

**Blackstone-Millville Regional School District  
Long-Range Technology Plan  
2010 - 2014**

The Blackstone-Millville Regional School District (**BMRSD**) has strived to put a viable, supported computer network in place to support the educational goals of the District as well as to provide all of its users a set of tools (both software application and Internet-based) to increase productivity and performance. We at Blackstone-Millville also hope to equip our students and faculty with the technology needed to enhance their curricula, to support project-based learning, and to utilize technological tools as support for all learning activities. The network, connecting 5 schools over a wide-area, as well as over 600 on-line workstations, has been in place for several years. The District has made a conscious effort to align its technology integration efforts with the 3 recommended PreK-12 Instructional Standards:

Standard 1: Demonstrate proficiency in the use of computers and applications as well as an understanding of concepts underlying hardware, software, and connectivity. *All classrooms in the District have an on-line computer and each school has at least one full-sized lab.*

Standard 2: Demonstrate responsible use of technology and an understanding of ethics and safety issues in using electronic media. *This is covered in each computer class yearly. It is also covered in the Network Computer Handbook accessible to all faculty and staff each year.*

Standard 3: Demonstrate ability to use technology for research, problem-solving, and communication. Students locate, evaluate, collect and process information from a variety of electronic sources. Students use telecommunications and other media to interact or collaborate with peers, experts, and other audiences. *These concepts are emphasized in relation to the State's Science and Technology/Engineering frameworks, a unit presented by our Library Media Centers, and as a point of emphasis in all electronic research projects, K-12. BMRSD has been guided by the ISTE Technology Standards since 1999. Student e-mail privileges are granted on a case-by-case basis for educational purposes.*

With the Guiding Principles of the **Massachusetts MCAS Test and Curriculum Frameworks** emphasizing problem solving, hypothesis testing and understandings of deductive/inductive/analogic and statistical reasoning, we are motivated to help our students with such skills. We would like to utilize our existing and ever-expanding computer network to assist in this endeavor.

**Integration of technology with curricula and instruction:** BMRSD has undertaken a complete creation of curriculum guides by subject area and grade level. Templates are used, edited and stored on network folders for all to access. These documents are proving to be valuable resources for exactly what we teach and when for both veteran and new staff as well. The Technology Department is always involved in professional development, support and other integration procedures to ensure that our investment in technology reaches the students and the curriculum delivery.

## **GOALS:**

### **OVER ARCHING GOALS for 7/1/10- 6/30/14:**

The Blackstone-Millville Regional School District seeks to meet and surpass the Massachusetts Department of Education Local Technology Plan Guidelines, Benchmarks 1 through 8. (<http://www.doe.mass.edu/edtech/planning.html>)

Additionally:

### **NETWORK**

1. To provide user-account support to all students grades 4-12 and all staff, K-12.
2. To develop a plan to edit and update the District web pages in light of the cuts in technology support staffing in the 2001-2009 period.
3. To continue to maintain the network and guard against viruses, spam and other dangers that would affect performance and integrity of the network.
4. To maintain an up-to-date suite of licensed software applications for use by all students and staff.
5. To maintain a student-to-high-capacity, Internet connected computer ratio equal to or better than the DESE Benchmark 4 level in a given year.
6. To provide technical support in the form of information, resources, HelpDesk application as well as staff to support the network and its users.
7. Hardware: To continue to upgrade, update and deploy hardware that is sufficiently powerful and up-to-date to run our various software packages for educational and utility purposes as well as keep peripherals (printers, digital cameras, LCD projectors, document cameras, etc.) in working order so that our staff members will feel confident and comfortable that if they engage this hardware on behalf of their students that it will be a valuable, smooth, reliable and productive experience.

With the opening of the Harnett Middle School in the fall of 2003, our District saw a state-of-the-art technological showpiece open its doors. Each classroom contains a SmartBoard, hanging LCD and a document camera. The school contains wireless laptop capability as well as mounted plasma screens in the Media Center and Main Foyer. The District and this Technology Committee is aware that the elementary schools and the high school do not have the technological roll-out that the new Middle School does. While we feel that these other schools are adequately outfitted technologically, we feel

that we should make conscious plans and decisions to keep these schools on a par technologically.

We would like to create “Presentation Rooms” out of each classroom in our schools. These rooms would be regular classrooms equipped with a SmartBoard and mounted LCD so that teachers can present topics in a presentation–style model, have students present oral reports using PowerPoint or some other presentation software utility, or utilize some new audio/visual features such as streaming video.

