

School Union #133

Technology Plan

2009-2011

Technology Plan Components	
1.	Community & Parental Involvement
2.	Vision
3.	Goals
4.	Identify Necessary Technology
5.	Collaboration with Adult Literacy Service Providers
6.	Strategies for Improving Academic Achievement and Teacher Effectiveness
7.	Integration of Technology with Curricula, Instruction, and Assessment
8.	Technology Type and Costs, and Coordination with Funding Resources
9.	Supporting Resources
10.	Steps to Increase Accessibility
11.	Promotion of Various Curricula and Teaching Strategies that Integrate Technology
12.	Professional Development
13.	Innovative Delivery Strategies
14.	Accountability Measures

Community and Parental Involvement

1. – 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.

The Technology Steering Committee includes a broad representation of the school and community. The committee's objective is to promote community and parental educational involvement by using technology to address the goal of the future direction of the plan, "To communicate and build support among stakeholders."

The Technology Plan includes hardware and software acquisitions for the following purposes:

- To responsibly share assessment data with parents**
- To use technology to encourage curriculum connections beyond the school walls**
- To recognize the diverse learning needs of individual students**
- To train educators in the use of technology**
- To strengthen leadership in technology**

The Technology Plan available at the Superintendent's Office.

Vision

2.- Establish a vision statement linking the tools of technology with areas such as curriculum content, instructional practices, professional development strategies, and enhanced services. (If you have already established a school or district-wide vision statement you may use it rather than establishing a separate statement, so long as it encompasses the requirements above.)

Mission Statement

An educational environment should include the use of computer-related technology to empower students, staff, and community members to access, process, and exchange information. Promoting the use of this technology will build the bridges that support lifelong learning.

Community Vision for Technology

We believe that our educational environment must include the use of computer-related technology to empower students, staff, and community members to succeed in the information age. Technology will build the bridges that support lifelong learning from the beginning of school to community educational opportunities for senior citizens. These opportunities must transcend any age, gender or socio-economic status and be equitably presented to all.

Goals

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

Learning Qualities, Behaviors & Skills

GUIDING PRINCIPLES FROM THE MAINE LEARNING RESULTS:

Each student should leave Union #133 as:

1. A self-motivated and life long-learner who:
 - a. Engages in learning;

- b. Finds and uses appropriate resources
2. A self-confident individual who:
- a. Accepts responsibility for completing tasks
 - b. Takes initiative in solving problems
 - c. Takes on leadership roles
3. A self disciplined learner who:
- a. Observes the problem
 - b. Critically evaluates the data
 - c. Analyzes possible solutions
 - d. Maintains high ethical standards
4. An adaptable individual who:
- a. Works well in collaborative groups
 - b. Understands the importance of exchanging information
 - c. Demonstrates the capacity to find, evaluate, and use new information
5. An inquisitive problem solver who:
- a. Demonstrates the capacity to explore new areas--a risk taker
 - b. Comprehends varied relationships
 - c. Generates diverse ways of solving problems



Union #133 Technology Goals

Goals developed using the points below from the National Education Technology Plan:

1. Strengthen Leadership

- *Encourage school, district and state leaders to not only supervise, but provide informed, creative and ultimately transformative leadership for systemic change of the rapidly evolving development of information and communication technology.
- *Invest in leadership development programs to develop a new generation of tech-savvy leaders at every level.
- *Retool administrator education programs to provide training in technology decision making and organizational change.
- *Develop partnerships between schools, higher education and the community.
- *Encourage creative technology partnerships with the business community.
- *Empower students' participation in the planning process.

2. Innovative Budgeting

- *Develop a yearly budget generated successfully through innovative restructuring and reallocation of existing budgets to realize efficiencies and cost savings with the new focus geared towards the educational objectives in terms of how they support student learning and specific educational goals. Determine the total costs for technology as a percentage of total spending.

(Consider a systemic restructuring of budgets to realize efficiencies, cost savings and reallocation. This can include reallocations in expenditures on textbooks, instructional supplies, space and computer labs).

