

Mountain Lakes Technology Plan



2010-2013

Three-Year Local School District/ Charter School Technology Plan

July 1, 2010 through June 30, 2013
[New Jersey Department of Education](#)

[Local District Technology Plan Procedure: 2010-2013](#)

This Document in: [PDF](#) | [Microsoft Word](#)

Directions: Indicate in the *PAGE #* column of the template, the page number from the district technology plan where the corresponding information can be found.

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	<p>3. <i>Describe the district's Internet safety policy that addresses the</i></p> <p style="padding-left: 40px;"><i>a) technology protection measure that protects against access through computers with Internet access to visual depictions by adults or minors that are—</i></p> <p style="padding-left: 80px;"><i>(I) obscene; or</i></p> <p style="padding-left: 80px;"><i>(II) child pornography; or</i></p> <p style="padding-left: 80px;"><i>(III) harmful to minors; and</i></p> <p style="padding-left: 40px;"><i>b) process for educating minors about appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms, and cyberbullying awareness and response, as required by the Protecting Children in the 21st Century Act.</i></p>
7	<p>4. <i>Indicate the dates when the school district provided the community with public notice and a hearing to address any proposed Internet safety policies adopted by the school district pursuant to CIPA. (Note: This is a requirement by e-rate only for those entities that have not already provided such notice and hearing related to an Internet safety policy and technology protection measure.)</i></p> <p>Resource: Information from Universal Service Code: http://www.law.cornell.edu/uscode/html/uscode47/uscode47_usc_sec_47_00000254----000-.html</p>

C. Needs Assessment	
	Help
7	1. Complete a needs assessment for educational technology in your school district or charter school. Begin by determining current status. Afterwards, determine the educational needs, prioritize the identified needs and plan for necessary changes through goals and objectives.
	a. Evaluate educators' current practices in integrating technology across the curriculum.
	b. Provide a summary of educators' proficiency in the use of technology within the district.
	c. Determine the current educational environment and barriers by describing how:
	i. Educators are assured access to technology to facilitate technology integration across the curriculum,
	ii. Often students have access to technology to support the use of 21 st century skills in their learning environment,
	iii. The needs of educators are evaluated,
8	iv. The needs of students are evaluated,
	v. Past professional development addressed the educators' and students' needs for technology integration,
	vi. Past professional development for all administrators was provided to further the effective use of technology in the classroom or library media center,
	vii. Ongoing, sustained professional development was provided in 2009-2010 for all educators to further the effective use of technology in the classroom and library media center,
	viii. Ongoing, sustained professional development was provided in 2009-2010 for administrators to further support the effective use of technology in the classroom or library media center,
	ix. Supports were provided for educators other than professional development,
	x. Professional development needs and barriers relating to using educational technology as part of instruction have been identified.
	2. Based on the answers given above, indicate the needs of the district to improve academic achievement for all students through the integration of technology across all curricular areas.
9	3. Prioritize the identified needs
IV. THREE-YEAR GOALS AND OBJECTIVES	
A. History	
9	Evaluate each goal from the previous plan, in one or two sentences, detailing each goal's success, or reasons for continuation, or issues preventing its success.
B. Goals and Objectives for 2010-2013	
9	Modify goals and write new goals to meet the needs identified from the assessments. Goals for 2010-2013 should support district need and align with the state plan.
V. THREE-YEAR IMPLEMENTATION AND STRATEGIES TABLES (July 2010 – June 2013)	
11	Implementation Activity Sample Table

