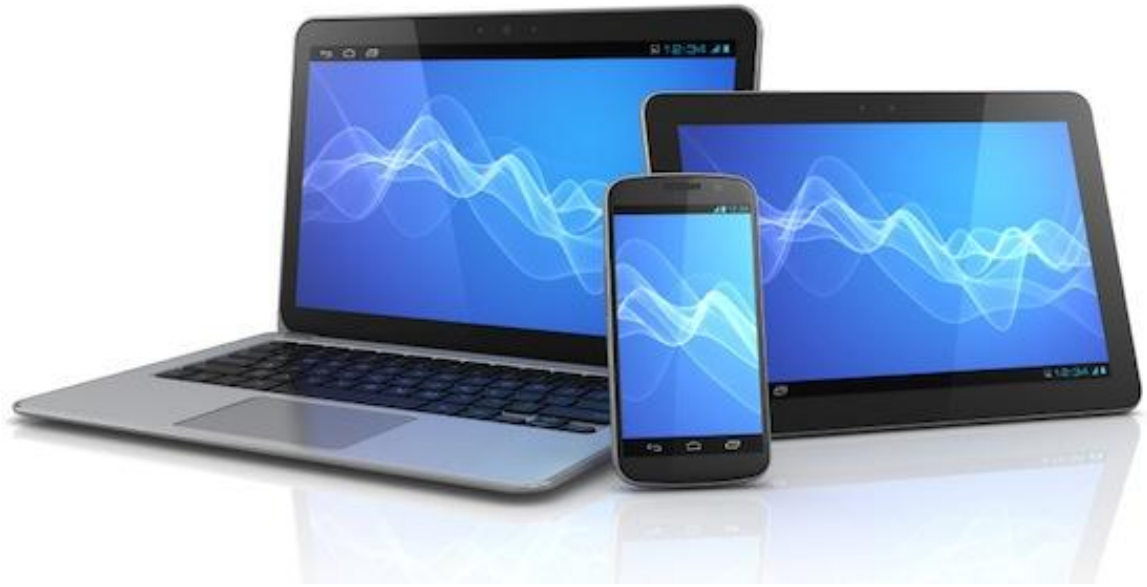
EAST LONGMEADOW
PUBLIC SCHOOLS DISTRICT



Technology Plan
2013- 2018

EAST LONGMEADOW PUBLIC SCHOOLS
District Technology Committee 2012-13

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Lisa Galaska-	Mountain View Elementary School
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Kathy Hill-	Principal, Birchland Park Middle School
Larry Humason-	Birchland Park Middle School
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Gordon Smith-	Superintendent
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Benchmark 1: Commitment to a Clear Vision & Implementation

A. Vision & Goals

TECHNOLOGY VISION STATEMENT

East Longmeadow Public Schools recognizes the increasing role technology plays in our global society. ELPS is committed to the use of technology to support creativity, collaboration, communication, critical thinking, and digital citizenship in the educational process. This includes equipping our students and staff with 21st century digital learning skills and resources that will promote/create:

- Student centered and inquiry based learning environments
- Lifelong learners
- College and career readiness
- District curriculum integration
- Engaging learning environments
- A school community that effectively interacts and communicates at a local and global level
- Creativity and collaboration
- Opportunities to meet the needs of diverse learners
- Efficient and effective use of existing technology
- Equitable access to technology
- On-going professional development for staff in the area of instructional technology
- Student achievement and effective instructional planning through the collection and evaluation of data
- Responsible Digital Citizenship
- The safe and ethical use of technology

EDUCATIONAL TECHNOLOGY GOALS

The integration of technology into the curriculum and instruction of ELPS students will help to develop the 21st century learning skills that include: collaboration, communication, critical thinking, and digital citizenship in the educational process. Our students will meet the MA Technology Literacy Standards (MTLS), National Education Technology Standards (NETS) and the International Society for Technology in Education Standards (ISTE).

- All students will show proficiency in the technology standards set forth by MTLS, NETS and ISTE.
- Instructional plans will integrate technology to support the MA Frameworks for learning, the Common Core Standards and district curriculum goals and objectives.
- All school will have access to the most up-to-date technology tools to facilitate

instruction and meet curriculum goals.
- Technology will create collaborative environments for students, staff, parents and communities to support the learning goals and objectives.
- Technology will be used to develop and nurture critical thinking, inquiry -based learning and informational technology skills.
- Technology will be accessible to all students and staff.
- Technology will be used to administer assessments and evaluation of students to provide data to guide instruction.
- All schools will utilize digital resources, such as online textbooks and other materials, to support curriculum and instruction.
- All schools will integrate 1:1 learning tools such as laptops, tablets, etc.

