



**JULY 1, 2006 - JUNE 30, 2009**

**July, 2006**

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**MSAD #33 THREE-YEAR  
TECHNOLOGY PLAN COMMITTEE  
June, 2006**

Chairperson: Tammy LeBlanc, Principal  
Members: Lester Michaud, Director of Instruction  
Scott Carter, Technology Specialist, MSAD #33  
Curt Harvey, Teacher, Wisdom Middle/High School  
Deborah Gendreau, Teacher, Wisdom Middle/High School  
Helen Melvin, Teacher, Dr. Levesque Elementary School  
Sherry Dubois, Teacher, Dr. Levesque Elementary School  
Lisa Bernier, Principal  
Fern Desjardins, Superintendent

**MSAD #33**  
**Technology Plan**  
**July 1, 2006 through June 30, 2009**

**1. Community and Parental Involvement**

Broad community involvement in education-related planning is on-going and essential to ensure community members security about depth and breath of knowledge regarding technology as it pertains to educating students. The technology planning committee that drafted this plan articulated some of the activities that need to be developed and implemented to respond to community needs in the area of home-school connections through technology.

Each teacher in the district will be encouraged to maintain a link to the District web page to post homework assignments, student project timelines, scheduled assessment activities, as well as other types of information that parents have indicated they would like to access at any time. These web pages can be easily developed and posted free of charge as part of our district web site. They can be accessed through hot links. Teacher professional development and parent training sessions will occur in order to realize the full benefit of this plan. In addition, parents of middle and high school children will be able to access, through Web 2 School, a student/guardian login to view items such as: student schedules, report cards, and transcript information.

Community members and staff members would like to see the existing MSAD #33 ATM facility provide more opportunities for attending state-level meetings/conferences/courses relating to town management and service issues such as OSHA, EMT, and fire fighter training, town manager and other meetings for town officials; and, sanitation department meetings/training. These would require statewide connectivity coordination.

Parents in our community will have opportunities to attend open forum/informational evenings in order to become more familiar with the new Maine Learning Technology Initiative (MLTI), also known as the "Laptop Project." The focus of these events will be to inform parents on how middle school students and teachers are using the laptops in the learning/teaching process. Parents will also receive training in the use of First Class and Web 2 School to access student information. To ensure parent participation in such trainings, we will place articles in our quarterly *Words of Wisdom* school publication, in our local and regional newspapers, and a flyer will be mailed to all parents informing them of the training opportunities. In addition, special invitations will be sent to inform parents of our student-led demonstrations in the use of the laptops at school.

Very often, parents and community members are unable to attend school functions that occur during the school day. To keep parents and community members connected to our middle/high school events, our Video Editing students will prepare and post video clips of current events throughout the school year. These will be placed on the school web site to further meet our goal of increasing the ways that the school connects with the homes in our communities.

## **2. Vision**

We believe that MSAD #33 must be a primary force in the introduction and use of technology for the purpose of educating our children and supporting our communities. School personnel, including teachers, administrators, and students will be required to use technology in all aspects of teaching, learning, and responding to community needs and expectations. To accomplish this, we envision full collaboration among students, teachers, parents, school administrators, community members, and service providers in the planning and implementation phases of the advancement of the use of technology in our school system and the communities it serves.

## **3. Goals**

MSAD #33 students will use state of the art technology tools to locate, collect, analyze, and evaluate information from a variety of sources so that they may become informed decision-makers as they endeavor to become knowledgeable, involved, responsible, and responsive participants in our democratic society and the world at large.

Our students and teachers will use technology resources in all subjects and at all grade levels to enhance academic achievement. Specifically, each student will gain proficiency in the areas encompassed in the Guiding Principles of Maine's Learning Results. Students will improve their ability to define problems and frame questions which result in researching, recording, processing, and communicating data and knowledge. Through continuing and expanding the use of current and future technologies, students will demonstrate the ability to locate, record, and manipulate information from both analog and digital data including text, audio, video, and graphic elements.

Students will have numerous opportunities to use digital and video cameras to document their educational experiences as they progress through their programs of study and endeavor to meet the content standards of Maine's Learning Results. The District has also made the use of Smart Boards available to students, parents, teachers, and the community.

