

**Maine School Administrative District No. 15
Gray and New Gloucester**

**District Technology Plan
2007-2010**

**Developed by:
District Technology Committee**

**Written by:
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Introduction

To help facilitate the appropriate use of technology, MSAD #15 has established a Technology Committee to meet as needed to oversee technology in its schools, discuss the roadblocks to implementation and establish priorities and budget issues. As the committee works to develop an understanding of the current usage of technology and bring into focus a picture of the future, it is a priority to continue to develop an organizational structure that is in line with district technology goals. This structure enables all parts of the whole to work in areas of expertise and control the scope of work in an effort to act on the goals and vision of this document. This organizational structure identifies three distinct groups that must inform as well as perform the work relating to technology and learning in MSAD #15.

Those three groups are:

- Infrastructure
- Administration
- Academic

Each of these groups has a distinct and unique understanding of its particular role regarding the action steps needed to accomplish each goal. Thoughtful reflection, numerous conversations, and informative, data driven surveys have aided in identifying the many areas of strength and concern in MSAD #15's technology landscape. This committee is comprised of representatives from all schools and the communities served by MSAD #15.

- Victoria Burns Superintendent of Schools
- Karen Caprio Director of Teaching and Learning
- Craig Moore District Technology Director
- Barbara Foster Technology Secretary
- Tod Bennett School Board Member
- Paul Penna G-NG High School Principal
- Sherry Levesque G-NG Middle School Co-Principal
- Peter Cook G-NG Middle School Co-Principal
- Bruce Beasley Burchard A. Dunn Elementary School Principal
- Daniel Joseph James W. Russell Elementary School Principal
- Donna Beeley Memorial School Principal
- Art Bodwell District Technology Technician
- Cinda-Lee Bragdon Distance Learning Educational Technician II
- Deb Wheat G-NG Middle School Teacher
- Kent Pelkey Burchard A. Dunn Elementary School Computer Lab Educational Technician III
- Michelle Adler G-NG Teacher's Association President and High School Teacher
- David Coleman G-NG High School Teacher
- Stephanie Enaire Burchard A. Dunn Elementary School Teacher
- Virginia Bearce Memorial Elementary School Teacher
- Marc Rubenstein Community Member

1. Community and Parent Involvement:

Involve a broad representation of the school community in the planning process. Include a description of how the technology will be used effectively to promote community and parental involvement and increase communication with parents, including a description of how parents will be informed about the technology and its proper use.

MSAD #15 recognizes the importance of parental involvement and strives to include parents/guardians in all aspects of their child's education, including decisions in the operations of schools, planning, and resource management. As technology evolves as a method for schools to maintain open lines of communication with the communities it serves, MSAD #15 continues to expand on opportunities in this area. Examples include, but are not limited to, individual and school web pages, e-mail, electronic surveys, and varying levels of PowerSchool access.

The MSAD #15 Administrative Team has worked to employ varying technologies as a vehicle to continuously set goals, evaluate progress, and make decisions at the local level to support student learning. As data is collected and analyzed, technology is also proving useful (and necessary) as a tool to share information with parents.

- Middle School and High School parents are given access to the student progress through PowerSchool.
- A commitment to informing the G-NG communities through the use of e-mail as a tool for communication. Whether it is a single teacher communicating with a parent or a mass e-mail sent from a building administrator, MSAD #15's schools have embraced FirstClass as a swift and efficient method to communicate with parents and the G-NG communities. Additionally, over the past two years MSAD #15's schools have made school climate surveys available for online viewing and completion.
- Each year MSAD #15 offers training in FirstClass and PowerSchool/PowerGrade. This training is available to existing staff and mandatory for new staff.
- Each year, as a part of the dissemination of information to its students, parents, and communities at large, MSAD #15 sends home a Computer Use Acceptance Policy and Acknowledgement Form, whereby parents/guardians know what manner of usage is expected in Gray-New Gloucester schools.

Over the past several years MSAD #15 worked to keep its web site updated and available for the communities. The continuing challenge is to appropriately allocate resources needed to keep the multiple sites updated. This is currently in the hands of building principals and a secretary at MSAD #15's central office. We must also pilot new ways to utilize technology as a vehicle for mass communication. Possible examples would include, listservs, web casts or web blogs.

MSAD #15 also uses video technology and access to public cable television to facilitate communication with its communities and parent population. The District is committed to supporting endeavors such as student and staff broadcasting contributing to local cable/community public access channels through the development of high school communications courses/department.

MSAD #15's commitment is further underscored as computer upgrades and more servers become available to support the expanding infrastructure. This will allow for quick and easy access to varying and ever-changing data and documentation by parents and community members. Additionally, MSAD #15 has purchased a number of servers and software/hardware upgrades that will facilitate the sharing of critical information between administrators, teachers, and other personnel within the district system and beyond.