PROFESSIONAL DEVELOPMENT GOALS FOR STAFF

- New teacher technology orientation (full or half day PD)
- Align professional development with assessment data to increase student and staff technology proficiency.
- Professional development planning includes an assessment of district, administration and teachers' needs.
- Integrate K-12 instructional Technology Standards and into professional development initiatives as well as align professional development programs with classroom activities and curriculum delivery strategies.
- Use email as communication tool for collaboration during professional development activities and communication in general (Google Docs)
- Utilize a web-based teacher intranet for teacher resources such as attendance, grading and file sharing to increase district wide collaboration.
- Provide teacher with a mentoring program to support emerging and existing technology such as, Rediker,Edline, Teacher Website and Webpages.
- Provide on-going professional development opportunities including online instruction.
- Provide training to support teachers to input and access data assessment tools (i.e. Star and BAS)
- High-quality professional development that includes technology skills and the integration of technology into instruction.
- Provide courses for utilizing technology to achieve the goals of the MA Curriculum Frameworks in all subject areas.
- Provide professional development that is modeled by both Instructional Technology staff and academic area teachers.
- Allow teachers to create technology sessions that can be attended by other teachers according to their needs or interests.
- Create an Open House Professional Development format for teachers to provide ongoing support and education in many areas of educational technology. Teachers attend the sessions in an open house format and receive powerful individualized training led by Instructional Technology and Media Specialists.
- Provide professional development on assistive technology to create awareness and a knowledge base for what is available for students to access the curriculum.

ADMINISTRATION & SUPPORT SERVICES GOALS

- All administrators will meet the ISTE NETS for administrators, implementing the goals and strategies into their daily work.
- Technical problems will cause major disruptions infrequently to curriculum delivery. Same-day, in-classroom, technical support will be provided.
- The technology curriculum will be coordinated at the district level.
- There will be an adequate budget for technology purposes, professional development, adequate support staff, and ongoing costs.
- There will be a full-time Technology Curriculum Integration Specialist for the district.

INFRASTRUCTURE FOR TECHNOLOGY GOALS

- The infrastructure should be able to handle a minimum of 1:1 connections per student and staff
- Develop technology maintenance and replacement plan of no more than five years
- Wireless Network quality will be enhanced to allow for 1:1 wireless environments
- Provided internet will be filtered based on content and safety
- The district will have centralized backups, firewalls, adequate servers and prompt upgrading for known vulnerabilities.
- An inventory system will be maintained to track and audit technology assets
- Procurement policies will be developed and implemented to work towards backwards compatibility as appropriate.
- Unique username and passwords will be generated for students grade 6 (?) and above.
- Students and teachers will have easy access to educational resources from home and school. (Edline)
- All classrooms will have either dedicated or easy access to projectors and other technology that will enhance student instruction through technology

B. Technology Planning Committee

This document was prepared by the ELPS District Technology Committee. This committee consisted of central office personnel, building administrators, teachers, site technician staff, and the Town IT Director. The ongoing monitoring of the progress toward district technology goals and objectives will continue to be conducted by this committee. While the committee members may change yearly, the district will ensure that stakeholders from all schools and the district and town offices will be represented.

C. CIPA Compliance

The district continues to work to maintain all compliance requirements as outlined in CIPA. The district has an acceptable use policy that each student and/or parent or guardian signs at the beginning of each school year. East Longmeadow Public Schools employs a CIPA compliant internet filtering process

D. Budget

East Longmeadow Public Schools is working to include comprehensive technology planning as a part of district and building based improvement plans. This will include provisions for infrastructure, hardware and software needs, professional development, student support and electronic communication between home and school.

Currently, all school technology funding is planned and coordinated between the Town of East Longmeadow's Information Technology Department and the East Longmeadow School Department. It is the goal of the ELPS to continue to work as closely as possible with the Town IT Department in order to ensure that our community is providing our students with effective 21st century learning skills via technology. Capital planning for technology equipment acquisition and renewal is planned and organized through the Town IT Department's capital budget. General maintenance of equipment is supported through the operational budget of the school department. Long-term capital planning will be coordinated between both departments.

E. Evaluation of Technology Goals

The East Longmeadow Public Schools District will use the tools and practices listed below to assess our progress towards meeting our Technology & Instruction goals. These will be used to guide our decision-making and make adjustments as needed in order to accomplish the outlined goals.