	A. Describe the implementation strategies/activities that relate to the goals and objectives. Include in the description the timeline, person responsible and documentation (or evidence) that will prove the activity occurred.
19	B. Develop strategies to ensure that the technology plan addresses the use of technology, including assistive technology, to support 21 st century learning communities.
	C. Provide details of the process for meeting the NCLB requirement that all students be technologically literate by the end of grade eight. Help
	D. Identify specific telecommunications and information technologies and any other specific resources that are useful to reach the stated goal.
VI. FUNDING PLAN (July 2010 – June 2011)	
20	Funding Plan Sample Table Help
	A. Provide the anticipated costs for 2010-2011 and then indicate the projected funding for 2012-2013 of the technologies to be acquired. Include expenses such as hardware/software, digital curricula including NIMAS compliance, upgrades and other services including print media that will be needed to achieve the goals of this plan. Also incorporate specific provisions for interoperability among components of such technologies to successfully achieve the goals of this plan.
	B. Indicate the federal, state, local and other sources of funds used to help ensure that <u>students</u> have access to technology and ensure that <u>educators</u> are prepared to integrate technology effectively into curricula and instruction.
	C. Attach a copy of the board approval for this technology plan. Be sure it includes the budget for the first year of this plan.
	D. A board approved budget for each successive year of this plan must be filed with the technology plan for e-rate auditing purposes.
	E. Provide your technology plan's creation date which, as defined by e-rate, is the point when these five elements are in your plan. Those elements are: <ul style="list-style-type: none"> • Goals and strategies for using telecommunications and information technology; • A professional development strategy; • An assessment of telecommunications services, hardware, software, and other services needed; • Budget resources; and <ul style="list-style-type: none"> • An ongoing evaluation process.
VII. PROFESSIONAL DEVELOPMENT	
22	A. Provide the name and title of the person responsible for coordinating the professional development activities as stated in the district's professional development plan and noted in this plan.
	B. Describe the planned professional development activities for teachers, administrators, and school library media personnel that include:
	Help

	<ol style="list-style-type: none"> 1. <i>How ongoing, sustained professional development for all administrators will be provided to further the effective use of technology in all learning environments.</i>
	<ol style="list-style-type: none"> 2. <i>How ongoing, sustained professional development for all educators will be provided that furthers the effective use of technology, models 21st century skills and demonstrates global outreach and collaboration in the classroom or library media center.</i>
	<ol style="list-style-type: none"> 3. <i>The professional development opportunities and resources that exist for technical staff.</i>
	<ol style="list-style-type: none"> 4. <i>How professional development is provided to all staff on the application of assistive technologies to support all students in their learning.</i>
22	<p style="text-align: center;"><u>Professional Development Sample Table</u></p> <p>C. <i>Based on educators' proficiency and the identified needs for professional development, describe only the ongoing, sustained high-quality professional development opportunities planned for 2010-2011 as they relate to the infusion of technology into the curricular process. Include a description of in-class support, such as coaching, that is used to ensure effective use of technology to improve learning. Also, include a description of the involvement of all partners associated with professional development for the district.</i></p> <p>D. <i>Project professional development activities that will continue to support identified needs through 2013, including all partners.</i></p>
VIII. EVALUATION PLAN	
22	<p style="text-align: center;"><u>Evaluation Plan Sample Table</u></p> <p><i>Describe the evaluation process and accountability measures that monitor progress and mid-course corrections that are used to regularly evaluate the extent to which goals, objectives, activities, resources and services are effective in</i></p> <ol style="list-style-type: none"> 1. <i>Integrating technology into curricula and instruction to promote 21st century skills and global collaboration and outreach,</i> 2. <i>Enabling students to meet challenging state academic standards, and</i> 3. <i>Developing life-long learning skills.</i>

I. Stakeholders

Technology Coordinator	Mark Huber	
Mountain Lakes High School – Vice Principal	Steve Ryan	
Board Member	LaVonne Feigeles	
Teacher – Spanish, IDE instructor	James Mendello	
Teacher – Briarcliff Media Special	Dennis Posner	
Teacher – High School Technology	Carol Pinto	
Director of Special Services	Janet Wright	
Supervisor of Instruction – Wildwood Elemen	Paul Odenwelder	
Supervisor of Social Studies	Frank Sanchez	
Teacher – G&T Wildwood	Missy Sidron	

II. EXECUTIVE SUMMARY

“The Mountain Lakes Public Schools will ensure that all students demonstrate mastery of defined skills and knowledge that will empower them to be productive, responsible, self-directed citizens of the global community. Our district promotes safe and supportive learning environments that challenge and inspire students while cultivating their intellectual curiosity. We are committed to providing adequate resources to maintain the successful educational partnership that exists among staff, family, and community.