Following the adoption of MSAD #15's previous Technology Plan, G-NG Middle School participated in the 7th grade (and subsequently 8th grade) Maine State Lap Top Initiative (MLTI). Indeed, the introduction and implementation of these laptops at the 7th and 8th grade levels raised the bar for technology and bring this tool of

learning into the homes of our communities. Subsequently, MSAD #15 has committed to continue with its participation in the MLTI program. 7th and 8th grade students will take part in this program. As a result of MSAD #15's buyout of previously utilized MLTI computers, the District's 6th grade students will benefit. Additionally, teachers throughout the District at all grade levels will have computer access.

2. Vision/Philosophy for technology:

Establish a vision statement linking the tools of technology with areas such as curriculum content, instructional practices, professional development strategies, and enhanced services.

MSAD #15 is a community dedicated to providing an environment where all are afforded opportunities to learn, succeed, grow and mature. MSAD #15's Vision Statement clearly affirms the need for adaptability in the face of social and technological change and addresses a commitment to the educational development of critical and creative thinkers. The MSAD #15 Vision and the efforts of its leadership seek to empower every student to become:

- Community and Global Stewards
- Complex Thinkers
- Self-Directed Learners
- Academically and Artistically Literate Persons
- Effective Communicators
- Quality Workers
- Physically, Mentally, and Ethically Healthy Persons

In 2000, the MSAD #15 School Board adopted a document titled "*MSAD 15 Technology Goals*". This document outlined MSAD #15 guiding values for technology and its use:

1. Technology will be viewed as an integral part of the school community.
2. All students will have meaningful experiences in a variety of technologies designed to prepare them for a rapidly changing world.
3. All staff will be experienced in a variety of technologies. This will allow them to prepare students for life-long learning.
4. MSAD #15's schools will productively integrate current technology into its educational environment.
5. All will view technology as a community-wide resource that will be accessible.
6. Necessary equipment, training, and support will be provided; guaranteeing that technology will have a significant and critical impact on the MSAD #15 educational system, now and in the future.
7. The MSAD #15 Technology Committee has identified the increased implementation of current technologies as critical to teaching and learning within the District.

3. Goals:

Articulate specific goals, aligned with the Maine Learning Results, for using advanced technology to improve student academic achievement.

The following goals were originally identified in MSAD #15's 2003-'07 Technology Plan . Given the current needs and aspirations of our school community, these goals will continue to guide the integration and applications of technology for MSAD #15 for the 2007-2010 school years.

- MSAD 15 will utilize technology as a link to communicate between home, school, and community.
- MSAD 15 will continue to develop its K-12 technology curriculum, integration, and innovation.

- MSAD 15 will analyze technology needs and establish a reasonable replacement cycle for hardware, software, and peripherals.
- MSAD 15 will carefully look at data collected, which supports student achievement and use the data in a meaningful way to make curriculum, instruction, and assessment decisions for all learners.

4. Necessary Technology

Include a technology assessment. Gather information about technology currently in use so that what will be needed to meet new goals can be determined. Include a list of the equipment and telecommunication services that are necessary to reach the goals.

Equipment:

In 2004 MSAD 15 adopted an equipment replacement cycle with the goal that C1/C2 hardware averages no more than 4 years old. Our current inventory, distribution plan and system status is as follows:

- Equipment Classifications:
 - Class 1 (C1) target age: 2-4 years
 - Mostly under warranty. Good working condition. Will be repaired or replaced. High priority
 - Class 2 (C2) target age: 4-5 years, some trickle down units
 - Out of warranty. Acceptable working condition. May be repaired or swapped. Normal priority
 - Class 3 (C3) target age: N/A, pool - trickle down units.
 - Nearing end of useful life. Passable working condition. Will not be repaired. May be swapped if suitable pool units are available. Low priority
- Staff Computers:
 - All administrators, administrative staff and every teacher have at least one C1 computer.
 - The 7th and 8th grade teacher laptops are provided by the MLTI project.
 - Other staff have a mix of C2 & C3 computers
- Student Use Computers:
 - Gray-New Gloucester High School:
 - 110 C2 laptops on carts
 - 25 C1 desktops in a teaching lab
 - 25 C2 desktops in the media center
 - 25 C1 and 25 C2/C3 desktops spread through several tech rich classrooms
 - 6 unit C1 Read 180 pod
 - Gray-New Gloucester Middle School:
 - 343 C1 MLTI (Maine Learning Technology Initiative) provided laptops for 7th and 8th grade students (teacher/spare units included)
 - 25 C1 desktops in a teaching lab
 - 25 C2 desktops in an open lab
 - 6 C2 desktops in the media center
 - 153 6th grade students have C3 laptops
 - 6 unit C1 Read 180 pod
 - Burchard Dunn Elementary (3-5):
 - 25 C1 desktops in teaching lab

- 20 C3 laptops on carts
- 6 unit C1 Read 180 pod
- James Russell Elementary (K-2):
 - 10 C3 desktops in media center
 - 4 C3 desktops in learning lab
- Memorial Elementary (K-2):
 - 6 C3 desktops in Media center
 - 4 C3 desktops in learning center
- All teachers in all buildings have an opportunity to add student use technology to their classrooms by adding C3 desktops and/or laptops from the spare pool.
- SPED teachers are provided with and use technology as appropriate for their student's specific needs
- Other Equipment:
 - 25 C1/C2 Application/File Servers and related devices
 - 26 C2/C3 Network Printers – mix of B/W laser, Color laser and Color solid ink

Software:

By the fall of 2007 (for the 08-09 budget cycle) we will have a defined software replacement cycle for District Wide Software, Standard Software and Curriculum Software.

