

Lisbon School Department
Lisbon, Maine

TECHNOLOGY PLAN
July 1st, 2010 - June 30th, 2013



Lisbon School Dept.
Technology Committee

Creation Date: September 18th, 2009

1. Community and Parental Involvement

The Lisbon School Department is dedicated to increasing student achievement. Technology is playing an ever expanding role in the education of students globally, as a tool for teaching and learning. The use of technology to enhance communication between school and home provides a vital set of tools for the Lisbon School Department.

This plan requires that the Lisbon staff must maintain strong communication among the schools, parents and community. Through the use of the Lisbon School Department websites, information is constantly shared with the community. Parents and students also utilize the Pinnacle Internet Viewer (PIV) to view the students grades online instantly. Combined with technologies like texting and email, parents, students and staff communicate frequently.

The school department also works directly with the community to help shape the use of technology within the school department. There are multiple public reports given to the Lisbon School Community throughout the year. The purpose of the reports are to inform the public how technology is being employed in the schools. It also gives a avenue for the public to comment and ask questions about educational technology and best practices.

Furthermore, the school department employs a technology committee that meets to discuss current technology challenges and future initiatives. The committee reviews and discusses the current and future technology budgets. This committee is further tasked to review the technology plan and suggest revisions when necessary. Reviewing the Technology Plan and dealing with revisions falls within the duties of the technology committee also.

2. Vision

EDUCATIONAL VISION

Members of the communities of Lisbon Community are committed to creating safe, respectful climates in which broad-based educational and cultural opportunities provide rich, diverse experiences for all learners. Within this environment, learners will become knowledgeable about themselves and others develop strong academic, creative, technological, recreational, and practical life skills, preparing them for many options as life-long learners, effective problem solvers, and capable communicators. These experiences will provide a solid base for future responsibilities as family members, workers, and citizens. As the communities strive to improve the educational environments, necessary resources will be provided to secure safe, spacious, accessible facilities for a wide variety of learning activities. To this end, the schools will encourage practices which are respectful, open, fair, and relevant.

LISBON TECHNOLOGY COMMITTEE MISSION STATEMENT

The mission of the Lisbon Technology Committee is to develop long term goals, operational guidelines, and standards for technology practices designed to create an environment that supports the community and school, and, furthermore, allows the School Department to communicate in a secure environment that is beneficial to community growth.

3. GOALS

Goal #1: To provide for the equitable distribution of technology resources throughout the system in relation to the needs of the schools.

Objective 1:1: To provide equitable and adequate access to technology to each school by June 2014

For the educational use of technology to be effective, the components must be available to students and staff. The Lisbon School Department is striving to create a learning environment where technology is accessible whenever the learning environment requires it.

Objective 1:2: To insure that technology is accessible to all students per ADA standards by June 2014

The Lisbon School Department is committed to equitable technology access for all students. This means to us that the technology access meets the standards set by the ADA and universal design. Technology must be accessible to any student that wishes to use it. This involves the use of software to meet specific learning needs.

Objective 1:3: Utilize new delivery models to maximize technology exposure
Examine cloud computing, web based applications and other associated technologies to remove physical and economic barriers to accessing technology. Encourage the use of this technology by staff, students and community members for the purposes of sharing data and information.

Goal #2: To provide adequate and realistic funding to maintain a technology status current with the ever-changing world of technology

Objective 2:1: To designate an appropriate amount of funding in each year's School Department Budget to keep computer systems current through June 2014.

Part of keeping technology useful in the classroom is maintaining a current level of technology. The average computer has a life span of approximately three (3) years. In schools nation-wide, computers can average between four (4) and six (6) years. Older, obsolete technology hinders the teaching and learning process due to the fact that older technology cannot run current software or perform more sophisticated functions.

Objective 2:2: To explore other sources of technology funding, such as grant-writing, software solutions (i.e. Open Source, Linux, Unix), and/or donations from outside sources by June 2014

The Lisbon School Department recognizes that the community cannot be asked to assume the entire burden of the costs of continuously improving and upgrading educational technology. Using grants and soliciting donations, the School Department has worked to increase access to technology while keeping the technology current. This process will continue for the foreseeable future.

Open Source solutions, otherwise often referred to as “free software,” have begun to take hold in technology across the world. The Lisbon School Department is active in exploring the options provided by Open Source software to help reduce the cost of instructional technology while, at the same time, maintaining its usefulness.

Goal #3: Continue the introduction of technology to allow access to courses and content that are not traditional offered in the schools and create new teaching and learning avenues

Using online courses and software and pairing that with the video conferencing units, the Lisbon School Department will continue to expand the number of course offerings for the students. These tools will also be made available to the staff for the purposes of staff development.

4. Identify Necessary Technology

In an effort to identify necessary technology, the Technology Director, technology committee and staff, examines and recommends purchases of educational technology. In the past, this has consisted of computers, laptops, network gear, and other associated software and hardware. Though these purchases will continue, online learning systems, video conference equipment and other technology are being invested in.