Our schools foster the emotional, social, and physical development of our students. A dynamic and continuously evolving curriculum addresses academic preparation and personal resiliency that includes the life-long learning skills of self-awareness, self-direction, and perspective consciousness. Achieving our mission should enable each student to actualize his or her unique potential and to excel in any endeavor he or she undertakes. “

- Vision Statement Mountain Lakes 2009-2014 Long Range Education Plan

The district will:

1. Instruct students in the acquisition and application of **21st Century Skills and key concepts of Sustainability**.
2. Build upon our **conceptual curriculum model** to highlight 21st Century Skills and to incorporate concepts of Sustainability.
3. Foster an **educational environment** that maximizes Sustainable Learning and the acquisition of 21st Century Skills.
4. Develop a system of **assessment** that accurately reflects student achievement in 21st Century Skills and concepts of Sustainability.
5. Formalize a process for faculty collaboration by establishing **Professional Learning Communities (PLCs)** among the faculty in each building.
6. Facilitate **individual growth and the development of personal resiliency skills and interpersonal responsibility and respect** through curricular and co-curricular activities.
7. Ensure that students exhibit a firm **commitment and dedication to their own learning and to the learning of others**, applying personal initiative, assuming responsibility in defining and achieving their individual goals, and exhibiting an understanding of the interconnectedness of all members of a learning community.
8. Integrate **technology** into the classroom as a standard learning tool.

III. TECHNOLOGY OVERVIEW

A. Technology

1. Provide an inventory of current technology networking and telecommunications equipment.

Mountain Lakes High School	
3com 10/100 switches	14
HP 10/100/1000 switches	1
Cymphonix Network Composer R30	1
Barracuda Spam Filter	1
Sonicwall 3060 Pro	1
Wireless AP (airport/linksys)	30
Desktops – Labs & Classrooms	83
Laptops - Carts	65
Computers, Non-instructional	24
Teacher Laptops	58
Network Laser - B&W	20
Network Laser - Color	4
Networked Copiers	5

Briarcliff Middle School	
3com 10/100 switches	7
3com 10/100/1000 switches	1
Wireless AP (airport/linksys)	18
Desktops – Labs & Classrooms	47
Laptops - Carts	96
Computers, Non-instructional	5
Teacher Laptops	20
Network Laser - B&W	16
Network Laser - Color	3
Networked Copiers	2

Wildwood Elementary School	
3com 10/100 switches	6
3com 10/100/1000 switches	1
Wireless AP (airport/linksys)	14
Desktops – Labs & Classrooms	120
Laptops - Carts	48
Computers, Non-instructional	6

Teacher Laptops	38
Network Laser - B&W	6
Network Laser - Color	2
Networked Copiers	2

2. Describe the technology inventory needed to improve student academic achievement through 2013 including, but not limited to:

Technology equipment and networking capacity:

The High School and Wildwood programs continue to lag behind Briarcliff in student/computer ratios. The emphasis on 21st Century Skills and Problem based learning at the High School should focus greater attention to the tools needed to achieve those goals. At the minimum, increasing laptop cart inventories in both buildings to increase access is necessary. Alternatives also being explored include a pilot of iPod touches to increase the quantity of devices that students can use in the classroom at a considerably reduced cost to the district.

Wireless access is nearly universal in all buildings. Currently this is achieved on an ad-hoc basis with inexpensive unmanaged access points. The technology department continues to evaluate managed wireless options to provide robust, secure & reliable wireless access.

Software used for curricular support and filtering:

- Filtering: Cymphonix Network Composer;
- SIS: Powerschool; maintain & upgrade when necessary
- Maintain & upgrade when appropriate:

Technology maintenance policy and plans

- Continue first-level software & hardware support.
- Fund training for Apple Certification and SmartBoard technical support
- 3rd party support for out of warranty items & printer repair.

Telecommunication services

To ensure consistent, rapid access to the web to support content retrieval as well as creation the district will be increasing bandwidth capacity during the summer of 2010. Currently, access is passable during most parts of the day but there are bottlenecks that hinder video streaming, for example. The district will be moving from fixed 3 MB/s bonded T1 lines and a secondary non bandwidth-guaranteed cable modem to a minimum of 10 MB/s with an eye to upgrade to as much as 20 MB/s if that proves to be insufficient. A secondary, low cost, line will be maintained for redundancy (cable modem).

Technical support

On-site technicians provide multiple levels of support; software, hardware & networking. Requests are submitted via a web-based tracking system.

Facilities infrastructure

Core switches that handle the private fiber between buildings will need to be upgraded to increase capacity and replace obsolete equipment.

3. Describe how the district integrates assistive technology devices into the network to accommodate student

needs.