- District Wide Server Based Software:
 - PowerSchool (student information system)
 - FirstClass (groupware)
 - Destiny (library software)
 - Nutrikids (POS lunch system)
 - FundSense (accounting system)
 - Versatrans (transportation system)
 - SchoolDude (trouble/request tracking system)
 - All software in this group is on a maintenance/support plan
 - Server operating systems will be upgraded as required to meet the application vendors suggestions/requirements
- Standard Local Software:
 - Windows 98/2000/XP (1)
 - OS X 10.2+ (1)
 - Neo Office (PPC Mac) and/or Open Office (PC & Intel Mac) (3)
 - AppleWorks (end of product life – 06/07 last year installed and supported)
 - Norton AntiVirus (only C1 & C2 District owned computers) (2)
 - Mozilla (for Composer) (3)
 - Firefox (3)
 - Safari (Mac) (3)
 - Internet Explorer (PC) (3)
 - FirstClass (staff computers only) (2)
 - (1) OS upgrades will happen as required
 - (2) Maintenance plan for updates
 - (3) Free, or Open Source, software will be updated as appropriate

- Gray-New Gloucester High School – additional software:
 - Dreamweaver
 - Graphical Analysis
 - Gimp
 - Mackiev 3D Weather Globe & Atlas
 - Maintenance/update plans are being developed
- Curriculum Support Software:
 - Various education software packages are locally installed and maintained in the computer labs and extra student use computers in the classrooms.
 - Detailed inventories as well as maintenance/update plans are being developed

Facilities:

- Network:
 - All workspaces and classrooms in all locations have at least one 10/100 Ethernet network connection.
 - The high school has a complete 802.11g POE (Power Over Ethernet) wireless network.
 - The middle school 7th and 8th grade wings and most of the Unified Arts areas are also covered by a 802.11g wireless network
 - All network connections are passed through 10/100 or 10/100/1000 MB switches in centrally located closets
 - Network backbones are a mix of 10/100 and 1000MB fiber connections
 - Servers and network racks are protected by UPS (universal power supply) devices
 - Each location has a hardware firewall device at the internet connection choke point
- Internet Connections:
 - The high school is connected to the internet through an ATM (Asynchronous Transfer Mode, 45Mbit/s) circuit provided through the MSLN (Maine School & Libraries Network) as part of the Distance Learning Network
 - The other four schools are connected to the Internet with individual T-1 (1.544Mbits/s) lines provided through the MSLN
 - The two administrative buildings are connected to the Internet with cable modems (2.5Mbit/s) from the local cable provider.
- Wide Area Network (WAN):
 - We do not have a traditional WAN.
 - We have established VPN connections between each site using the firewall devices to allow secure remote interaction with the fund accounting system, point of sale (POS) lunch system and limited centralized system maintenance.
- Internet Filter:
 - We have a CIPA compliant internet filter at the choke point of each school's Internet connection. This is provided through the MSLN and the University of Maine system.
 - The two administrative locations monitor and filter all Internet traffic with an add-on service on their hardware firewall devices.
- Distance Learning:
 - The Distance Learning Project provides over \$100,000 of high-tech equipment to facilitate interactive learning between locations.

- The project equipment includes cameras, microphones, projectors, scanners, monitors, screens and all of the infrastructure equipment to connect everything and everyone together
- The backbone of the system is the 45Mbit/s ATM circuit that currently connects 91 educational sites in Maine together. We use a 10Mbit/s portion of this connection to provide a very high speed internet connection for the high school
- Telecommunications:
 - CENTREX:
 - Gray-New Gloucester High School, Gray-New Gloucester Middle School James Russell Elementary School, MSAD 15 District Office and MSAD 15 Bus Garage use CENTREX for phone service (extensions, voice mail, long distance)
 - Seven years ago, after reviewing the options available, we determined that CENTREX service was the best approach at the time. With CENTREX service all of the equipment, except for the phones themselves, will be owned and maintained by the telephone company thereby minimizing our capital costs.
 - In these locations, should the need arise, we now have the ability to place a phone in every location where staff and students spend time. The buildings are completely wired for this service.
 - POTS (Plain Old Telephone Service):
 - Memorial Elementary School and Burchard Dunn Elementary are using POTS at the time being.
 - Dunn is fully wired for CENTREX but has chosen not to change over to that service. Memorial would need to be wired in order to have that option. (The current system at Dunn School allows teachers the capability to call out of their classrooms for confidential calls or emergencies. CENTREX would eliminate that capability)
 - We are looking again at the various ways to provide voice service, voice mail, etc. One of our 06/07 goals is to research phone service options and report out.

