

Lunenburg Public Schools Technology Department
Technology Plan
2011 - 2013

Benchmark 1: Commitment to a Clear Vision and Mission Statement

Goal 1.1: Continue implementation of the previously adopted Technology Mission and Vision:

The mission of the Lunenburg Public Schools Technology program is to provide application, hardware, and training to support administrative and educational efforts. Technology is a tool that enhances learning and productivity and needs to be accessible in the district facilities by remote access. We will add mobile labs and classroom media carts that will utilize a wireless LAN in the next two years at Turkey Hill Middle School and Lunenburg High School to maximize opportunities and limit time lost to transitions between classrooms. Technology skill learning will occur at all grades based beginning with basic skills including Internet safety instruction and computer assisted learning at the Primary; typing, productivity, and Internet research will be added at the Elementary and further developed at the middle and high school. Supplemental educational software delivered via computers supports a diversity of learners and provides teachers valuable information on student performance. Specific program and curricula training will continue to be provided through professional development. The new student information system will provide parents increased avenues to their students' progress in schools and email communication. Technology is critical to our District's efficient operation and valued outcomes for improved student learning. The Technology program must have support not only through the financial budget, but also from public and private sources and community involvement.

State Standards:

- A. *The District's technology plan contains a realistic and clearly stated set of goals and strategies that align with the district-wide improvement plan. It is committed to achieving its vision by the end of the school year 2011 - 2013.*

Current Status: This plan is aligned with the current district improvement plan. The vision's framework is already in place and we consider this state standard met. The expanded vision that appears above is for 2011 - 2013.

State Standards:

- B. The district has a technology team with representatives from a variety of stakeholder groups. The technology team has the support of the district leadership team.*

Current Status: Many people are involved with technology in the district. Representatives from each school and department were involved providing input for this update. The technology plan is approved by the School Committee. The general public and school faculty and staff have the opportunity to review and provide feedback on the plan as it is revised in the future.

C. Budget

- 1. The district has a budget for its local technology plan with line items for technology in its operational budget.*
- 2. The budget includes staffing, hardware, software, professional development, support, and contracted services.*
- 3. The district leverages the use of federal, state, and private resources.*

Current Status: The tech plan has had funding and line items associated with its success. Technology has three budget line items (Computer Purchase, Computer Supplies, and Computer Maintenance). Professional development related to technology is budgeted through the Professional Development line. This support is supplemented by federal and state resources for technology via grants and Erate where applicable. The district has applied every year for Erate to defray Internet costs. Community members donate time, services, and products to technology.

D. Evaluation

- 1. The district evaluates the effectiveness of technology resources toward attainment of educational goals on a regular basis. Prior to purchasing, the district assesses the products and services that are needed to improve teaching and learning.*
- 2. The district's technology plan includes an evaluation process that enables the district to monitor its progress in achieving its technology goals and to make mid-course corrections in response to new developments and opportunities as they arise.*

Current Status: The Lunenburg Public School District continually evaluates technology and the use of such technology. A Technology Goal appears on the District Improvement Plan and is monitored regularly at a variety of levels within the organization and annually by the School Committee. Surveys, monitoring, and practical use of the technology and services are the most common assessment strategies utilized. Purchases are evaluated by a variety of users, supporters, and administration on a number of criteria to ensure the maximizing of every resource and impact. The lessons learned along the way are incorporated into the technology plan, so that failures become successes.

Benchmark 2: Technology Integration

Goal 2.1: Acquire mobile labs and classroom media carts to support the instructional program and student learning. The target is to provide appropriate usable Internet access at any school facility.

Goal 2.2: Continue to provide adequate staffing to support the Technology Program.

State Standards:

A. Teacher and Student Use of Technology

1. Use

a) Outside the Classroom

Teachers use technology everyday, including some of the following areas: lesson planning, administrative tasks, communication, and collaboration. Teachers share information about technology uses with their colleagues.

b) Within the Classroom

Teachers use technology appropriately with students each week, including some of the following areas: research, multimedia, simulations, data interpretation, communications, and collaborations.

- 2. Students from grades 5 to 8 show proficiency in all the Massachusetts Recommended PreK-12 Instructional Technology Standards for Grades 5 to 8.***
- 3. Teachers meet the proficiency level in technology, as defined by the Massachusetts Technology Assessment Tool (TSAT).***

B. Staffing

- 1. The district shares a network / technology director with the Town.***
- 2. The district employs two part-time (each 30 hours per week) technology assistants.***
- 3. The district has a 0.5 FTE person dedicated to data management.***

Current Status:

Teacher and student use of technology over the past five years has increased significantly. More and more teachers and students are using the Internet and a variety of software programs for teaching and learning.

District personnel rely upon technology for data mining, material searching, collaboration, and communication. Lunenburg Public School District takes CIPA compliance very seriously. We have utilized an AUP for our students. This year we also implemented one mobile cart with a wireless access point for the Foreign Language Department at the high school. We also evaluate our standards, computer use, and Internet use regularly. Every year we make strides to increase our use of technology and decrease problems associated with our children and technology.