The Kurzweil program provides scanning and read-aloud capabilities designed to assist students who need specific help with reading assignments. Additionally, Universal Access Tools in the Macintosh OS allow for students to control settings for vision, hearing & input control. Additionally, Mountain Lakes is unique in its relationship with the Lake Drive Program for Deaf and Hard of Hearing Students:

- We use a variety of software (by Lingui-Systems) specifically designed for use with children with autism and other learning difficulties.
- Work with the Commission of the Blind for our students that have visual issues. They provide specific devices and software for individual students.
- Use the BoardMaker program to create communication boards for use with students with communication difficulties.
- Use a captioning program and equipment to create open captioned educational VHS tapes and DVDs.
- Sentence Master (by Laureate) is used as a systematic non-phonics based reading intervention program (right from their literature).
- The visual impact of SmartBoards and digital cameras as teaching tools improve learning, particularly with our population.

4. How educators have access to educational technology in their instructional areas such as using desktops, mobile laptop and wireless units, PDAs.

Teachers and library personnel have access to individual laptops to design lessons, present content with an LCD projector and connect to mounted Smartboards in classrooms and libraries. Classroom machines are available in K-5 classrooms for student use and mobile laptop carts are available in each building. Additionally, teachers have access to computers labs equipped with desktop computers for whole-group instruction.

5. How administrators have access to technology in their workplace (such as using desktops, mobile laptop and wireless units, PDAs).

Administrators have access to either a desktop or laptop computers and PDAs/smartphones.

6. Describe how the district's web site is accessible to all stakeholders (for example using Federal Accessibility Standards)

The Mountain Lakes district website is compatible with all browsers. Content is served in plain text and, when appropriate, in PDF format. The district website will be ported to a Content Management System (specifically, Wordpress) to ensure the website complies with Accessibility Standards. Notice of board meetings, agendas and approved minutes are regularly posted to the website and relevant information: special events, emergency closings/delays are posted to the website.

7. Describe the plan for replacing obsolete computers/technology and include the criteria for obsolescence.

Computers are considered obsolete when they are no longer able to run current software (including the operating system) or meet any specific classroom use. That usually means extending a machine's use beyond the 5-year limit whenever possible. Currently, machines are often "trickled-down" from high-use computing areas to less demanding environments (a high school lab machine moved to a K-3 classroom, for example). Labs are replaced/upgraded on a 3-year cycle. Laptops will need to be replaced with a goal of replacing 20% of our inventory on an annual basis, focusing on complete cart upgrades. Staff laptops are replaced on a need basis; typically 10% of the inventory per year.

B. Cyber Safety

1. List the filtering method(s) used.

All computers access the internet through the same portal which is filtered using an appliance by Cymphonix

called the Network Composer 30. The software provides filtering by pre-defined categories and can be customized to block additional content as the district finds necessary. Additionally, all network traffic can be monitored and controlled based on traffic type giving the technology department greater control in ensuring access to educationally appropriate websites.

An additional component of the current appliance, only partially enabled at this time, is the ability to track user activity. This is an important feature to give administration the ability to be both preventative by blocking inappropriate sites and also report on student activity in case a problem does occur. The acceptable use agreement will need to be updated to clearly state the monitoring of web activity for all users.

2. Identify the Acceptable Use Policies (AUP) used for students and staff and include a copy of the AUPs with the submission of this technology plan.

The Mountain Lakes Network Use Contract clearly defines the expectation that students and staff will use the network responsibly. That includes no intentional damage to the network infrastructure as well as accessing inappropriate content. A network contract is signed by both the student and parent(s) when a student is enrolled in the district. Use of all computers and network access is prohibited until a signed AUP is on file.

3. Describe the district's Internet safety policy that addresses the

a) technology protection measure that protects against access through computers with Internet access to visual depictions by adults or minors that are—

- (I) obscene; or*
- (II) child pornography; or*
- (III) harmful to minors; and*

All computers are automatically filtered with Safe Search as the only option when using services such as Google or Yahoo images. Students are unable to bypass this setting. Additional filtering is done with a subscription based service that blocks by subject matter (tagged by the vendor) as well as sites added manually.

b) process for educating minors about appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms, and cyberbullying awareness and response, as required by the Protecting Children in the 21st Century Act.

