, as well as additional software support for Starbase student information system and the Win Cap financial system.

The students and school community need the skill and expertise of a full-time technology teacher/coordinator.

Academic Plan Including Teacher Technology Competencies

Digital Content (Teaching and Learning)

Students at Brushton-Moira Central School will meet National Educational Technology Standards (NETS) for Students by using technology as a tool within their educational setting. We envision the students meeting the following outcomes as integral parts of curriculum activities. These competencies are not all-inclusive but are meant to be used as a guideline.

NETS for Students I. Basic Operations and Concepts

Goal: Students are proficient in the use of technology.

Student Competency: Students will acquire basic technological skills to successful use technology resources to meet education objectives.

Rationale	Activity	Timeline	Resources
Fifty-eight percent (58%) of the students sometimes use word processing software and sixty-three percent (63%) sometimes use tutorials to meet educational objectives	1. Reviewed a chart of student competencies with integrative technology learning objectives.	1.	Technology Committee
	2. Develop integrative technology learning activities to meet student competencies.	Continuous	NERIC Staff
	3. Implement and assess activities.	2. 2007 - 2010	FEH BOCES Staff
	4. Evaluate success of implementation and revise as needed.	3. 2007 – 2010	K-12 Faculty
		4. 2007 – 2010	Word Processing Software

NETS for Students III. Technology Productivity Tools

Goal: Students use technology tools to enhance learning, increase productivity, and promote creativity.

Student Competency: Students will use a word processing software program to complete classroom assignments.

Rationale	Activity	Timeline	Resources
Fifty-eight percent (58%) of the students sometimes use word processing software to meet educational objectives	Students will use a word processing software program to enhance content-area learning.	2007 – 2010	K-12 Faculty
			NERIC Staff
			FEH BOCES Staff
			Word Processing Software

NETS for Students IV. Technology Communication Tools

Goal: Students use telecommunication tools to collaborate, publish, and interact with peers, experts, and other audiences.

Student Competency: Students will use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

Rationale	Activity	Timeline	Resources
Ten percent (10%) of the students sometimes use multimedia software to meet educational objectives.	Students will create, produce and present ideas with the use of multimedia software.	2007 – 2010	K-12 Faculty Librarian NERIC Staff FEH BOCES Staff Multimedia Software

NETS for Students V. Technology Research Tools

Goal: Students use technology to locate, evaluate, process data and report and information from a variety of sources.

Student Competency: Students will demonstrate the use of appropriate technology for research, problem solving, decision-making, and reporting in all content areas.

Rationale	Activity	Timeline	Resources
Sixty percent (60%) of the students sometimes use online educational resources.	Students will search electronic databases to locate reference materials or to retrieve specific information.	2007 – 2010	K-12 Faculty Required by School Library Media Specialist and Classroom Teachers FEH BOCES Staff OPALS Library Automation System

Professional Development

The National Educational Technology Standards (NETS) and Performance Indicators for Teachers will be viewed as guidelines for professional staff development and to facilitate the integration of technology into curricular areas.

NETS for Teachers I. Teachers demonstrate a sound understanding of technology operations and concepts.

Goal: Teachers will demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies with a focus on word processing, presentation and productivity skills and online educational resources.

Teacher Competency: Educators will acquire basic skills and will be able to select and apply appropriate technology for instructional and management tasks.

Rationale	Activity	Timeline	Resources
Eighty-six percent (86%) of the teachers sometimes use word processing, presentation and productivity skills and online educational resources.	1. Technology Committee will review Proficiency Level Chart for Teachers. 2. Based on assessment findings, turn key trainers will be established. 3. Integrative technology workshops will be offered.	1. Continuous 2. As needed 3. 2007 – 2010	Technology Committee Turn Key Trainers Federal Grants

NETS for Teachers II. Teachers plan and design effective learning environments and experiences supported by technology.

Goal: Teachers will design developmentally appropriate learning opportunities and experiences supported by technology.

Teacher Competency: Educators will use the computer and appropriate technologies to design and align curriculum to support the implementation of the Learning Standards.

Rationale	Activity	Timeline	Resources
Seventy-six (76%) percent of teachers sometimes use the Internet.	1. As new technology becomes available it will be included in the curriculum. 2. Investigate on-line courses, such as mindleaders.com	1. 2007 – 2010 2. 2007 – 2009	Technology Committee K-12 Faculty Administration FEH BOCES Staff

NETS for Teachers III. Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning.

Goal: Teachers will facilitate technology-enhanced experiences that address content standards and student technology standards.

Teacher Competency: Educators will use telecommunications technology to communicate through date, video and voice.

Rationale	Activity	Timeline	Resources
Seventy-six (76%) percent of teachers sometimes use the Internet.	1. Investigating a more user-friendly web page for teachers.	1. 2007 – 2009	NERIC Staff K-12 Faculty FEH BOCES Staff

Teacher Competency: Educators will model proper use of technology by observing and applying the Brushton-Moira Central School Acceptable Use Policy.

Rationale	Activity	Timeline	Resources
Thirty-one percent (31%) of teachers sometimes use the Internet and fifty-eight (58%) percent sometimes use online educational resources.	1. Require all staff to sign off on the Acceptable Use Policy for Employees. 2. Enforce the regulations as stated in the Acceptable Use Policy.	1. 2003 2. 2003 – 2006	K-12 Faculty Administration Acceptable Use Policies

Professional/Educational Development, Training and Support

Training and Staff Development Recommendations

Brushton-Moira Central School must ensure that district-wide technology training is offered each year, and that teachers gain, or maintain, technology skills. The requirement for Continuing Professional Education (CPE) necessitates training of teachers. Because of this, this Technology Plan recommends that:

- A portion of the Brushton-Moira Central School Staff Development budget needs to be specified for technology training each year, and a portion of Brushton-Moira Central School's staff development plan should be devoted to making effective use of technology and media resources.
- Brushton-Moira Central School should offer training throughout the year during school and non-school hours, and these courses should offer different levels of training to meet the needs of all staff members.