5. Collaboration with Adult Literacy Service Providers:

MSAD #15 provides information and access for technology to be used as a tool for the promotion of adult technology literacy. Technology is available throughout the district including all schools, libraries (public and district), and adult education facilities. MSAD #15 staff and students will work toward a technology outreach plan for the purpose of introducing emerging technologies to a variety of adult learners in the G-NG communities.

This outreach plan will be informed through work with service providers and the data that is collected regarding the use of technology. MSAD #15 will conduct a follow up survey to determine needs of the community regarding adult literacy.

MSAD #15 will continue to use its Adult Education department to offer adult learning courses for those who express a need in the area of electronic literacy. MSAD #15 is currently working with this department to research literacy programs that will be part of a drop in adult education program. The MSAD #15 Technology Committee would also like to fully utilize the Distance Learning classroom at the high school to offer a more flexible option for adult learners.

The District has implemented PLATO as a software application that focuses on adult literacy and can be offered in the Adult Education computer room.

6. Strategies for Improving Academic Achievement and Teacher Effectiveness:

MSAD #15 is focused on embedding technology within all curriculum areas. With the exception of applications training, the District does not view the practical uses of technology and/or the development of such as a separate curriculum. To aid in this process MSAD #15 has purchased the previously utilized MLTI laptops for use by teachers who develop a plan for their implementation and use. These plans must focus on the available technology as a tool for learning. MSAD #15 is moving in a direction that offers technological tools and training for all staff members who are ready to move forward with technology as an instructional tool. It is hoped that these teachers will act as models for the other staff members.

A recent survey, administered with the help of All Tech, indicates that teacher computer knowledge in MSAD #15, ranges from "...very comfortable with technology..." to "...needing support with everything from e-mail to the Student Management Software..." In light of this information, employees are given the opportunity to sign up for courses through local colleges, Adult Ed., or on-line training; whichever meets their individual needs. This flexibility allows MSAD #15's adult learners the flexibility to make their own professional development schedules. The District also utilizes current knowledgeable staff to train staff on various applications, including but not limited to MEDMS and the student management software.

The MSAD #15 Technology Committee is currently developing a training program with the help of service providers (and the data received through surveys) to offer needs based instruction for all staff members.

MSAD #15 maintains up to date electronic reporting systems, curriculum guides, templates, and supporting documentation, and makes these important documents readily available, both electronically and in hard copy form. As the District continues to update its management systems (PowerSchool, FirstClass, etc.), storage capacity of electronic information such as curricula, resource documents, reports, and student data has become a priority.

MSAD #15 uses technology as an essential tool for the collection and analysis of critical data to guide and inform instruction. The District has made remarkable strides in inputting student assessment data into a variety of data management systems. One focus for future infrastructure is to have a singular database/content management system (CMS) that will manage all data collect in the District. MSAD #15 personnel including administrators, teachers, and some support staff have been trained to use PowerSchool for critical data management. Future challenges include the creation of user-friendly interfaces for the purpose of transferring data that was not originally stored in this application with little or no problems. Additionally, the director of teaching and learning has developed ways for teachers and administrators to collaborate and view all data collected for each child. Currently, data that is stored and made accessible are:

- grade level assessment results
- district writing prompt results
- developmental reading assessment results
- MEA results
- NWEA results
- PSAT results
- SAT results

This information is becoming more and more accessible and therefore having a greater, more immediate impact in terms of informing instruction. Administrators are using this data to inform curriculum offerings and program effectiveness. MSAD #15 will continue to offer informational sessions on a variety of software and web-based applications that are used daily by staff.

Technology is used as an instructional tool in the form of supplemental, diagnostic, and developmental approaches to instruction. (e.g., NWEA, LEXIA, Read 180, PLATO, server/web space, Follett, e-mail, web-based applications, etc.). Technology is implemented in a manner that allows students and teachers to identify and offer

individualized and needs based supplemental instruction.

MSAD #15 is realizing success with a number of initiatives that have been developed with the support and direction of teacher leaders. The District is considering providing staff with the opportunity to be trained as teacher leaders in technology. The initial goal is to identify the personnel, structure, and funding source that will enable MSAD #15 to take the next steps necessary in meeting the stated commitment to technology as a learning tool.

Another way the MSAD #15 learning community is developing the human capacity to reach that commitment is through developing hiring procedures that include questions designed to identify applicants with suitable technological skills and training.

Finally, another way MSAD #15 will support teacher development and academic achievement is by offering each staff member and student blocks of space on the server to store and share files such as projects, curriculum, and instructional materials.

7. Integration of Technology with Curricula, Instruction, and Assessment:

Technology is an integral part of everyday life. It is the District's goal that its classrooms reflect the multifaceted components of life outside of school. Additionally, it is the goal of the District Technology Committee to have classrooms reflect the real world use of, and operate with, consideration of current and emerging technologies. The District is committed to integrating these technologies with on-going curriculum development. MSAD #15 provides support for teachers in their movement toward technology leadership in their classrooms with multiple opportunities for training and resources. Technology can provide pathways for instruction that haven't always been available to learners. Technology does not replace essential skills that students need to learn; rather it supports that learning.