There are several approaches currently being used in Mt. Lakes. Students learn about online behavior during regular tech-based instruction as well as during pull-out topic specific programs. For example:

- K-5. A collaborative program led by the technology instructors and media specialist in which students are taught about online safety.
- 6-8 Students cycle through a technology course in which online safety, cyberbullying are addressed and reinforced in social studies and english classes when working on collaborative projects.
- 9-12 Cyber-safety is an element the Freshman Technology class that is a requirement for all Freshman and new students. With the course scheduled to be dropped beginning in September, 2010, Cyber-safety will be incorporated into Freshman orientation.

The district has hosted multiple cyber-safety workshops for students and parents. The symposiums have been held during the school day as well as at night to ensure full participation Representatives from the Morris County Prosecutor's Office have led several of the workshops. A website hosted by the district with pertinent information was established in the spring of 2010 to augment the workshops.

4. Indicate the dates when the school district provided the community with public notice and a hearing to address any proposed Internet safety policies adopted by the school district pursuant to CIPA. (Note: This is a requirement by e-rate only for those entities that have not already provided such notice and hearing related to an Internet safety policy and technology protection measure.)

Most recently, two sessions were held for the community: May 4th & May 17th, 2010.

Needs Assessment

1. *Complete a needs assessment for educational technology in your school district or charter school. Begin by determining current status. Afterwards, determine the educational needs, prioritize the identified needs and plan for necessary changes through goals and objectives.*

a. *Evaluate educators' current practices in integrating technology across the curriculum.*

The staff in Mountain Lakes actively seeks to integrate technology in the curriculum but the greatest barrier remains exposure to examples of effective integration. There are examples of seamless integration throughout the district and across multiple subject areas: weather projects at the 5th grade level, group writing & multimedia projects at the middle school, wiki authoring at tBriarcliff Middle School and the High School. Access is on ongoing consideration and sometimes a barrier to successfully planning and executing plans that integrate technology. The most successful appear to be in PBLs that call for students to acquire technology resources when needed and appropriate. It helps balance the demand on technology resources with successfully completing the lesson objectives.

b. *Provide a summary of educators' proficiency in the use of technology within the district.*

Staff proficiency has been observed formally and informally in the classroom and during workshops. Increased access to technology such as personal laptops, the need to maintain an electronic gradebook and district email has raised certain technology proficiencies though gaps remain in use and understanding. Multimedia authoring, web page publishing and collaborating with colleagues and students with the districts conferencing software (FirstClass) have also raised proficiencies around the district.

c. *Determine the current educational environment and barriers by describing how:*

I Educators are assured access to technology to facilitate technology integration across the curriculum,

All classroom teachers are issued a laptop to work on lesson plans, multimedia projects, communicate with colleagues using FirstClass email & conferences and complete administrative tasks such as attendance and electronic grading. In addition, all K-5 classrooms have at least 2 desktop machines for student use, the middle school has eight carts of 12 laptops in addition to desktop machines and teachers at the high school have access to a media center technology lab, a mobile classroom set of 25 laptops as well as 4 carts of 12 laptops. Projectors and Smartboards are in every classroom at the high school and middle school and continue to be added at the elementary school.

ii. *Often students have access to technology to support the use of 21st century skills in their learning environment,*

Students have access to technology both in their classroom and in lab environments. There are mobile carts in each building but access is best when the carts are in close proximity to the rooms. All students 6-12 now have email accounts using FirstClass email/conferencing and more teachers are using Google Docs with students (Google Apps for education) for collaborative work. Students have access throughout the day in open labs and can typically sign-out laptops through the district. Inventory, however, is still insufficient in some areas to ensure access without some careful planning.

iii. *The needs of educators are evaluated,*

Formal observations by supervisors, team meetings with building administrators and department meetings are all environments in which the needs of the staff are evaluated. Staff are encouraged to bring projects and requests to building principals and the technology coordinator.

iv. *The needs of students are evaluated,*

Teachers, in the classroom, technology labs and media centers evaluate student needs. Mountain Lakes is committed to Differentiation of Instruction and incorporates individual technology as needed.

v. *Past professional development addressed the educators' and students' needs for technology integration,*

10-hour Teacher Institute courses led by district staff, technology themed workshops during in-service days and after-school workshops have all been vehicles for staff development. The greatest impediment is often the need for "follow-up" after an initial session. The hope is that PLCs will help blend formal PD training and extended follow-up while working together over a longer period of time.