- *Leasing with 4 year refresh cycles.
- *Determination of total costs for technology as a set percentage of total spending

3. Improve Teacher Training

- *Ensure that all teachers have sufficient training in the effective use of technology to enhance learning within the classroom. Give teachers access to research, examples and innovations as well as staff development to learn best practices.
- *Improve the preparation of new teachers in the use of technology.
- *Provide professional development for effective technology integration and to increased student learning.
- *Ensure that every teacher has the opportunity to take online learning courses.
- *Ensure that every teacher knows how to use data to personalize instruction. Teachers should have the ability to interpret data to understand student progress and challenges, drive daily decisions and design instructional interventions to customize instruction for every student's unique needs using SIS, NWEA and standardized on-line testing.

4. Support E-Learning and Virtual Schools

- *Provide an environment to make it possible for students at all levels to receive high quality supplemental or full courses of instruction personalized to their needs via an E-Learning environment as well as to enhance professional development for teachers.
- *Provide every student access to online resources.
- *Provide opportunities for teachers to participate in technology training.
- *Encourage teachers to teach using an E-learning format such as workspaces on email.

*Encourage the use of e-learning options to meet *No Child Left Behind* requirements for highly qualified teachers and supplemental services.

*Explore creative ways to fund e-learning opportunities.

5. Ensure Broadband Access

*Broadband access 24 hours a day, seven days a week, 365 days a year to help teachers, students and parents realize the full potential of this technology and broadband technology needs and have it properly maintained.

*Ensure broadband capabilities and access are reliable.

*Make broadband available all the way to the end-user for data management, online and technology-based assessments, e-learning, and accessing high-quality digital content.

*Have available adequate technical support to manage and maintain computer networks, maximize educational uptime and plan for future needs.

6. Move Toward Digital Content

*Encourage the use of multimedia or online information (digital content) which offer many advantages, including cost savings, increased efficiency, improved accessibility, and enhancing learning opportunities in a format that engages today's web-savvy students.

*Ensure that teachers and students are adequately trained in the use of online content.

*Encourage ubiquitous access to computers and connectivity for each student.

Consider the costs and benefits of online content, aligned with rigorous state academic standards, as part of a systemic approach to creating resources for students to customize learning to their individual needs.

7. Integrate Data Systems

*Develop and utilize an integrated, interoperable data system that allows better allocation of resources, greater management efficiency, and online and technology-based assessments of student performance that empower educators to transform teaching and personalize instruction.

*Establish a plan to integrate data systems so that administrators and educators have the information they need to increase efficiency and improve student learning.

Use data from both administrative and instructional systems to understand relationships between decisions, allocation of resources and student achievement.

*Ensure interoperability between schools for cost savings.

*Use online testing to focus on improved instruction through rapid assessment and feedback.

*Use assessment results to inform and differentiate instruction for every child.

Identify Necessary Technology

4.– *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).*

School Union #133 has been able to provide access to technology, network services, and support for all our students and their staffs. This plan will expand and maintain the technology resources with the ultimate goal of providing tools to impact teaching and learning in our schools. It is our hope that this plan will move us further towards transforming teaching and learning.

Current Technology Assessment

Desktops:

Primary school students across the school union currently use mostly networked desktop computers either within their classrooms or in the computer labs. Secretaries and other support staff are also provided with a desktop computer as required by their jobs. All schools also have labs of sufficient size to accommodate classrooms. These are used for higher end multimedia projects. Some, older laptops are available on carts or small clusters, as well.

Laptops:

Most teaching staff in our schools are provided with laptop computers. The laptops are paid for with local, state, and grant funding. Our goal is to have 1 to 1 computing for students in grades 5-8, where each student is assigned a computer to use for the school year. This allows access anywhere anytime to the network and computing services for students and staff.

Network Access:

All of the our schools and classrooms have been networked. Additionally all schools have a wireless network to support the student and staff use of laptop computers. Our schools will have broadband connection for web services. These lines are paid for with local and e-rate funds.

Internet:

Our schools Internet connectivity is currently provided by T1 connections. Federal e-rate and state MSLN funding helps pay for this Internet access each year. This process will be continued and upgraded, as needed to provide for future usage needs

Security Surveillance:

The Windsor School has a digital wired system with 4 cameras covering main entrances and rear parking lot and main foyer. All schools will be upgraded to provide better safety and security by enhancing and expanding these systems.

District Servers and Services:

ADS-Financial package

FirstClass - email and web server

PowerSchool- student information and grades

DNS Servers

Cisco, IP Cop (Linux) and Fortinet Firewalls exist now. Our goal is to unite under one firewall system by 2011.

Bess Filtering provided by MSLN (Maine School and Library Network).