Also, the District’s custom of purchasing at least 60-90 new computers per year for the purpose of maintaining quality in our schools’ labs shall continue. In turn, a lab-full of new, current PCs will be purchased for a lab. The existing labs’ PCs will be rolled out to various classrooms in that school or elsewhere in the District. This keeps our labs in the best condition and fights obsolescence in the other areas.

The District would like to engage in creating a wireless infrastructure throughout its 5 schools and administrative areas. Currently, wireless deployment is on a limited and sporadic basis. With the ever-increasing availability and use of portable, tablet technology, we would like to upgrade and enhance our access capability to a secure, solid wireless infrastructure.

The development of portable technology items (iPADS, etc.) is of great interest to us as a learning tool. Bringing very specific, pertinent and timely apps to both large and small sub-sets of our student population is seen as having endless potential. We would like to establish at least pilot programs in each of our 5 schools of a mobility cart, with 24-30 wireless tablet computers, connections to LCD presentation devices and associated applications/software.

#### ADMINISTRATIVE

1. To continue to remain compliant with the SIMS DOE-IMS 52-element transmittals and the annual EPIMS staff data submittal, the SCS submittal within the entire SIMS Expansion Project..
2. To devise a plan to continue to train and implement the student administrative software package, X2, for secretarial staff, administrators, support services staff, and teachers. Implementation began September 2005. Parent Portal opened in 2009-2010. Elementary level schedules were added in 2010 with report card grade entry performed by all teachers and specialists.
3. To make all systems and software applications as seamless as possible and practical in their implementation and sharing of data.
4. To continue to support the use of the DESE Security Portal for all administrators and other necessary staff members, including the Data Warehouse application.

## CURRICULUM

1. To continue to establish a formalized set of courses/units in computer literacy, applications, ethics, research tool use and other productivity tools for Pre-K through Grade 12.
2. To make on-line/distance learning opportunities available to our students.
3. To adopt, present and assess the following computer/computing skill standards by the end of Grade 8 (using ISTE and DESE Standards):
  - A. **Basics:** terminology, ethical and acceptable use, hardware identification and operation.
  - B. **Keyboarding:** proper hand placement, software based.
  - C. **File Management:** copying, deleting, moving, renaming files; creating and using folders.
  - D. **Word processing:** creating and formatting documents, inserting and manipulating graphics, using tables, using copy-and-paste within and between applications, basics of writing the research paper.
  - E. **Spreadsheet:** as a problem solving tool, formulas, functions, values and labels, working with charts and graphs
  - F. **Presentation software:** using PowerPoint to create a presentation using different views, graphics, sound, animation, and the master slide. Students will present their project orally using the classroom SmartBoard/LCD set-up.
  - G. **Tools:** graphic organizers (Kidspiration/Inspiration); experience with maps and other tools in coordination with problem solving/project work.
  - H. **Research:** how to effectively and efficiently locate information on the World Wide Web, how to recognize legitimate web sources, how to properly cite web resources, and demonstrate competence with the electronic resources and the electronic card catalog.

## STAFFING

1. To assess staffing K-12 the areas of technology integration, and, in particular, the Technology Standards and benchmarks for students leaving Grade 8.
2. To restore our technology integration staffing to equal or surpassed that of 2002-2003 levels. (1-3 technology integrators at the elementary and secondary levels, adequate technology teachers at the secondary level to meet graduation requirement and elective needs of the students).

### Specific Goals for 2010-2011:

1. Create a short-term and long-term implementation strategy for X2, to include additional use of parent portal and personnel modules.
2. To purchase and deploy SmartBoard/LCD projector set-ups in all Grade 2 and Grade 1 classrooms at J.F. Kennedy Elementary School and Millville Elementary School.
3. To establish a pilot programs in two of our 5 schools of a mobility cart, with 24-30 wireless tablet computers, connections to LCD presentation devices and associated applications/software. Wireless infrastructure will be deployed first.
4. Comply with the DESE-IMS project submittal of 52 data elements on all 2300+ students in the District throughout 2010-2011. Collect, verify and transmit the data in compliance with all DESE guidelines. Improve transfer of data for the Special Education fields. Comply also with the EPIMS staff data submittal and the SCS Student Course Schedule submittal.
5. Orient all new staff members in the operations of the BMR network, including HelpDesk account usage.
6. Establish a set of in-service courses taught by our own staff members to continue computer technology professional development in the District.
7. Continue to implement and maintain student user accounts and network storage, for Grades 4-12. Train students in the use of their user accounts, especially students new to the District. Pilot the use of Google Docs for Grade 4 and Grade 5 students.
8. Devise a strategy to edit and update the District web pages.
9. To make twenty-five on-line/distance learning course offerings available to high school students and middle school students.