Budget Development and Planning for Funding

A budget has been created to identify necessary expenditures for realizing the vision adopted by the Brushton-Moira Central School. While considerably smaller than the budget for the past plan, given the infusion of significant resources into the district due to a large capital project, there remains a strong commitment to technology even though the funding will not be as large as the recent years.

Technology Budget for Years 2007-08 through 2009-10

	2007-08	2008-09	2009-10
Hardware	\$64,815	\$64,815	\$64,815
Software	\$21,036	\$21,036	\$21,036
Title II D	\$3,536	\$3,536	\$3,536

Evaluation and Communications

Brushton-Moira Central School recognizes that an on-going evaluation is necessary to assess the effectiveness of the technology plan and to communicate the progress to the public. The evaluation process will include both formative and summative evaluations. As the technology plan is implemented, an on-going formative evaluation will insure that the goals, objectives and action plan timelines are on schedule and realistic. The summative evaluation will be based on the answers to key questions that will be determined by the Technology Committee. The questions will be based on the technology plan benefits, which include evaluation criteria.

Evaluation Strategies

Determine the methods of evaluating the progress of the technology plan using the feedback from the groups responsible for implementation.

Determine responsibility for conducting the formative evaluation.

Determine the methods for evaluating the final outcome of the technology plan goals and the target date for completion.

Determine the responsibility for conducting the summative evaluation.

Determine the method of communicating progress to the public. This communication is very important in building continued support for integration of technology throughout the district.

Plan for Monitoring and Evaluating

The Technology committee will be responsible for monitoring and evaluating the progress of the Technology Plan. In order to do so, the committee will:

- Meet at least three times a year, at the beginning of the year, in mid-year, and at the end of the year to assess the implementation of the Technology Plan.
- Reassess the objectives and benefits of the Technology Plan in order to ensure that it reflects the current situation.
- Assess the progress of staff development with regard to faculty and student computer literacy.
- Work to enhance technological communication between the school and the community.
- Assess the district's progress toward revising instructional guidelines, revising commencement competencies for technology, and revising the district-wide technology plan.
- Report the progress of the plan implementation to the school board, school district personnel, and the community.

Evaluation Plan

Brushton-Moira Central School evaluation plan will be conducted on an ongoing basis. The evaluation plan will include:

- Evaluation/implementation of administrative systems (student record system, library resource access system, faculty record system, inventory system and others)
- Evaluation of staff development programs
- Evaluation of the use of technology in the classroom
- Evaluation of network administrative services
- Evaluation of student use of computer resources
- Evaluation of computer integration into the curricula

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Appendix A

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Competencies for Students

Elementary, Grades K-4

- Mouse use
- Hour lass
- Log in, log off
- Basic skills
- Word processing
- Keyboard skills
- Guided internet use

Intermediate, Grades 5-8

- Basic skills +
- Word processing
- Keyboarding
- Internet use +
 - Using search skills
 - Search engines – awareness
- Power Point – basic

Commencement, Grades 9-12

- Word processing – advanced/templates
- Spreadsheet
- Database – creating
 - Mailing lists
- Graphics
- Research using internet
- Web page design
- Troubleshooting – software/hardware
- Exposure to new technology

Commencement

- Keyboarding
- Internet proficiency
 - Email
 - Online database
- Microsoft office
- Web page design (optional)
- Troubleshoot computer problems

Brushton-Moira Central School
Acceptable Use Policy
(Adopted as BMC Board of Education Policy, June 11, 2007)

Introduction

The purpose of the Brushton-Moira Central School District computer network is to provide internet access to students and staff for educational purposes. In order for students to use the district's network, they and their parents or guardians must first read and understand the following acceptable use policies. Failure to adhere to the policy and guidelines, as described below, will result in loss of access privileges for a time period to be determined by the district.

Acceptable Uses

1. Computer users must save material to their assigned directory.
2. Student use of the internet is partially contingent upon parent/guardian permission in the form of a signed copy of the Acceptable Use Policy. Parents/guardians may revoke approval at any time except for required curriculum work.
3. **Material created and/or stored on the system is the property of Brushton-Moira Central School District** and may be reviewed at any time for any purpose that the District deems necessary.

Unacceptable Uses

1. Computers may not be used to **download, copy or store any software, install screensavers, play games, check e-mail, instant message or enter any chat rooms/personal sites (e.g. myspace.com or youtube.com and similar sites).**
2. Computers may not be used for any activity that **is illegal or violates the school code of conduct.**
3. Accounts and passwords **must not be shared. Each student is responsible for the security of his/her username and password.** If illegal or unacceptable activity occurs under a student account, the student who is assigned that account is responsible. Users may not log on to someone else's account.

General Safety Guidelines

1. Never give out personal information online such as: name, address or phone number.
2. Notify an adult immediately if you encounter inappropriate material.

Please Keep This Page for Future References

Acceptable Use Permission Slip

Parent/Guardian Permission

I have read and understand the information about appropriate use of computers at the Brushton-Moira Central School District, and I understand that this form will be kept on file at the school. I give my child permission to access the network as outlined. I also understand that my child's work may be occasionally published on the internet and be accessible on the Word Wide Web through the district's web pages.

This permission slip must be returned to your child's homeroom teacher before he/she may access the District's network.

Parent Name (Print) _____

Parent Signature _____ Date _____

Student Name _____ Grade _____

Student Signature _____ Date _____

This form must be reviewed annually