MSAD #33 has created a Web Page Master position to increase efficiency, thoroughness, and accuracy in the development and regular updating of the district web page. This will be particularly important if teachers, students, parents and community members will be encouraged to make maximum use of the district web page.

Our district will utilize regional technology linkages to enable increased communication and collaboration among students, teachers, parents, and community members. We will provide new and alternative methods of professional development/training for school personnel and community leaders. We will also provide opportunities for students to link up with courses taught in other schools through the internet and the ATM systems in order to address the limited course selections that are typical of small, rural schools. Teachers will be encouraged to remain "connected" with subject area colleagues throughout the region in order to share individual technology-related expertise and experiences in the classroom.

The Technology Committee is committed to meeting at least twice each year to report on and monitor the progress of the technology plan implementation and oversee the intended use of funds.

#### **4. Identify Necessary Technology**

We have made impressive strides over the past eleven years in establishing a strong base of technology equipment and connectivity in our school district. However, our teachers and students will benefit greatly from the continued introduction of technologically advanced computers in both the PC and MAC platforms in our K-12 classrooms.

Currently, the two schools in our district are in need of upgraded classroom units, cutting-edge network management software, and wireless capabilities. Acquiring up-to-date hardware and software will greatly enhance the overall technology experience at both schools. The presence of upgraded battery back ups for the servers in both school buildings will continue to be a priority. Roaming profiles will be added in August 2006 and/or ability for middle/high school students to save to the network. The introduction of portable laptop labs will be also be considered.

In order to increase the effectiveness and manageability of our implementation of Maine's Learning Results, we will develop and manage our curriculum maps through the use of web-based data management software designed for this purpose. Specifically, our district will employ the Curriculum Mapper. Teacher and administrator training in the use of this powerful software will occur in June, August, and September, 2006. Additional, ongoing training will be provided to ensure successful implementation of our curriculum mapping goals. Technologizing our mapping and map management processes will empower individual teachers and supervisors of instruction to be effective creators and implementers of instruction and assessment.

#### **5. Collaboration with Adult Literacy Service Providers**

Our district collaborates in a regional Adult Education Program sponsored by MSAD #33, MSAD #27 and the Madawaska School Department. In the past, our schools have been used as sites for delivering literacy instruction to adult community members. With increased technological capabilities, this is a very real option for community members in MSAD #33 who wish to expand their personal knowledge in a variety of fields, yet who cannot travel long distances to do so. This collaborative, regional model for delivering adult literacy learning opportunities was developed to address the costs associated with providing such programs, the challenges that a rural environment presents (especially travel during long winter months), and our dwindling population.

#### **6. Strategies for Improving Academic Achievement and Teacher Effectiveness.**

The funds targeted for expanding/updating technology in our schools will also be used to provide professional development opportunities for all of our teachers and administrators. These funds will be used to acquire contracted assistance to help teachers and students continue to develop their skills and knowledge in the use of technology for teaching and learning. This will be accomplished through the use of our District Technology Specialist who can work directly with

teachers and students on a one-to-one to increase the effectiveness of using technology to improve teaching and increase academic achievement.

Funds will be used to acquire software that personalizes and individualizes learning experiences for students in all subject areas. We will continue to utilize Accelerated Reader program in grades 9-12, and focus on expanding this program to grades 7 and 8. To increase the academic performance of all of our students in an additional content area, the addition of Accelerated Math will begin in grade K and move its way up to grade 9. Because of the diagnostic, self-paced, continuous self-assessment features of these programs, teachers will be able to develop individualized learning plans for all students, including those with special learning needs.

Funds will be used to acquire sophisticated simulation software and support resources for use by teachers and students in the classroom in all content areas. This will greatly enhance students' learning experiences and aid with application and experimentation activities.

Funds will be used to acquire the necessary hardware and software needed to improve students' learning about and exploration of our microscopic world. A computerized microscope is available at the middle/high school and facilitates instruction by providing the teacher with greater control over managing student observations and pointing out specific features of a particular sample on the microscope. In addition, the recent purchase was instrumental in the offering of a new course at the high school in 2006-2007 – forensics. In the future, curriculum offerings for students will invariably increase due to our advanced technology.

Funds will also be used in any way necessary to promote the use of technology in our schools to increase student learning and teacher effectiveness. The list provided above does not prevent us from exploring other possibilities for incorporating technology in our district.