Each school will have its own storage server for student and/or staff data

Library servers – The Windsor School only, Palermo and Somerville have no library servers. Our goal is to unite these under one system by 2011.

Software Resources:

FirstClass Client (E-mail client)

Pages (Apple/Mac)

Microsoft Office Professional (Word, PowerPoint, and Excel)

iLife software suite (iPhoto, iMovie, iTunes, Garage Band & iWeb)

iworks

Noteshare

Inspiration

Internet Explorer, Firefox & Safari - web browsers

InfoCenter Library Software

Other software tools and titles as required by the curriculum

Odyssey

ADS

Studywiz

NWEA

Powerschool

InstantAlert (Honeywell)

*Note: This is not an all-inclusive list.

Equity of Access to Technology:

All students and staff have access to technology via either a laptop or desktop.

Students in grades 6-8 have the greatest access with their 1 to 1 computing. All schools will also have this access at the 5th grade level, as well. Accommodations are made with the technology if a student has a handicapping condition. The Adult Ed. Program serving Windsor, Palermo, Somerville, Whitefield and Chelsea has a cluster of ibooks and desktops for use.

Support:

By 2014, Each school will receive the following support: Technology Integration/Coordination/Network and Instruction under the auspices of the District Technology Director. Software installation at each school is handled by the Technology Teacher in that building along with minor repairs and upgrades. The Technology Director arranges for all other repairs and network upgrades through outside providers paid for by local, e-rate, and grant funds.

School Department Website:

School Union #133 maintains a web site to provide information for students, staff, parents, and community members on what is happening in the school system.

<http://www.union133.org>

The information is housed on the email server with each school having their own section to better meet the needs of that school. The costs of software updates and hardware maintenance are paid for by local, e-rate, and grant funds.

Union #133 K-8 Schools:

All schools have a networked computer system with computers in labs for classes to use and some classrooms have additional computers or laptops to use with students. Most classroom teachers have a wireless laptop for access to email, Internet, sis, student records, report cards and to use for curriculum development. We are working to have all teachers have a laptop. The networked system allows students to save and access their individual writing, graphics, iMovie, and web page assignments. It also allows students to carry out research on the Internet and with CD Roms and use DVDs to create multimedia projects, design web pages, check out library books, and communicate with people around the world. Most schools have a computerized library system. We are working to get all schools computerized and on the same system to make better use of our resources. Our students have the opportunity to use scanners and digital cameras to create and enhance projects for their classes. Classroom teachers bring their students to the lab for Internet research and additional practice with appropriate software. Students use computers to help them meet technology curriculum goals and the Maine Learning Results.

Staff members participate in technology workshops during school, after school and during summer workshops.

Staff and students in some schools use distance learning systems to access virtual field trips and conference with teachers/students across the state and country. We are hoping to expand this technology to all schools. Technology is used for designing lesson plans and multimedia projects, web pages, email communication with colleagues and parents/guardians, word processing, budget preparation on spreadsheets, report cards, Internet, attendance, lunch count, library searches, MLR alignment, NWEA assessment, literacy software, Spanish and French instruction, and world communication.

Students in most schools meet with the technology teacher to learn basic computer applications which are used in their classrooms: word processing, keyboarding, databases, spreadsheets, web page design, email use, presentation programs, multimedia programs, digital imaging, and utilities programs. Team teaching by the technology person with the classroom teachers is also done in many of the schools to help promote the use of technology.

The seventh and eighth grade students are allowed to take their ibooks home after

paying an insurance fee and their parents meet with the technology staff on parent/student responsibility.

An Acceptable Use Policy governs all users; a copy is located in the student's handbook and on the school's web site. Student use is monitored by a filtering system, logs, and ARD (Apple Remote Desktop).

Technology use is growing and expanding. As teachers are focusing on the guiding principles while aligning their curriculums to the Maine Learning Results, technology expectations are becoming an integral part of daily lessons. Many teachers have created PowerPoint presentations, workspaces, blogs, and web pages for student lessons and research materials. This allows the teachers to create lessons that are current, challenging, and creative.

Most daily teacher tasks are also handled by technology; these include the use of email for lunch count, attendance, web page design, and communication with peers and parents, PowerSchool for grading, budget, inventory, and software updates.

Some schools have digital security cameras and we are planning to expand those into all schools to create a safer learning environment.