A major step in moving MSAD #15's mental models in this direction is the proper alignment of the Technology Committee. This committee has developed a configuration that advocates the following:

- It is essential that MSAD #15's development of technology follow an academic focus that will ensure the inclusion of the people and processes necessary for technology to become an effective instructional tool.
- Infrastructure must maintain and expand when necessary the various interactive points and stations for teachers and students to access technology.
- The District's administration and the teaching staff must develop the necessary skills and knowledge to put that technology to work as a tool for learning.

This is the reason for breaking the technology committee into three (3) working groups. These groups will collaborate to determine what works best to reach the maximum integration of the District's vision of technology in MSAD #15 schools. Sub-committees focusing around Infrastructure, Administration, and Instruction will work together to get the right people the right training and resources to make integration a reality.

The Technology Committee recognizes that the utilization of technology in the development of curriculum, instruction and assessment, and planning, is a best practice. The District expects its students to use technology as a tool in the creation of their coursework and to demonstrate their learning. The District must continue to strive to find and employ innovative and varying technologies to support teaching, learning, and differentiated instruction. MSAD #15 is committed to a thoughtful plan in advancing new technologies for implementation. Deployment plans with supporting resources and professional development will be utilized. See Sections 4 and 8 for deployment strategies that were developed to ensure availability of appropriate technology to support teaching and learning. For example, laptop carts at the high school, labs in the middle schools and small clusters in k-5 classrooms. In addition, each library has computers available for student use and each computer has software that enables that workstation to be a tool for learning and research.

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Currently MSAD #15 has limited on site tech support in 3 out the 5 buildings in the district. There is also tech support that works throughout the district. The technology staff members have little or no time for working with staff on integration of technology for instruction and learning. Furthermore, the job description does not call for these tech members to work with teachers for integration. Therefore, we as a committee must look at our current resources to determine if we can offer more technology integration support for teachers seeking to utilize technology within their instructional practice. This may lead to an additional position that would work within the Technology Sub-committee on instruction.

In MSAD #15, leadership and school staffs have spent considerable time, energy, and resources to align curriculum, instruction, and assessment to the Maine Learning Results. Many opportunities for staff development by way of workshops, courses, and in-service continue to be available. To offer continued direction of MSAD #15's work, various service providers will inform its needs in terms of equipment, training, and other resources. The District is currently preparing for its next budget process with the understanding of a growing need for peripherals and training in their use as tools for teaching and learning. As work with these outside resources to offer training and support, the MSAD #15 Technology Committee must identify, support and develop teachers who want to use technology in the classroom. These teachers who receive support and training must in turn offer the training to other staff members to facilitate ongoing professional development.

Currently MSAD #15 has an informational newsletter that is sent to all staff by the Director of Teaching and Learning. This is a way of sharing information, ideas, and upcoming trainings for the staff. The District will continue to utilize this resource and offer training opportunities to staff for training. The Technology Committee is also looking into an information-based newsletter adding a section to our current professional publication to highlight technology as a tool for learning. This newsletter would focus on communicating current events in the district with regard to technology and technology related issues.

8. Technology Type and Costs, and Coordination with Funding Resources:

Develop a step-by step action plan, with timeline that includes goals, activities, required hardware and software, costs, funding sources. Describe the type and costs of technology to be acquired and how it fits within the current structure.

MSAD #15 will identify and maintain an inventory of technology resources available to staff. The District will keep a prioritized listing of staff technology requests that may be funded in subsequent years. MSAD #15 will coordinate all funding sources for technology and encourage staff to apply for grants.

MSAD #15 Technology Plan
Section #8 Technology Type, Cost and Funding Source

Goals	Activities	Hardware/Software	Costs	Funding Source
MSAD #15 will utilize technology as a link to MSAD #15 between home school and community.	Collect information through online surveys.	Purchase and electronic survey program. (07-08) 2007-2010	500.00	District
MSAD #15 will continue to develop and implement a K-Adult education technology curriculum, integration and innovation.	Offer adult learning opportunities in the area of literacy.	Purchase of software for adult literacy program. (PLATO) (07-08)	?	Adult Education
MSAD #15 will continue to develop and implement a K-Adult education technology curriculum, integration and innovation.	Develop a drop in resource learning center for non-traditional students.	Purchase software for support of non-traditional learners. (08-09)		Adult Education (Grant)
MSAD #15 will continue to develop and implement a K-Adult education technology curriculum, integration and innovation.	Technology is implemented in a manner that allows students and teachers to identify and offer individualized, needs based supplemental instruction.	<p>Grade Levels (K-2)</p> <ul style="list-style-type: none"> • 2-3 computers in every classroom. • 10 computers in both Library media centers. • Peripherals- LCD projector. • Reading A to Z online subscription. • Remedial reading software program. (07-08) • Remedial math software program. (08-09) • Curriculum software needs to be on a support and upgrade plan. <p>Grade Levels (3-5)</p> <ul style="list-style-type: none"> • 2-3 computers in every classroom. • 5 computers in the library media center. • Peripherals (TBD) • Reading A to Z on line subscription. • Remedial reading software program. (07-08) • Remedial math software program. (08-09) • Curriculum software needs to be on a support and upgrade plan. <p>Grade Levels (6-8)</p> <ul style="list-style-type: none"> • 1:1 computer access. • Peripherals (TBD) • FOSS software instructional support. • HOLT software instructional support. • Social Studies software instructional support. • Curriculum software needs to be on a support and upgrade plan. <p>Grade Levels (9-12)</p> <ul style="list-style-type: none"> • 4 computer carts (24 laptops each) with printers for content areas. • 1 Printer on wheels for general use. • LCD (classroom use, science area focus) • PLATO (additional 5 seats to total 15) • Curriculum software needs to be on a support and upgrade plan. 	For hardware purchases see Goal section on technology equipment replacement plan.	