## **7. Integration of Technology with Curricula, Instruction, and Assessment**

Regarding the integration of technology with curricula and instruction, please refer to number six above. Regarding the integration of technology with assessment, we provide the following information.

Five years ago, we introduced the use of an electronic grade book into the assessment process in grades 7-12. This system is designed to manage classroom level assessment record-keeping and management and has proven to be a very efficient way of dealing with this task. In the future, teachers will be asked to utilize other options in the program such as a parent module. This will be a must when the student/guardian login becomes a reality.

Locally, we want to be able to track or assess our district's implementation of the Learning Results through the use of special data management software that deals specifically with the Maine Learning Results requirements. Again, this will involve teacher professional development as well as the purchase of software such as Curriculum Mapper designed to manage this type of tracking.

## **8. Technology Type and Costs, and Coordination with Funding Resources.**

Please refer to the attached Technology Implementation Plan for details on this topic.

## **9. Supporting Resources.**

In order to increase the use of technology by teachers and students, we will continue to replace outdated textbooks with the latest copyright version of textbooks in all curriculum areas. The new texts are loaded with connections to technology. They come with impressive teacher and student resources such as CD's and lists of website addresses that may be accessed to enhance the learning experience.

Any software needed to support this three-year plan will require site licenses and updated classroom units in both our elementary school and middle/high school.

In order to address the individual learning needs of our special needs students, we will support and pursue the purchase of software and provide updated computers in the resource room to help individualize instruction in the core curriculum.

To dramatically enhance students' experiences in our lab courses, we will acquire a variety of simulation software that will provide greater depth and breadth of student exploration, particularly in math and science. This will help us address the need to provide a greater range of learning experiences for all of our students. In order to use this sophisticated software, it will be necessary to increase student access to computers in the classrooms. Computers will need to have the technical specifications necessary to run these cutting-edge software packages.

We will continue to realize our goal to have students become proficient in both the PC and MAC platforms. We believe it is important to pursue and expand upon this goal because we cannot predict what type of technical environment they will encounter once they leave high school. This may require us to purchase MAC computers that will be used to familiarize students with this style of computing.

We will need to upgrade teacher computers and computers in the Wisdom Middle/High School electronic research center, as well as in our Internet Research Lab, our Cyberschool Lab, and in the computer labs at the Dr. Levesque Elementary School. Currently, students and teachers are encountering problems that interfere with their efficiency as learners and facilitators of learning.

We will need to continue to make available a technology specialist who will assist teachers, administrators and students in advancing the use of technology in the school environment to maximize student achievement and teacher performance throughout the district.

The committee realizes that the items addressed above may not be sufficient, in and of themselves, to ensure successful and effective uses of technology in our schools. Other support resources will undoubtedly be needed to help us move toward our vision for technology use in our schools. However, we do believe it is a step in the right direction.

## **10. Steps to Increase Accessibility.**

Currently, each classroom has at least one computer specifically for teacher use. Additionally, all classrooms have at least one computer for student use. We need to increase the number and quality of computers available for student use in the classroom environment in order to enhance the teaching and learning experiences of students. Our plan is to provide every teacher at the middle/high school with a newer computer (elementary school teachers all received new computers in 2004-2005) and to increase the quality of computers in every classroom for teacher and student use. This move will further support teachers' use of technology in their instructional strategies, which will ultimately lead to improved student achievement.

The computers available to students in the Wisdom Middle/High School library electronic research center and the computer lab will continue to be upgraded. We will purchase the computers necessary to maximize the potential for student research use.

Dr. Levesque Elementary School has a large computer lab equipped with 23 functional computers. However, these computers are substandard and must eventually be replaced if students are to use the level of educational software that is available today. Wisdom Middle/High School has an 18-unit inter-net research lab. This room may be more heavily used by students and teachers as a result of technology upgrades. These are the only labs that we have for teachers to use with an entire class of students. We view the upgrading of these facilities as a priority in our technology plan.

We will also be continuing to purchase teacher and student site licenses for First Class software. This software has enabled teachers and students to remain in touch with each other no matter where they are, no matter what day of the week. These licenses have significantly enhanced communication between staff members, between students and staff, and between community members and the schools.

Finally, site licenses for all software and the continued upgrade of servers with backups and computers are a must if our students are to have equal access to technology and opportunities to learn and improve achievement.