### Specific Goals for 2011-2012:

1. To further expand the use of the X2 student administrative software package to all schools; attendance, scheduling, health, discipline, guidance services including honor roll, class rank, report cards in grades K-12, teacher grade book. Training and support will be provided.
2. To build a Presentation Room(s) at the JFK Elementary School.
3. Comply with the DESE-IMS project submittal of 52 data elements on all 2300+ students in the District throughout 2010-2011. Collect, verify and transmit the data in compliance with all DESE guidelines. Improve transfer of data for the Special Education fields. Comply also with the annual EPIMS staff data submittal
4. Orient all new staff members in the operations of the BMR network, including HelpDesk account usage.

5. To implement the Grade 8 technology assessment. Plan, devise and implement the instrument and assess the results.
6. To create a District Network Disaster Recovery Plan. Data is now critical in decision making in many aspects of our educational program. Devising strict and secure plans and procedures to back-up, protect and maintain our data and applications is key in this day and age.
7. To make twenty-four on-line/distance learning course offerings available to high school students.
8. To create 24 additional "Presentation Room" set-ups (LCD projector, SmartBoard) in the high school.

#### Specific Goals for 2012-2014:

1. To further roll-out the X2 student administrative software package to all schools; attendance, scheduling, health, discipline, guidance services including honor roll, class rank, report cards in grades K-12. Training and support will be provided.
2. Comply with the DESE-IMS SIMS Expansion (SIMS-52, EPIMS, SCS) project submittal of on all 2300+ students in the District throughout 2012-2013.
3. Orient all new staff members in the operations of the BMR network, including HelpDesk account usage.
4. Plan, compile and deliver Internet Safety information to parents and a unit for students. Incorporate into existing computer lab time and use.
5. Continue to support remote access to network shared drive folders for staff and students (grades 6-12).
6. To make twenty-four on-line/distance learning course offerings available to high school students and twelve to middle school students.
78. To provide a stable, high-speed WAN to the 5 schools, using current best-available technology.

### **PROFESSIONAL DEVELOPMENT**

To offer high quality professional development to staff members. Leveraging MA DOE grants as well as operating budget funding, the District must continue to offer technical training in its current version suite of software applications, methodology and techniques in technology curriculum integration, and specific subject area software titles.

Courses and training will be provided during the school year both after school and on professional development release days. Also, courses and trainings will be included in any District-wide summer professional development offerings.

## **NEEDS ASSESSMENT**

To assess the computer network, its use by students and staff, all aspects of its design, implementation and performance will be performed by the Director of Technology and Network Administrator, with the input of administration, teachers, technology team and students.

## **BUDGET**

The Director of Technology will create the budget proposal each year. Input from teachers through their building principal will be sought. The budget will include telecommunications and Internet Service Provider costs, network maintenance and support items as well as administrative, curriculum, staffing and professional development items. The budget proposal will be reviewed by the Superintendent, Assistant Superintendent and School Committee. District-wide purchasing of computer related supplies and materials, including software titles and application suites, will be the policy. The District will participate in the Schools and Libraries Division E-Rate program for eligible telecommunications services.

## **EVALUATION**

The District's Technology Department will be evaluated by the Central Administration, Director of Technology, and technology team members. Planning and implementation, including all fiscal items, will be measured against the over-all technology goals of the District. Hardware and software upgrades will be made using conservative, annual purchasing plans, with older equipment being rolled out from labs to individual classrooms.

## **TECHNOLOGY TEAM:**

Kay Tessier	District Director of Technology
Brad Monroe	Technology Consultant, Parent
Kimberly Shaver-Hood	Superintendent of Schools
Philip Toupin	Network Manager, Parent
Justin Cameron	Principal, FW Hartnett Middle School
Samuel Conklin	Technician
Elizabeth Ganis	Technician
John Morocco	Teacher