The Lisbon School Department currently budgets funds for technology purchases each budget year. Those funds are used to purchase hardware, software and technology services as needed. Additionally, other sources of funding (Title Funding, grants, etc.) are also utilized when applicable to help purchase technology or technology services. Lisbon School Department also recognizes that all funds are limited so Lisbon also continues to examine Open Source Solutions for software. Typically Open Source software is free or very low cost for schools to use.

The Lisbon School Department will continue significant investments in video conferencing units and online courses. With technology applications and services being more and more web-enabled, the need to have a consistent and fast internet connection is becoming the absolute critical piece in educational technology. To that end, the Lisbon School Department will conduct regular reviews of the Internet Access capabilities for each building throughout the district.

5. Collaboration with Adult Literacy Service Providers

The Lisbon School Department supports adult literacy programs through its Adult Education Department. The Adult Education Department also works with the Lisbon Student Services Department and Lisbon High School to provide a range of services to help at risk students finish their high school education.

Particularly, adult education uses the software program Plato to offer online courses for at risk high school students. This program is available, as well to the adult education students. In the 2010 - 2011 school year, adult education is going to offer a new opportunity for identified students.

The Gartley Street Program will start in 2010. This program is Lisbon School Departments alternative education program which will target at risk students and students who chose to drop out. The program will employ a curriculum that uses online learning and technology resources as well as the more traditional learning materials.

6. Strategies for Improving Academic Achievement and Teacher Effectiveness

The Lisbon School Department recognizes that technology in the schools is not enough to improve academic achievement by itself. Technology must be integrated within the curriculum to maximize its effectiveness within education. The Lisbon School Department is active in providing resources that will help staff integrate the technology into their lesson plans and daily activities.

To help implement best practices, the Lisbon School Department uses Technology Integrators and Literacy Specialist. These specialists work with the Lisbon School Department staff integrate educational technology. They meet with the staff individually and in groups to explore different teaching and learning strategies that often revolve around the use of technology.

To continue to provide resources for the staff, the Lisbon School Department invests in a variety of different technologies that can be used in the education of the students. The goal is to have technology available on a whenever and where ever needed basis. Traditionally, this meant purchasing more computers (desktops and laptops), now we are finding that needed technology includes a myriad of objects, including hardware, software and online resources.

Throughout this work, the technology is constantly being reviewed to make sure that it is an effective tool for students and teachers alike. As new technologies arrive, the school department examines the technology and looks to see if the technology can be used as an aid to improving academic achievement.

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

The Lisbon School Department staff, Superintendent and members of the school committee work together to develop and implement the curriculum for grades K through 12. All curriculum units must be approved by the superintendent. Every unit is required to demonstrate how technology will be utilized within the instruction of the students. If the technology piece is not included in the unit design, the unit will not be approved.

To help track integration of technology within the school department, the electronic gradebook system, Pinnacle, is being used. The Pinnacle software allows for parents, staff and students to instantly have access to grades. This system allows for numerous reporting options. These reports are used by teachers and staff to examine student achievement and make adjustments to lessons, lesson plans and units to offer improved learning opportunities to the students.

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

Goals	Activities	Hardware/ Software	Costs (Subject to Change)	Funding Source
Goal #1	Purchase technology	Laptops, Computers Servers MS Office Virus Protection WAN gear Distance Learning licenses and hardware	\$700 per unit \$4000 per unit \$700 per unit \$60 per license N/A \$5000 - \$10,000 per unit	Local and Title funds
Goal #2	Explore cloud computing solutions	Depends on the solution	Depends on the solution (possible cost per seat)	Local, Title and grant funding

The Lisbon School Department began developing a replacement strategy for older technology, specifically computers. This has allowed the Lisbon School Department to provide additional resources for teachers and students to be able to access. Currently, every teacher in the Lisbon School Department is assigned a laptop. The teachers at grades 7 and 8 have Apple laptops assigned to them via the Maine Learning Technology Initiative (MLTI). Furthermore, the MLTI has expanded to provide laptops to the high school teaching staff. Teachers K – 6 have been assigned a laptop that was purchased with local funds and grant funds.

With the resources that MLTI provides for our middle school staff and students and our high school staff, the technology needs shift to different areas. Lisbon Community School has the largest need for additional technology resources. At the same time, the Lisbon School Department has also started investing in mobile laptop carts. The carts are being placed in those schools to help meet the need for access to technology while maintaining equity throughout the district.

As teacher laptops are being replaced, the older laptops are being gathered and placed in a cart for the purpose of creating another mobile laptop cart. That cart is then placed in the school that has the largest need for access to technology. Thus far, the Lisbon School Department has experienced excellent success with not only the general use of the carts but also the new avenues for teaching and learning that the carts have provided.