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

MSAD #33 will continue to work toward removing the obstacles that currently exist to prevent our students from using our ATM facility to the extent envisioned during the planning stages of bringing this option to our district. Scheduling disparities among high schools continue to hamper distance learning efforts throughout the state. Schools in Aroostook County are beginning to work more cooperatively to maximize the use of the ATM system.

All of middle school students will have continued access to laptops. Middle school teachers will continue to receive professional development in the use of this resource as a teaching tool through MLTI meetings and other opportunities. We may also explore the possibility of recruiting a technology integration specialist (e-mints) to provide focused, on-going professional development in the use of technology as a whole to enhance students' learning experiences and teachers' effectiveness in the classroom.

Wisdom Middle/High School will continue the successful use of the Accelerated Reader in grades 9-12 and the District will expand its use to the lower grades in order to better meet the needs of students who are apprehensive readers and learners.

The use of digital and video cameras will help our students not only learn about this technology but also to use it to accomplish educational objectives in the area of communication and broadcast.

MSAD #33 will continue to update its textbook inventory to include textbooks that not only support the content standards outlined in Maine's Learning Results but also make frequent connections with the World Wide Web as a source of additional opportunity for students to learn.

Wisdom High School will continue to encourage students to enroll in courses offered in our ECO 2000 Cyberschool Program. The program is intended to provide a broader range of courses for our students. We will make this learning option more appealing by upgrading our hardware and software resources that support this program.

We will also encourage students to pursue Academ-e courses. These courses are offered through The University of Maine system and allow students an early college experience primarily in an online teaching and learning environment in addition to face to face regional ATM site and on-campus experiences.

## **12. Professional Development.**

MSAD #33 recognizes that professional development is an on-going process, not a discrete event. We also recognize that just as our students learn and progress at different rates and in different ways, likewise, adults are at many different stages of development in the field of technology and will progress at varying rates on the continuum of effective use of technology use in the learning environment. Given this variety of needs, we envision a great deal of flexibility and variation in our pursuit of professional development.

The school district will ensure that local, state, and federal funds designated for staff development will be used to train teachers in the integration of technology in their instructional practices. We will encourage teachers to include technology integration course work/workshops in their certificate renewal plans. We will require that teachers who have technological tools in their teaching environments attend appropriate in-service activities that relate to integrating technology into teaching practices.

The MSAD #33 technology coordinator will prepare and deliver technology integration vignettes to teachers during district-wide professional development days. He will also work with individual teachers who have expressed concern about their knowledge/skills level regarding the use of technology as a teaching tool. This kind of "on-site" support is essential if all teachers are to ultimately feel confident about using technology and appreciating the potential that these tools have not only for teacher effectiveness but also for student achievement.

### **13. Innovative Delivery Strategies.**

The ECO 2000 Cyberschool Program and the ATM Distance Learning System are our two lifelines to increasing the depth and breadth of learning experiences for our students. Another newly added experience will be the Academ-e offerings, of which preliminary data will be available only in 2007.

MSAD #33 is a member of ECO 2000, a consortium of several small rural school systems in Aroostook County. One novel, cooperative effort of ECO 2000 is the Cyberschool Project. The project offers online courses for high school students of member units. The courses are developed and taught by teachers of member units. Courses include personal enrichment offerings such as *How To Get Rich*, *Web-Page Design*, *Music Theory*, as well as courses in computer programming. The courses are designed to be one semester in length, and the content must meet the requirements of the standards in Maine's Learning Results. We will continue to support this project by encouraging our students to enroll in the courses, and will be working with the leadership in the ECO 2000 consortium to expand course offerings (especially in specialty areas where individual school units have difficulty addressing student demand for non-traditional courses.)

MSAD #33 will continue to work with the state of Maine in implementing the ATM distance learning system in our district. Our biggest obstacles continue to be the disparity in the daily schedules of schools that offer courses on the system and the lack of confidence of teachers to utilize it as a teaching tool or to offer a course. Currently, we have one teacher who will be teaching an ATM class for next year. Others have expressed interest for 2007. Continued efforts, through the development of an ATM plan, will address the regional problem in common time schedules in the member schools.