Collaboration with Adult Literacy Service Providers

5.- Describe how the program will be developed, where applicable, in collaboration with adult literacy service providers.

The Adult and Community Education department consults with our district's Technology Department concerning adult education course offerings and after school/summer offerings. Adult literacy, enrichment and many technology-based offerings are available to citizens and students through Adult and Community Education.

Strategies for Improving Academic Achievement and Teacher Effectiveness

6. Describe how funds, specifically Ed Tech funds where applicable, will be used to

improve academic achievement, including the technology literacy of all students attending schools served by the SAU/LEA; and describe how funds expended will improve the capacity of all teachers in schools served by the SAU/LEA to integrate technology effectively into curriculum and instruction.

The following strategies for improving academic achievement and teacher effectiveness through technology integration are being employed:

- Identify needs for achieving goals for using advanced technology to improve student academic achievement (See **3. Goals**)
- Describe how technology will be integrated into curricula, instruction, and assessment (See **7. Integration**)
- Identify necessary technology and steps to increase accessibility (See **4. Necessary Technology** and **8-Goals, Steps, Costs**, and **10. Steps to Increase Accessibility**)
- Describe professional development needs (See **12. Professional Development**)
- Funding will be needed for (See Sections: **4. Necessary Technology** and **8-Goals, Steps, Costs**)
 - Substitutes and/or teacher release time for professional development paid by Title IID, local funds, and grants.
 - Software and/or web subscriptions necessary to achieve district goals paid by local funds and grants.
 - Online course development paid by local funds and grants.
 - Expansion and continuation of mobile computing opportunities paid by EPS, erate, grants, and local funds.
 - Peripherals such as scanners, microscopes, probes, and cameras paid by local funds.
 - Repair, upkeep, and replacement of current hardware and network paid by local funds and erate.
 - Technology staff is paid for by local funds

Integration of Technology with Curricula, Instruction, and Assessment

7.- Describe how technology (including software and electronically delivered learning materials) will be integrated into curricula, instruction, and assessment and include a timeline for this integration.

Technology is a tool to enhance teaching and learning

Both staff and students receive ongoing training in how to effectively integrate technology into the curriculum.

Access to Hardware & Software

Before technology can be put to use in support of implementation of the Learning Results, it needs to be not only available but reliable. Appropriate training must take place to help support teachers and students in the integration of technology into their curricula and the use of appropriate software, online subscriptions, and other web resources. Schools have made the technology available by providing all teachers with either a laptop, or a desktop. Students in grades 5-8 will have one to one computer access. Students in grades K-4 have access to networked labs. Programs have been purchased to enhance the teaching in curricula areas at all grade levels as local and grant funds have permitted. Training for staff is on going both in small groups and individually. Students in grades K-6 receive training in basic computer skills which which transfer to other classes. Students in grades K-8 use programs as part of their curriculum to enhance their learning.

Assessment

NWEA an online test is used for assessment and to inform instruction in grades K-8.

Technology Staffing

In order for the technology mentioned above to be put to effective use, it has to be available everywhere and all the time. These people play a critical role in helping the school community envision and act on the possibilities presented by the tools: team teaching in classes, one on one with staff and students on projects, and researching new applications and technologies.

Professional Development

The school union provides ongoing opportunities for staff to grow in their knowledge of both "how" and "why" to use technology to support student achievement of the MLR.

Rather than purely skills-based sessions, presenters are asked to provide working sessions where educators use session time to create working materials that will directly support their students' achievement. We continue to pursue ongoing off site technology staff development and/or bringing in outside technology trainers for staff. This training is paid for by using federal, state, and grant funds.

Technology Type and Costs, and Coordination with Funding Resources

8.-Develop a step-by-step action plan, with timeline, that includes goals, activities, required hardware and software, costs, and funding sources. Describe the type and costs of technology to be acquired and how it fits within the current structure (use the list developed in the technology assessment in # 4, above.). Designate sources of funding, specifically Ed Tech funds, E-Rate funds, and funds from other federal programs, and state and local sources that support technology acquisition and integration.