- Yearly survey of stakeholders to assess the impact of the goals of this plan
- Assess current School Committee Policies for alignment and support of Technology Vision and Goals. The School Committee sub-committee for policy will be able to work with the District Technology Committee to ensure that goals and policies are aligned.
- Evaluate funding sources and levels
- Evaluate infrastructure needs
- Evaluate staff readiness in using technology, utilizing TSAT or other tools (outcome would be PD needs)
- Evaluate the extent to which instructional technology is used to enhance student learning (MA standards in Technology Standards and content specific standards)
- Assessment of teacher growth of technology skills via the teacher's observation system

Benchmark 2: Technology Integration & Literacy

A. Technology Integration

1. Outside Teaching Time

All teachers (100%) will use technology every day, to include some of the following areas: lesson planning, administrative tasks, assessment and data collection, communications and collaboration. Teachers will share information about technology uses with colleagues on a regular basis.

All teachers (100%) will show improvement toward meeting the proficiency level of the Massachusetts Technology Literacy standards, as measured by the Massachusetts Technology Self-Assessment Tool (TSAT) and teacher evaluation system.

2. For Teaching and Learning

All teachers (100%) will use technology appropriately with students to improve student learning of the curriculum. Activities will include some of the following areas: research, multimedia presentations, simulations, data interpretation, communications, and collaboration.

100% of students in grades PK- 12 will...

- Demonstrate proficiency in the use of computers, applications, and software
- Demonstrate responsibility with the use of technology
- Demonstrate ability to use technology for problem solving, communication, decision making, creativity, and research.

B. Staffing

- Technology instructional support is primarily provided by building staff members who have demonstrated a higher level of proficiency and interest in technology. The district will continue to work toward providing more regular and specialized technology instructional support for staff members in order to accomplish the technology goals set forth in this document.

- The district has staff dedicated to data management and assessment.

Benchmark 3: Technology Professional Development

East Longmeadow Public Schools recognizes that in order for our students to be equipped with effective technology skills to prepare them for college and work place, it must invest the time and funding to support continued professional development to staff in the area of technology literacy.

To support this, the District will ensure that . . .

1. By the end of the school year 2016-2017, at least 85% of district staff will have participated in 45 hours of high-quality technology professional development covering technology skills and the integration of technology into instruction.

2. Technology professional development mostly will be embedded into existing collaborative meeting time for staff, allowing it to become part of the professional culture in the district. It will be ongoing, including coaching, modeling best practices, district-based mentoring, and study groups. Additionally, training through outside vendors will be utilized whenever possible to support and augment the collaborative work of the district's teachers. The professional development includes concepts of universal design and scientifically-based, researched models.

3. Professional development plans will include a focus on instructional technology.

4. Professional development will be planned utilizing an assessment of the district's and teachers' needs. The assessment is based on the competencies listed in the Massachusetts Technology Self-Assessment Tool (TSAT). 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.

Benchmark 4: Accessibility of Technology

A. Hardware Access

East Longmeadow Public Schools will be able meet the 2015 goal of 1:1 high capacity internet-connected computers. The district currently has a ratio of 1:3.5 high capacity internet connected computers per student. Each year, the district inventories and reviews the placement and capacity of the computers in the administrative offices and the schools. Every possible funding source is utilized to meet the ultimate goal of a one-to-one, high-capacity, Internet-connected computer ratio, including federal, state, local, and private funding (grants and other sources). Please note that this ratio is district-wide and varies from school to school. The district recognizes the need, and is utilizing every possible funding source, to bridge the gap that exists between schools.

The replacement cycle will be determined as the district formalizes a plan for either a 1:1 environment or a Bring your Own Device model. The District's goal is to maintain a maximum life cycle for technology of 5 years or less.

B. Internet Access

The district provides connectivity to the Internet in all classrooms in all schools including wireless connectivity, wherever possible. The district provides bandwidth of at least 10/100/1000 to each classroom. The network card for each computer is at least 10/100. The district has 50 mb/s internet connection with plans to increase to 100 mb/s.

C. Networking

Local Area Networking (LAN)

The district maintains a LAN that supports 10/100/1000mb connection per endpoint.

Wide Area Networking (WAN)

The district has a town-owned fiber optic Wide Area Network. This currently provides 2000 mb/s connection between the schools and town offices.

Wireless Network

The district currently provides wireless access for devices. The district is expanding the wireless network to support a minimum of 1:1 connections per user. The district maintains an enterprise class managed wireless network capable of expansion.