To fully take advantage of the increased access to computers, the district has invested and will continue to invest in online resources, software, and hardware. The district will also continue to examine current and future technology trends like cloud computing and smart phone integration.

9. Supporting Resources

Lisbon High School is currently using online AP courses for students for whom no on-site course existed. Local funds have been increased to allow more students to participate in this resource.

The Plato Program, used by special ed, regular ed and adult education students, is yet another example of the use of technology to provide more learning opportunities to Lisbon students. Plato offers the opportunity for student to perform credit recovery or take classes for enrichment purposes.

Teacher training in Lisbon includes an in depth session in learning how to use the Maine Library Databases for research and information. Professional development has be designed to instruct how best to use the databases in order to extend student resources and support research assignments and projects.

In these difficult budget times, schools are looking for ways to offer additional courses to their students. Using video conferencing technology, students are capable of participating in classes offered by other schools. These units also allow for teachers to communicate anywhere in the world to share best practices and participate in professional development opportunities.

10. Steps to Increase Accessibility

Lisbon has adopted the strategy to use both static computer labs and mobile laptop labs. In an effort to remove the physical barriers to learning, laptop carts are being distributed in the Lisbon Community School and Lisbon High School. These carts offer a chance for student and staff to leave the classroom and collect data or create projects in different learning environments. The traditional computers still operate to offer additional access for technology instruction for students and staff.

Using grant and local funds, the Lisbon School Department will continue to bring newer technology into the schools like laptops, projectors, smartboards and video conferencing gear as well as software applications. The MLTI has supplied our 7th and 8th graders with 1 to 1 technology. As technology changes and new opportunities arise, the Lisbon School Department will continue to work to get that technology into the schools for teaching and learning.

In an effort to remove technology barriers, the school department is also examining using web-enabled applications. These applications do not rely on a specific computer platform to run. All that is needed is a internet connection and a capable web browser.

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

Teachers are required to include technology activities within each curriculum unit. When the teachers are developing the units, each unit has a specific are that requires teachers to outline the use of technology within the lesson(s).

The Lisbon School Department is also expanding the role of technology in the classroom by providing additional laptops, LCD projectors, SmartBoards (interactive whiteboards) and other forms of technology for teaching and learning.

In an effort to provide further resources for teaching and learning, the Lisbon School Department, has begun to use more web-enabled applications. These applications bypass the need for a particular computer platform and can be accessed from anywhere in the world.

The Lisbon School Department has long since recognized the role of technology in our daily lives and is constantly working to provide the additional tools to help prepare staff and students to use the technology.

12. Professional Development

Technology training for teachers has change significantly over the years. It used be a day or two each year, the staff would gather and have an all day technology training workshop. Over time, this model show to be very ineffective.

A more effective model that Lisbon employs revolves around using technology integrators and other specialist working directly with the staff. The goal is to introduce the staff to new technology tools to help teaching and learning. The specialist are located in the schools year round and work with staff to implement and support the use of technology within the classroom.

The staff is also encouraged to take part in technology conferences and classes to advance their own knowledge. As the staff becomes more familiar with the available technology, we are seeing the staff using the technology to better enhance the learning experience.

13. Innovative Delivery Strategies

The Lisbon School Department has been working on new ways to deliver content to the students. Lisbon High School has begun offering online AP courses for students (were the AP course isn't available within the school). Local funding has been increased to allow for more students to use this resources and the school department only sees further growth in use of this.

The Lisbon School Department is currently using the PLATO online course software to offer new content to our high school students, adult education students and special education students.

The Lisbon School Department staff has been trained in how to use many of the online resources, like the Maine Library Database, to help with teaching and learning strategies. Online web content and subscription services are constantly being reviewed for further teaching and learning opportunities.

Finally, by adding the video conferencing units to the schools, additional online courses are now available to the students. Also the staff is in a position to participate in professional development opportunities that are located in other parts of the world.

14. Accountability Measures

Lisbon School Department administrators are using the capabilities of the software to track student achievement. Particularly, Principal Viewer, a module of the electronic grade book, is used for the supervision of student mastery of skills and knowledge by generating reports detailing student achievement. The teachers also have a number of reports available in the grade book for the same purpose of tracking student progress.

The electronic grade book software, Pinnacle, is being used to help with the transition from a traditional report card to a standards based report card.

Whenever a curriculum unit is revised and approved, the use of technology as a teaching and learning tool has to be included within the unit.

Professional development will continue in the area of technology use in the classroom. As teachers master the basic skills, staff development will address higher level needs.

To help communicate with the community, technology is used heavily in the creation and presentation of the State of Schools report. This annual report provides information about the district's performance as they are linked to the district's goals. The report is mailed to every town resident and posted on the school department's website.

The Lisbon Technology Plan will be reviewed annually by the technology committee. The review will examine the effectiveness of the plan. Should any changes need to be made to the plan, a addendum will be attached to the plan with an explanation of the change.