### **14. Accountability Measures.**

MSAD #33 will continue to administer a technology use survey to all instructional staff in an effort to gather data regarding the frequency of use of technology in teaching practices. The same survey will again be administered in January of 2009 (this will be the 3<sup>rd</sup> time). Current data indicates that if we have done a good job implementing our three-year technology plan, we should continue to see gains in the use of technology by teachers for the purpose of instruction. This year's results were impressive. From baseline data gathered in 02-03 to current data from 04-05, District results indicated the percent use of technology across the clusters either doubled or tripled in all content areas. (Review attached *District-Wide Use of Technology in the Classroom* survey results.)

Since the ultimate goal of this technology plan is to improve student academic performance, we anticipate increases in students' scores on assessments such as the MEA, PSAT, and SAT. We are aiming for individual school scores that are at least equal to the state average in all areas tested and strive for a reduction in the number of students who do not meet the standards of Maine's Learning Results in grades 4 and 8 in the areas of reading, writing, and mathematics.

**MSAD #33 TECHNOLOGY IMPLEMENTATION PLAN**  
**July 1, 2006 - June 30, 2009**

System Level and Activity	FY '06	FY '07	FY '08
<b>1. Elementary</b>			
Install/Upgrade Network Administration Unit ( to include battery back up)	1,000	1,000	6,000
UpgradeAdministrative Computer	1,500	800	800
Upgrade Computers in Lab	7,300	7,300	7,300
Network Printers	700	0	700
Site Licensed Software (ex. Acc. Math, other)	10,000	10,000	10,000
Wireless capabilities	400	0	0
Curriculum Mapper	775	775	775
Portable Laptop Lab	900	900	900
Professional Development (teachers, students, parents, support staff, and administrators)	936	936	936
<b>Sub Total</b>	<b>27,511</b>	<b>22,111</b>	<b>27,811</b>
Upgrade Network Administration Unit (to include battery back up and roaming profiles)	500	6,000	500
Upgrade/Replace Classroom Teachers' Computers	8,000	8,000	8,000
Upgrade Library Computers	3,000	4,000	0
Upgrade Research Lab/Classroom Computers	6,000	6,000	6,000
Site Licensed Software(e.g., Accelerated Reader and Accelerated Math)	10,000	10,000	10,000
Wireless Capabilities	700	0	0
Curriculum Mapper	715	715	715
Portable Laptop Lab	900	900	900
ATM System	24,900	24,900	
Network Infrastructure	600	600	600
Professional Development (teachers, students, parents, support staff, and administrators)	936	936	936
<b>Sub Total</b>	<b>56,251</b>	<b>62,051</b>	<b>52,551</b>

<b>3. Administration</b>			
Replace/Upgrade Office Computer Systems	0	0	2,000
Site Licensed Management Software	7,000	7,000	7,000
Upgrade Printers	500	0	500
Sub Total	7,500	7,000	9,500

<b>4. District-wide Needs</b>			
Supporting Instructional Literature	2,000	2,000	2,000
Technology Integration Specialist	2,500	3,000	3,000
Webmaster	600	600	600
Bi-yearly Meetings of Tech Committee	200	200	200
Sub Total	5,300	5,800	5,800

<b>Grand Total of Costs</b>	96,562	96,962	95,662
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<b>Sources – Federal</b>			
NCLB Act - Tittles IA, IIA, IID, and V	1,000	1,000	1,000
E-rate	15,000	15,000	15,000
Carl Perkins Fund	1,000	1,000	1,000
Local Entitlement	5,000	5,000	5,000
Rural Educational Achievement Program (REAP)	20,000	20,000	20,000
<b>Sources – State</b>			
iBook Fund - Laptop Initiative	21,000	21,000	21,000
Maine Support Network Grants	2,000	2,000	2,000
<b>Sources – Local</b>			
Equipment (District-wide)	12,562	12,962	11,662
Site Licensed Software	12,000	12,000	12,000
Textbook Software	2,000	2,000	2,000
Professional Services	5,000	5,000	5,000
<b>Total Funding Sources</b>	<b>96,562</b>	<b>96,962</b>	<b>95,662</b>

Dr. Fern Desjardins  
 Superintendent, MSAD #33

Date: 07/24/2006

This document was prepared by the MSAD #33 Three-Year Technology Plan Committee and revised by Tammy LeBlanc.

## District Wide Use Of Technology In The Classroom