Server Farm

All servers are consolidated in the Town Hall Data Center in a Cisco Blade Center Chassis. The services provided from the server farm are:

- Authentication Services
- Antivirus Protection
- Document Storage and Replication
- Email
- Centralized Operating System and Software Updates

Future Concerns:

- Enhanced Disaster Recovery Plan + Testing
- Staffing - Any future technology expansions will need staffing levels addressed
- Increase level of training for technical level staff

Disaster Recovery

East Longmeadow Public Schools does not currently have a single comprehensive Disaster Recovery (DR) Plan for Business Continuity in the event of catastrophic event. The district is currently in the process of developing both a more robust data backup plan and IT Disaster Recovery Plan.

Data Backup Plan

Currently, all important documents are centralized and backed up nightly. Those backups are then replicated off site from the Town Hall to the Police Department.

IT Disaster Recovery Plan

This is currently under development. Our hope is that this plan would allow for near instantaneous recall, which would encompass the use of a secondary data center complete with servers, networking capabilities and tape and disk storage which could possibly be located at the Town datacenter.

D. Access to the Internet Outside of the School Day

The district maintains a website that provides both informational and instructional information for all stakeholder groups, including but not limited to, parents, staff, students, and the community. All departments, schools and teachers are encouraged to have a web page highlighting pertinent information and events.

E. Staffing

East Longmeadow Public Schools provides IT support through a shared department with the Municipal Offices. The IT Department consists of 6 employees: a Director, a Network/Server Admin, Application Analyst, Two Technicians and a Bookkeeper.

Each School employs a part time site technician that provides basic support and troubleshooting for the end users.

The District/IT Department is working toward the goal of 1 FTE per 200 computers.

Benchmark 5: E-Learning & Communications

A. Innovative Strategies for E-Learning

The district currently offers credit recovery through online courses. The district will continue to extend e-learning opportunities where appropriate including, advanced placement course as well as other supplemental courses.

B. Access to Web-based and/or Interactive Video

The district will increase the current Internet bandwidth to a minimum of 100 mb/s. This increase will support freely accessible web-based/interactive video and tools.

C. Classroom Applications of E-Learning

Teachers will be encouraged to use electronic tools to enhance student learning in the classroom and will provided professional development opportunities to explore these areas.

D. District Website

East Longmeadow Public Schools maintains a website that is updated in a timely manner and includes information for parents and community members. Each school has a web page managed by a building site technician. The district Data and Informational Specialist will support each school site tech in keeping web pages updated.

E. Electronic Communications and Data

East Longmeadow Public Schools complies with federal and state law by archiving electronic communications. The district's acceptable use policy states that any information transmitted over the district network may be a public record.

A mass-calling system is in place to provide parents and staff timely notification of information and emergencies.

2012-13 TSAT RESULTS

SurveyMonkey

ELPS: Technology Self Assessment Tool

SurveyMonkey

1. Please indicate what school you work at:

		Response Percent	Response Count
East Longmeadow High School		27.6%	67
Birchland Park Middle School		21.4%	52
Mountainview School		19.3%	47
Mapleshade School		10.7%	26
Meadowbrook School		21.0%	51
		answered question	243
		skipped question	0

2. EARLY TECHNOLOGY: Standard 1- Technology Operations & ConceptsPlease check each skill that you are able to do.

	Response Percent	Response Count
Identify components of a computer system and its operating system (e.g., drives, memory, window). Explain the functions of the components, and use appropriate terminology in speaking about them.	84.3%	199
Connect the cables and cords correctly so that a computer is functional. Reduce the risk of hardware failure through proper care of the components	73.7%	174
Demonstrate basic skills for using hardware and applications (e.g., start up and shut down computer system and peripherals, open and close a file, start an application and create a document).	**98.3%**	**232**
Follow the proper district/school procedures in the event of technical difficulties.	85.2%	201
Navigate using scroll bars, arrow keys, special keys, trackpads/touchpads, and mice.	96.2%	227
Save/backup and retrieve a file to/from local hard drive, portable disk/device, and/or online storage location.	86.0%	203
Select a printer and print a document with appropriate resolution and orientation (portrait or landscape).	93.6%	221
Use basic editing and formatting features of a word processing program (e.g., centering, spacing, fonts, enter text, edit, copy and paste, and insert graphics).	97.0%	229