Goal 1: To integrate the use of technology into the curriculum to enhance and improve instruction.				
Activities	Time Frame	Hardware / Software	Costs	Funding Source
Provide staff training through computer in-service coordinated by building technology coordinator.	Ongoing	None	\$10,000	local staff development funds, free training opportunities & grants
Create online help through a link on district web site	Ongoing	NoteShare/FirstClass	\$300	Local budget
Provide ongoing training for technology staff	Ongoing	None	\$12,000	Scholarship funds, Title IID, local budget & grants
Provide a technology person in each school and at the district level to support staff & students (Systems)	Ongoing	None	\$120,000	Local budget, state funds
Initiate, encourage and continue the use of technology for student instruction in all content areas of the Maine Learning Results.	Ongoing	None	None	None
Encourage staff to develop an annual professional growth goal related to the use of technology in the	Yearly	None	None	None

classroom.				
Provide direct technology instruction and/or assistance in classrooms, libraries, and labs.	Ongoing	None	None	None
Fully utilize the 1 to 1 computing using MLTI & locally owned laptops for all students in Grades 5 through 8.	Ongoing	MLTI laptops from the state and Laptop leases and replacement of computers.	\$10,000/yr	EPS, other state funds, local budget funds, grants & erate
Review and update competencies and goals for staff & students.	Ongoing	None	None	None
Provide ongoing computer and related technology assistance and/or instruction to all K-8 students	Ongoing	Software licenses	\$2000/yr	Local budget, grants, and erate.

Goal 2: To provide access to technology for individuals with disabilities.				
Activities	Time Frame	Hardware/ Software	Costs	Funding Source
Design all lab and technology work areas to be accessible to individuals with disabilities.	Ongoing	Vary with IEP requirements	Costs vary with IEP requirements	State, Federal, local and special education budgets

Provide adaptive devices to individuals with disabilities when necessary.	Ongoing	Depends on handicapping condition	Costs vary with IEP requirements	State, Federal, local and special education budgets
Provide Internet access at schools to students, staff, and community members.	Ongoing	Data lines, switches, routers, firewalls, filters	\$25,000 per year	Local, state, grants, and erate

Goal 3: To utilize every machine through its useful life.				
Activities	Time Frame	Hardware/software	Costs	Funding Sources
Evaluate the needs of Technology in each school and move machines around to accommodate the needs of the system.	Ongoing	None	none	None: Not all tasks require The newest or most powerful machines. As machines age they can be moved to other areas within the school system where capabilities are still sufficient to accomplish the necessary tasks.
Upgrade machines' memory, hard drives etc. to support current needs.	Ongoing	Memory, hard drives, mice, chargers	\$10,000	Local budget, erate, laptop maintenance, grants
When machines have outlived their usefulness, put on	Ongoing	Disposal of outdated equipment	\$50/ machine	Local budget

surplus status for disposal.				
Provide maintenance of hardware, software, and networks to ensure satisfactory operation.	Ongoing	Repair contracts on servers, computers, printers, switches, and routers	\$20,000	Local budget, eRate, grants

Goal 4: To replace hardware that is 4 years old unless still useable.				
Activities	Time Frame	Hardware / Software	Costs	Funding Sources
Replace oldest hardware with new machines using input from staff and inventories.	Ongoing	Replacement of oldest computers, printers, and other peripherals	\$30,000 per year	Local budget, grants, state and federal funds, erate
Provide MLTI Laptops grades 7 & 8	Ongoing	Laptops one for every student and teacher in the 7th and 8th grades	none	State funds
Provide one to one laptops for grades 5 & 6	Ongoing	Move laptops from other areas in the district for students	Up keep about \$5,000/yr	State EPS targeted funds and local budget
Sample Technology Budget: Technology Budget 07-08				

Goal 5: To evaluate the servers, network and phone service annually and upgrade to meet new needs.

Activities	Time Frame	Hardware / Software	Costs	Funding Sources
Evaluate the servers and networks (routers, switches, hubs, wiring, etc.) and update as needed. Servers and networks will need to be maintained and improved to provide for changing technological demands and curriculum expectations.	Yearly	Purchase as needed to meet needs	\$20,000 annually	Erate funds, grants, and local budget
Evaluate and provide network capacity for security cameras	Ongoing	Consider when upgrading network	\$10,000 annually	Local budget
Evaluate the need for new or update existing computers, peripherals, printers, copiers, and emerging technologies	Ongoing	Purchase as needed to meet needs	\$10,000 annually	Erate funds, grants, and local budget

Goal 6: To inventory technology related resources.

Activities	Time Frame	Hardware / Software	Costs	Funding Sources
Inventory all hardware and software to inform decision-making to provide for future needs.	Annually	Excel	none	NA
Create Inventory/repair tracking form	Ongoing	Excel	none	NA

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Goal 7: To educate the community about current technology and its use in the schools.