9. Supporting Resources:

Describe the supporting resources such as services, software, other electronically delivered learning materials, and print resources that will be acquired to ensure successful and effective uses of technology.

MSAD #15 must evaluate the current human capacity in meeting the needs for infrastructure and integration of its technology plan. The District must differentiate between those who are available to support infrastructure and those to support integration. As the District develops roles and responsibilities for the three sub-groups in its technology committee, that committee will allocate the necessary resources to ensure that the MSAD #15 vision is supported.

Data collection, to inform current utilization/ongoing support issues is a priority. The District has purchased “School Dude” which will enable district-wide tracking of the number and type of requests made for resources and support for technology, buildings, and maintenance. As MSAD #15 continues to use data to inform planning and allocation of resources, there are a number of new applications that will aid in assessing the current level of needs and available resources in this school community. Specifically, the Technology Committee is looking at the number of requests for technological repair and/or support to determine if the current level of support is adequate to meet the needs of the District’s growing fleet of computers and peripherals.

Supporting technological resources include a Technology Department consisting of:

Name	Title	Hours/Day	Workdays/Year
Craig Moore	Director of Technology	8	260
Art Bodwell	Technology Technician	8	260
Barbara Foster	Technology Secretary	8	260
Cinda-Lee Bragdon	HS Ed Tech III	3	194
Ann Ryan	MS Ed Tech II	3	194
Kent Pelkey	Dunn Ed Tech III	1.5	194
Summer Crew	Technology Support (4-5 staff members)	8	40

10. Steps to Increase Accessibility:

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Describe the steps being taken to ensure that all students and teachers have increased access to technology. The description must include how Ed Tech funds, if applicable, will be used to help students in high-poverty and high needs schools, or in schools identified for improvement or corrective action under Section 1116 of Title I; and how the steps taken will ensure that teachers are prepared to integrate technology effectively into curricula and instruction.

MSAD #15 is committed to providing all classrooms with technology needed to enhance the delivery of curriculum, instruction, and, student achievement. Teachers are encouraged to utilize technology in curriculum planning and delivery with the goals of increased student achievement. MSAD #15 works with service providers to demonstrate software and hardware that supports teaching and learning and accessibility for all. Funding from Title IID and Title V will support accessibility training.

We will work with All Tech and the special education director to determine what technologies are available for our staff and students. Also, staff training will be provided during monthly department meetings and will be driven by staff needs and offered by in house resources and experts when appropriate.

The MSAD #15 budget development procedure takes into account the needs of staff for integrating technology. There must be movement toward understanding, communication, and allocation of peripheral technologies that make the teacher or classroom computer a tool for instruction and learning. Please see section 8 for a more details.

Each school is developing a software and peripherals inventory and should share this with the staff so that they are aware of the current technologies available to them for use in the classroom. The MLTI has provided excellent training and staff development opportunities. These activities will continue and teachers will continue to be encouraged to share their new learning with others.

11. Promotion of Various Curricula and Teaching Strategies that Integrate Technology:

Describe how various curricula and teaching strategies that integrate technology effectively into the general curriculum and instruction will be identified based on review of relevant research, promoted to lead improvements in student academic achievement.

The District continues to solicit proposals from teachers for innovative uses of technology in the classroom. Teachers will be supported with hardware, software, and peripherals as available. MSAD #15 has established a clear expectation of teachers to share their learning. The Technology Committee is committed to establishing a sub-committee to investigate relevant data to inform instruction and promote & support innovative uses for technology. The technology committee is dedicated to offering a technology rich classroom for the district to offer all professional development trainings. This classroom will serve as an example of technology as a tool for instruction. Currently, there is a room at the middle school that houses most of our professional development opportunities. This room will be outfitted and maintained with up to date technology as a showcase for our district. A goal to establish a written communiqué to highlight and communicate innovation across the district will be established for the 2006-'07 school year (e.g., Online electronic databases, Follett, NWEA, PLATO, Lexia, MLTI re-distribution, UBD, K-5 Math, etc.).

12. Professional Development:

Describe how ongoing, sustained professional development for teachers, principals, administrators and school library media personnel will be provided to further the effective use of technology in the classroom and library media center.