Staffing has been greatly improved. The full time Director is a shared resource with the Town of Lunenburg. At the upper level, the efficiencies are enormous and greatly benefit the school district. The district now provides one full-time instructional technology teacher who is shared between the middle school and elementary school to provide technology education and support teachers in developing. The new position of Data Reporting Services Manager is currently responsible for all school data management and assessment. The Shared Technology Director is responsible for all Technology Town Department assessments, vendor bids and purchasing, contract management, staff supervision, as well as Network Administration, Server Administration, and wireless network administration. Two part-time Technical Support positions are responsible for all desktop support.



Benchmark 3: Technology Professional Development

Goal 3.1: To continue to integrate the use of technology in professional development in all curricular areas as well as specific instruction on a variety of technology applications and devices.

State Standards:

- A. Technology professional development is sustained and ongoing and includes coaching, model best practices, district-based mentoring, and study groups. The professional development includes concepts of universal design and scientifically-based, researched models.*
- B. Professional development planning includes an assessment of district and teachers' needs. The assessment is based on the competencies listed in the Massachusetts Technology Self-Assessment Tool. The Department, the Educational Technology Advisory Council, and stakeholders will review the levels of competencies in the Massachusetts Technology Self-Assessment Tool on an annual basis.*

Current Status: The district has a limited small number of technology courses offered on site. Specific training in each discipline is offered as an indirect part of directed training on departmental or district implementation. Coaching, mentoring, and group-based training is essential to the overall success and teacher improvement. Peer collaboration among teachers is highly encouraged. Professional development in the area of technology will be evaluated via the District's annual survey.

Benchmark 4: Accessibility of Technology

Goal 4.1: To provide adequate funding via the operational or other budget sources to implement the technology replacement plan (attached).

State Standards:

A. *Students per Instructional Computer*

- 1. The district has an average ratio of fewer than five students per high-capacity, Internet-connected computer. The Department will work with stakeholders to review the capacity of the computers on an annual basis. (The ultimate goal is to have a one-to-one, high-capacity, Internet-connected computer ratio.)*
- 2. The district considers students' access to portable and/or handheld electronic devices appropriate to their grade level.*
- 3. The district has established a replacement cycle of six years or less.*

B. *Technical Support*

- 1. The district makes a commitment to provide timely in-classroom technical support with clear information on how to access the support, so that technical problems will not cause major disruptions to curriculum delivery.*
- 2. The district provides a FTE network administrator.*
- 3. The district provides at least one FTE person to support 100-200 computers. Technical support can be provided by dedicated staff or contracted services.*

Current Status: The replacement plan works to keep instructional computers in the classroom at a five-to-one ratio. The more mobile labs that are in service, the lower the ratio, and the higher amount of integration. The proposed replacement plan is based upon an average of a four-year replacement, but not totally new items are contained within. With increased staffing, newer hardware, updated networks and software, and increased training, the load on the technology support personnel has significantly improved reliability and use of technology at all levels and for all functions.

Benchmark 5: Infrastructure for Connectivity

Goal 5.1: Provide wireless connectivity in meeting space areas including the auditorium, conference rooms and libraries.

Goal 5.2: Install a gigabit network for internal administrative databases.

State Standards

A. Internet Access

- 1. The district provides connectivity to the Internet in all classrooms in all schools including wireless connectivity, if appropriate.*
- 2. The district provides bandwidth of at least 10/100 MB to each classroom.*

B. Networking (LAN/WAN)

- 1. The district provides a minimum of 10/100 MB Cat 5 switched network and/or 802.11 b/g wireless network.*
- 2. The district provides services for secure file sharing, backups, scheduling, email, and web publishing, either internally or through contracted services.*

C. E-Learning Environments

- 1. The district encourages the development and use of innovative strategies for delivering specialized courses through the use of technology.*
- 2. The district deploys IP-based and or ISDN-based connections for access to web-based and/or interactive video learning on the local, state, regional, national, and international level.*
- 3. Classroom applications of e-learning include courses, cultural projects, virtual field trips, etc.*

Current Status: The district provides Internet access in classrooms. The district provides network bandwidth of at least 10/100 MB to each classroom. The district maintains a switched network that meets the minimum standards. The district provides email and other services. The technology curriculum will be written and adopted during the FY12 school year and will address E-learning environments. The IP network currently deployed offers several e-learning possibilities. Databases are offered as well.

Wireless connectivity has been installed in the high school library and in the Guidance Office area of the High School. In FY2012 it will be available in the meeting spaces of all schools. Gigabit switches have been installed in all the schools for all network applications.

Benchmark 6: Access to the Internet Outside the School Day

- 6.1 The district will launch and maintain an up-to-date website that includes information for parents in August 2012.**
- 6.2 The district will identify the current number of students without Internet access at home and work with community groups to ensure that students have access to the Internet outside of the school day.**
- 6.3 The district website will include an up-to-date list of places where students can access the Internet after school hours.**

State Standards:

- A. The district maintains an up-to-date website that includes information for parents.*
- B. The district works with community groups to ensure that students and staff have access to the Internet outside of the school day.*
- C. The district website includes an up-to-date list of places where students and staff can access the Internet after school hours.*

Current Status: The School website must be updated before the FY12 school year begins. We will survey parents in the fall of FY12 to determine the number of students that do not have access to the Internet at home. The local library offers more Internet access than ever before. The Teen Center also provides youth access to the Internet.