Activities	Time Frame	Hardware / Software	Costs	Funding Sources
Provide access to the school's technology equipment for Adult & Community Education classes.	Ongoing	NA unless they want software other than what the school uses	Variable	Local budget and user fees
Showcase the use of technology in the curriculum at open houses and other events in each school.	Periodically during each school year.	None	None	NA
Present technology related programs at public meetings such as School Board and Town Meetings.	Periodically during each school year.	None	None	NA
Publicize the use of technology in the schools in local newspapers, school newsletters, and on the school web sites.	Ongoing	FirstClass	None	Local budget, erate, and grants
Make meetings & courses via the DLN Available through Adult & Community Education	Ongoing	Variable	Variable - if we need to provide room coverage	User fees
Provide parent access	Ongoing	None	None	NA

to their student's grades, attendance, and lunch balances via the Internet grades K-8.				
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Goal 8: To provide the community with access to technology:

Activities	Time Frame	Hardware / Software	Costs	Funding Sources
Provide Community Education classes in technology and access to technology for community members.	Ongoing	NA unless they want software other than what the school uses	variable	Local budget and user fees
Maintain a community and staff advisory body to review and revise our NCLB plan.	Ongoing	None	None	NA
Maintain community email and school web sites to provide the community with information and events at the schools	Ongoing	None	None	NA
Provide DL classes for community members through Adult & Community Education	Ongoing	None	Instructor fees or trading of classes	Local budget and user fees
Make DL available to staff & community groups for training and meetings	Ongoing	None	Costs for staffing the rooms - variable	User fees

Supporting Resources

9.- 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.



In order for technology in the district to be put to effective use, it has to be reliable and available everywhere - all the time. Each school has a building technology teacher to support the staff and students of that school.

Technology Staffing	Location	Current Level Continued	Projected Need
Full-Time Technology Coordinator	Windsor School	X	
Full-Time Technology Coordinator	Palermo and Somerville Schools		X

Other Resources			
General Software Resources			
Curriculum Specific Resources			
Electronic & Web Based Resources			
Interactive White Boards	all schools		
LCD Projectors for Classrooms	all schools	X	more needed at all schools for classrooms
Network Support	all schools	X	Vendor Contract
Hardware support	all schools	X	

Our district also uses the MEDMS (Maine Education Data Management System) which meets the NLCB (No Child Left Behind) federal reporting requirements, and will satisfy the State of Maine Chapter 125 and 127 requirements. In addition to capturing K-8 SIS data, MEDMS collects staff and financial data on the schools.

Steps to Increase Accessibility

10. – 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.

Before technology can be put to use in support of implementation of the Learning Results, it needs to be not only available but reliable. Appropriate training must take place to help support teachers and students in the integration of technology into their curricula and the use of appropriate software, online subscriptions, and other web resources. Wiscasset has made the technology available by providing all teachers with a laptop. Students in grades 5-8 have one to one computer access. This allows access anywhere anytime to the network and computing services for students and staff. We are hoping to add a couple of carts of laptops to be signed out by classes at the primary school on an as needed basis in the next couple of years. Students in grades K-4 have access to two networked labs of 23 computers each along with 2-4 networked student computers in each of their classrooms. The laptops and desktops are paid for with local, state, and grant funding.

Programs have been purchased to enhance the teaching in curricula areas at all grade levels as local and grant funds have permitted. Training for staff is on going both in small groups and individually. Students in grades K-6 receive training in basic computer skills which transfer to other classes. Students in grades K-8 use programs as part of their curriculum to enhance their learning.

Along with accessibility there must be staff development. This training must be ongoing, using various methods to meet the needs of all individuals. See [12. Professional Development](#)

Promotion of Various Curricula and Teaching Strategies that Integrate Technology

11.-Describe how various curricula and teaching strategies that integrate technology

effectively into the general curriculum and instruction will be identified based on a review of relevant research, and promoted to lead to improvements in student academic achievement

Expansion of technology is ongoing in all areas. Methods of integration are reviewed, researched and updated by the technology team, administrators, and individual teachers. Staff development for teachers happens all the time both formally and informally. Our staff is constantly sharing among themselves.