MSAD #15 will provide staff with access to the knowledge, skills, and training required to advance the integration of technology across the district and all curriculum areas. The District will use data from the 2005 All-Tech technology survey to establish goals and professional development for staff and establish a partnership with service providers and other community resources to improve teacher technology skills.

As mentioned previously, MSAD #15 recognizes that all teachers are at varying levels regarding technology use and integration. To enhance professional development experiences, the District encourages course work, and workshops (live and on-line).

MSAD #15 Technology Plan

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Tech II funds have been utilized to encourage innovative use of technology. One teacher at G-NG High School has received funds, integrated specialized hardware/software and peripherals and is eMints trained in the process instructional model.

13. Innovative Delivery Strategies:

Describe how the development and use of innovative strategies for the delivery of specialized or rigorous courses and curricula through the use of technology, including distance-learning technologies, will be encouraged, particularly in areas that would not otherwise have access to such courses or curricula due to geographical distances or insufficient resources.

MSAD #15 encourages staff to utilize online and electronic media. The District will evaluate current technological offerings and monitor the implementation of various programs.

G-NG High School will begin using web-based content specific software in the fall of 2006 to help students with key concepts. The Technology Committee has encouraged the Principal to investigate offering and/or access to distance learning at G-NG High School.

14. Accountability Measure:

Describe the process and accountability measures that will be used to evaluate the extent to which the plan activities are effective in integrating technology into curriculum and instruction, increasing the ability of teachers to teach, and enabling students to reach Maine's Learning Results.

Each MSAD #15 Technology Sub-Committee will submit an annual report on its (and the District's) progress toward the goals delineated in the Technology Action Plan 07-10.

MSAD #15 Technology Action Plan 2007-2010

Goal: MSAD 15 will utilize technology as a link to communicate between home, school, and community.

Indicator and Measures	Action Step(s)	Resources	Person(s) Responsible	Shareholders	Timeline
1. As technology evolves as a method for schools to maintain open lines of communication with the communities it serves, MSAD #15 continues to expand opportunities in this area.	<ol style="list-style-type: none"> 1. Parent Access to PowerSchool. 2. Mass e-mail communications from building leaders. 3. Online surveying. 4. Training in 	<ul style="list-style-type: none"> • Server updates and space. • Professional Development • Staff • Funds for infrastructure and peripherals as 	<ol style="list-style-type: none"> 1. Administration. 2. Administration and Infrastructure. 3. Administration. 	<p>Administrative team</p> <p>Parents</p> <p>Teachers</p> <p>Greater Communities of Gray and New Gloucester</p>	

	PowerSchool and Firstclass for all new staff members. 5. District Web-site developed and maintained.	outlined in section 8 of the technology plan.	4. Administration and Infrastructure. 5. Administration.		
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MSAD #15 Technology Action Plan
2007-2010

Goal: MSAD 15 will continue to develop and implement a K- Adult Education technology curriculum, integration, and innovation.

Indicator and Measures	Action Step	Resources	Person(s) Responsible	Shareholders	Timeline
<p>1. MSAD #15 Adult Education Department will work toward a technology outreach plan for the purpose of introducing emerging technologies to a variety of adult learners in the G-NG communities.</p>	<p>1. Work with service providers and data to develop a plan.</p> <p>2. Offer adult learning courses in the area of adult electronic literacy.</p> <p>3. Research and employ best practices in software based literacy programs for a drop in resource center through Adult Ed.</p> <p>4. Continue to explore options for our distance learning classroom at the high school.</p>	<ul style="list-style-type: none"> • Professional Development. • Title Funds. • Adult Education. 	<p>1. Administration (Director of Adult Education.)</p> <p>2. Administration (Director of Adult Education.)</p> <p>3. Administration (Director of Adult Education.)</p> <p>4. Administration (Director of Adult Education.)</p>	<p>Adult Education.</p> <p>Superintendent.</p> <p>Adult Learners.</p> <p>Director of Teaching and Learning.</p> <p>Principals.</p>	
<p>2. Our district is dedicated to identifying and employing strategies that improve academic achievement and teacher effectiveness.</p>	<p>1. The MSAD #15 Technology Committee is currently developing a training program with the help of service providers to offer needs based instruction for all staff members.</p> <p>2. Collect information about teacher innovations in the area of technology.</p> <p>3. Our district will offer technological tools and</p>	<ul style="list-style-type: none"> • Teacher Leaders • Professional Development. • New technology and peripherals as identified. • Server space for data collection and storage. 	<p>1. Administration and Infrastructure.</p> <p>2. Instruction (Director of Teaching and Learning.) Administration</p>	<p>Teachers</p> <p>Director of Teaching and Learning.</p> <p>Director of Special Education.</p> <p>District Administrative Team.</p> <p>Teachers.</p>	