Explain the concept of a database, and provide examples from everyday life (e.g., library catalogs, school records, telephone directories).		72.9%	172
Use correct terminology in speaking about Internet communications (e.g., browser, search engine, website, URL, domain, links).		70.3%	166
Explain terms related to the use of networks (e.g., username, password, network, server, domain).		78.8%	186
Select a strong (secure) password and keep it safe.		96.2%	227
Access the Web and identify and use navigation features of an Internet (e.g., "home," "back," "forward," hyperlinks, and multiple tabs).		91.5%	216
Add a website to Favorites or Bookmark it for future reference.		91.1%	215
Create and send a message using email. Retrieve and read email. Reply to sender and forward an email and attach a file. Save, print and delete an email. Differentiate between "reply" and "reply to all."		97.9%	231
Send an email attachment. Receive an attachment, open it, and save it to an appropriate location.		92.4%	218
		answered question	**236**
		skipped question	**7**

3. EARLY TECHNOLOGY: Standard 2- Ethics and SafetyPlease check each skill that you are able to do.

	Response Percent	Response Count
Explain and comply with the Acceptable Use Policy in your district and describe the consequences of failing to comply.	**86.1%**	**199**
Explain and apply classroom/lab rules for responsible and equitable use of technology.	84.4%	195
Explain potential problems viruses and other malware create and practical methods of prevention (including exercising caution in opening email attachments and installing software).	63.2%	146
Identify key intellectual property issues that apply to technology use in education, the workplace and society (e.g., fair use, copyright, software licensing, plagiarism).	71.4%	165
Follow appropriate licensing for all software and content used.	75.8%	175
Discuss the basic concept of assistive technologies and Universal Design for Learning (UDL).	33.8%	78
Evaluate the proper physical setting for technology use (ergonomics).	48.5%	112
Explain how media and technology can be used to distort or exaggerate information.	78.4%	181
	answered question	**231**
	skipped question	**12**

4. EARLY TECHNOLOGY: Standard 3- Teaching & Learning with TechnologyPlease check each skill you are able to do.

		Response Percent	Response Count
Discuss current best practices on teaching and learning with technology in order to plan rich learning environments and experiences.		62.9%	144
Use technology to gather curriculum-specific information from online and/or local digital sources.		**91.7%**	**210**
Integrate technology into the curriculum of one's subject and/or grade level with assistance of a coach, mentor or other staff member.		86.5%	198
Use digital and online tools to communicate with teachers, parents, and other stakeholders and to create/distribute classroom materials.		84.7%	194
Identify your personal technology professional development needs.		87.8%	201
		answered question	**229**
		skipped question	**14**

5. DEVELOPING TECHNOLOGY: Standard 1- Technology Operations & ConceptsPlease check each skill you are able to do.

		Response Percent	Response Count
Connect a computer to peripheral equipment(e.g., scanner, printer, projector).		71.4%	167
Identify and use a variety of storage media (e.g., CD/DVD, flash drives, network servers, online storage spaces). Explain why a particular medium is or is not suited for a particular storage task.		67.9%	159
Resolve basic technical difficulties (e.g., reboot computer, clear paper jam, replace ink cartridge replacement).		90.6%	212
Use built-in help and other available support resources to learn about hardware and software features and to troubleshoot problems.		67.5%	158
Use proper terminology to communicate commonly occurring technology problems (e.g., frozen screen, disk error, printing problems).		83.3%	195
Use editing and formatting features (margins, spelling, and tabs) in a word processing application.. Insert images (e.g., downloaded from the Web or copied from a removable device) into documents.		86.3%	202
Create a report or newsletter using word-processing or desktop publishing software.		86.8%	203
Describe the structure and function of spreadsheet (e.g., cells, rows, columns, and formulas).		60.3%	141
Create an original spreadsheet, entering simple formulas (various			

number formats, equations, percentages,). Reposition columns and rows; apply formatting features.		37.2%	87
Interpret spreadsheet information, and produce simple charts from data.		49.1%	115
Perform basic searches (including multiple key words) on digital and online databases (e.g., library card catalog, encyclopedia). Use available tools to refine and limit the results of a search.		79.9%	187
Create and manipulate graphics using a drawing or painting program (e.g., adjust scale, size, shape, resolution).		59.8%	140
Create a simple multimedia presentation and explain the terminology (e.g., slide, transition, build.)		52.6%	123
Organize Bookmarks or Favorites into folders for future reference.		64.5%	151
Identify and use basic search strategies on the Internet.		**91.9%**	**215**
Create an address book in an e-mail program.		66.2%	155
		answered question	**234**
		skipped question	**9**