Some of the ways promotion of technology, curricula and teaching strategies occur:

- PowerSchool Portal has opened communication about grading, attendance, and lunch balances for parents and students by making this information available 24/7 for our K-8 population via the web.
- Principals will often highlight technology and curricula areas in their regularly scheduled newsletters to parents.
- Email is the preferred method of communication for our school community.
- Teachers are using workspaces via email to enhance student learning
- School web sites provide links to quality instructional resources
- Mini-workshops or trainings are offered by technology staff for teachers.
- The school library in Windsor has provided access to subscription databases and their online catalogs through their websites.
- Technology teachers assist other teachers in integrating new software and hardware into their curricula.
- Technology staff provides workshops throughout the school year for school staff.
- Online teacher help desk to provide on demand assistance for FAQs.
- Conduct teacher and student surveys to determine needs for training, hardware, and software.
- Technology staff should attend technology workshops and training to gain new information and skills to share with staffs and students.
- Use NWEA and other instructional resources to inform instruction.

Professional Development

12.- 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.

Over the last several years we have delivered professional development at various times during the day and year; workshop days, after school, and during summer vacation. All times are problematic for some staff members and there are some staff that never have taken advantage of our offerings. From a recent staff survey, the staff would like professional development to occur during the school day. The restructuring of the school day may allow for some opportunities during the school day.

We believe that the use of technology is about enhancing teaching and learning and not about the technology. We structure our trainings to make staff aware of ways to use that training to enhance their curriculum, teaching strategies, or improve student achievement.

Staff development must be ongoing and meet the needs of all individuals. Some of the ways that this training could be offered include but are not limited to the following:

- Workshops available during school, after school, and during the summer
- Workshops available to all staff
- One on One training available to all staff
- Technology staff supports staff in all buildings (Mentoring and team teaching)
- Web sites with quality resources for teachers
- Building based support by technology staff
- New staff technology training
- Provide out of district opportunities for staff development (EX: ACTEM conference, MLTI trainings, etc)
- Bring resources and opportunities into the district for staff
- Collaborate with nearby districts to offer staff development trainings that benefit many districts
- Learning with students (Encourage staff to learn right along with their students)
- Offer recertification credits for those involved in technology staff development
- Communicate to staff professional development opportunities available through other groups (MLTI, ACTEM, USM, etc.)
- Online learning opportunities

When setting standards for technology we look to ISTE (International Society for Technology in Education) and the NETS (National Educational Technology Standards) project. This project has developed standards for

students, teachers, and administrators. Our goal is to make all of our staff proficient and comfortable integrating technology into their curriculums. To view the standards click on the links below:

[National Educational Technology Standards for Students](#)

[National Educational Technology Standards for Teachers](#)

[National Educational Technology Standards for Administrators](#)

Innovative Delivery Strategies

13.–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.

Our schools use a variety of innovative technology measures to support the infusion of technology into their curricula. The following are some of the innovative technologies provided along with staff development and technical support to help with incorporating them into the classroom.

- *Classroom resources available via the Internet*
- *Classroom websites and homework/class calendars*
- *Student information system: grades, attendance, and student information*
- *Online lessons*
- *NoteShare*
- *Interactive White Boards*
- *Provide staffing support for the use on innovative technologies*
- *One to one laptops with wireless access for all teachers*
- *One to one laptops with wireless access for students 5-8*
- *Networked computer labs at each school*
- *Use of digital media in classrooms*
- *Sharing, editing and collaborating with online documents*
- *Porta Portal websites*
- *Use of virtual online activities (Dissection simulation)*
- *Online testing and assessment capabilities*
- *Online editing*
- *Online surveys*

Accountability Measures

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

Yearly staff development programs address expansion of curricula and strategies for integrating technology to promote student progress in the Maine *Learning Results*. The District Technology Committee will evaluate and update our plan yearly. This evaluation assesses the progress made on the yearly action plan and identifies any new outcomes. Surveys are taken to document progress in meeting these outcomes.

- Use of technology to assess students annually (NWEA)
- Analysis of external student performance data yearly (MEA, NWEA)
- Gather and analyze data on technology use from students and staff
- Review Technology Plan annually as it pertains to district budgets
- Make adjustments to Technology Plan as necessary resulting from budgets and district priorities
- Data gathered and kept in one place (PowerSchool - student information system) for easy accessibility
- Improved communication between students, parents and teachers with student data online
- Easy administrative reporting system for parents students and teachers (report cards & progress reports online)