MSAD #15 Technology Plan

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Indicator and Measures	Action Step	Resources	Person(s) Responsible	Shareholders	Timeline
	<p>training for all staff members to move forward with the application of technology as an instructional tool.</p> <p>4. Technology is implemented in a manner that allows teachers to identify and offer individualized and needs based supplemental instruction.</p> <p>5. Instructional capacity and student accessibility will be increased as MSAD #15 works with service providers to demonstrate software, computers and peripherals that support teaching, learning and accessibility for all.</p>		<p>3. Instruction (Director of Teaching and Learning) Administration</p> <p>4. Instruction (Director of Teaching and Learning.) Special Education Director</p> <p>5. Administration Instruction (Director of Teaching and Learning.) Administration Director of Technology</p>		
<p>3. MSAD #15 uses technology as an essential tool for the collection and analysis of critical data and content to guide and inform instruction.</p>	<p>1. Develop the infrastructure to support a singular database and content management system (CMS) that will manage all data collected in the District.</p> <p>2. The district data management specialists are developing ways for teachers and administrators to</p>	<ul style="list-style-type: none"> • Infrastructure support and expansion. • Professional development. 	<p>1. Infrastructure (Data Management Specialist), Instruction (Director of Teaching and Learning.)</p> <p>2. Infrastructure (Data Management Specialist),</p>	<p>Data management specialist.</p> <p>District Administrative Team.</p> <p>Teachers.</p> <p>Parents.</p>	

MSAD #15 Technology Plan

2007-2010

Indicator and Measures	Action Step	Resources	Person(s) Responsible	Shareholders	Timeline
	collaborate and view all data collected for each child.		Instruction (Director of Teaching and Learning.)		
4. The District Technology Committee must work to create classrooms that reflect the real world use of, and operate with, consideration of current and emerging technologies.	<p>1. The District must continue to strive to find and employ innovative and varying technologies to support teaching, learning, and differentiated instruction.</p> <p>2. MSAD #15 is committed to a thoughtful deployment plan in advancing new technologies for improved and supplemental instructional practices. Deployment plans with supporting resources and professional development will be utilized.</p>	<ul style="list-style-type: none"> • Professional development. • New technology and supporting peripherals. • Funding 	<p>1. Administration and Instruction.</p> <p>2. Administration, Instruction and Infrastructure</p>	<p>Director of Teaching and Learning.</p> <p>District Administrative Team.</p> <p>Teachers.</p> <p>Technology Committee.</p>	

MSAD #15 Technology Action Plan
2007-2010

Goal: MSAD 15 will analyze technology needs and establish a reasonable replacement cycle for hardware, software, and peripherals.

Indicator and Measures	Action Step	Resources	Person(s) Responsible	Shareholders	Timeline
<p>1. Identify and support the personnel, structure, and funding source that will enable MSAD #15 to take the next steps necessary in the application of technology as a learning tool.</p>	<p>1. Each school will develop a software and peripherals inventory to share with their staff so that they are aware of the current technologies available to them for use in the classroom.</p> <p>2. Building Principals with the help of the Director of Teaching and Learning will develop a process of review and implementation of any new software, hardware or peripheral.</p> <p>3. MSAD #15 will continue to use data to inform planning and allocation of resources, there are a number of new applications that will aid in assessing the current level of needs and available resources in this school community.</p>	<ul style="list-style-type: none"> • Funding • Staff • Professional development. 	<p>1. Principals or building technology support personnel and Director of Teaching and Learning.</p> <p>2. Administration, Instruction and Infrastructure.</p>	<p>Superintendent</p> <p>District Administrative Team.</p> <p>Director of Teaching and Learning.</p> <p>Staff and Students.</p>	
<p>2. MSAD #15 is committed to have teachers throughout the District at all grade levels have computer access.</p>	<p>1. The MSAD #15 budget development procedure takes into account the needs of staff for integrating technology.</p>	<ul style="list-style-type: none"> • Funding. • Technology and peripherals. • Professional 	<p>1. Instruction and Administration.</p>	<p>Superintendent.</p> <p>District Administrative Team.</p> <p>Infrastructure.</p>	

MSAD #15 Technology Plan**2007-2010**

Indicator and Measures	Action Step	Resources	Person(s) Responsible	Shareholders	Timeline
	2. Offer professional development for the understanding and facilitate the communication and allocation of peripheral technologies as a tool for instruction and learning.	development.	2. Instruction and Infrastructure.	Teachers and students.	

MSAD #15 Technology Action Plan
2007-2010

Goal: MSAD 15 will carefully look at data collected, which supports student achievement and use the data in a meaningful way to make curriculum, instruction, and assessment decisions for all learners.

Indicator and Measures	Action Step	Resources	Person(s) Responsible	Shareholders	Timeline
1. MSAD #15 uses technology as an essential tool for the collection and analysis of critical data to guide and inform instruction.	1. Creation of user-friendly interfaces for the purpose of transferring, viewing and manipulating student data. 2. Develop internal supports and reviews of current programs used for data generation and collection.	Technology Professional development.	1. Infrastructure, Instruction (Director of Teaching and Learning) Administration 2. Instruction (Director of Teaching and Learning) and Administration.	Superintendent. District Administrative Team. Infrastructure. Teachers and students.	