vi. *Past professional development for all administrators was provided to further the effective use of technology in the classroom or library media center,*

Administrators have led and participated in Teacher Institute classes to keep pace with technology integration. Additional training from NJ Elite, NECC & ASCD keep administrators informed of best practices and innovative instruction.

vii. *Ongoing, sustained professional development was provided in 2009-2010 for all educators to further the effective use of technology in the classroom and library media center,*

The Teacher Institute provided a rich assortment of learning opportunities during the 2009-10 school year. Shorter, skills based workshops were offered during Professional Development days. To begin the school year, multiple workshops were offered on collaboration with FirstClass and blogging (web publishing).

viii. *Ongoing, sustained professional development was provided in 2009-2010 for administrators to further support the effective use of technology in the classroom or library media center,*

Administrators were encouraged to participate in the professional development opportunities listed above.

ix. *Supports were provided for educators other than professional development,*

The technology staff provides hardware and software troubleshooting as well as project-specific help on a one-to-one basis. Supervisors, colleagues, technology teachers and technicians are available to assist teachers while building lessons that incorporate technology.

x. *Professional development needs and barriers relating to using educational technology as part of instruction have been identified.*

Time is always an issue when considering additional training when introducing new skills, reinforcement and integrating technology into lessons that align with the CCCS. Considerable success has been made with in-service days and Institute classes but there is a need to develop time during the formal workday to collaborate with colleagues, develop new lessons and improve technology literacy. Continued support from supervisors and administrators is critical for successful professional development. A highly available, properly working inventory of technology supplies needs to be in place to support teachers as they continue to integrate technology into their classrooms.

2. *Based on the answers given above, indicate the needs of the district to improve academic achievement for all students through the integration of technology across all curricular areas.*

We've seen considerable success at integrating technology into the curriculum when both substantial staff training and mentoring are combined with ready access to technology resources. For example, the Briarcliff school embarked on a program to train teachers in differentiated instruction with the Innovative Designs for Education. That training led to a felt need for additional tools in the classroom; a grant was secured to place SmartBoards and laptops in Language Arts and Social Studies classrooms. The combination of differentiated instruction and ready access to laptops has resulted in a dynamic learning environment. It is apparent this model should be extended throughout the district, a process already under way with the Innovative Teachers Strategies (ITS) Team mentoring other teachers.

But the resources do not entirely match the demand and training is an indispensable component for success.

Inventory of technology resources, especially laptops or other forms of portable computing, will need to be increased as well as the amount of professional development time.

3. *Prioritize the identified needs*

- Training and mentoring to integrate technology into curriculum and administrative process
- Teachers and administrators need to take part in a social workplace just as students will be expected to do. Current system needs to be re-evaluated to ensure it meets the needs of the staff and students.
- Increase technology resources (laptops) while maintaining the existing inventory and replacing obsolete equipment
- Continue to build an electronic, accessible curriculum resources repository as curriculum is revised and updated

IV. THREE-YEAR GOALS AND OBJECTIVES

A. History

Goal 1: Provide all staff with on-going professional development to acquire skills and knowledge to effectively use technology to improve student achievement.

The most consistent vehicle for professional development that incorporated technology came from the ongoing Mt. Lakes institute courses hosted on-site by colleagues. The advantage of the courses was that it not only provided specific content instruction but created an informal learning community for each session (classes met for a total of 10 hours over several weeks). The current tech plan expands upon this goal with PLCs.

Goal 2: The Mountain Lakes School District will develop and maintain a technology infrastructure to support student and staff technology literacy.

Faculty laptops and ubiquitous wireless have aided in staff technology literacy and a fair computer/student ratio has helped with student literacy. A cycle of keeping workstations and laptops current has also helped. This goal will continue into the current technology plan. Large file storage with the intent of providing space for student portfolios did not materialize but portfolios will be extended into the current plan.

Goal 3: Ensure staff and students have ready access to technology to achieve the core curriculum content standards.

Improvements have been made in some areas but budgetary restraints have prevented the duplication of the middle school model where laptop carts are more readily available than in other buildings. The middle school program was build largely around a curricular model based on problem based learning that drove the demand for increased access to technology. This goal has been continued to the current plan.

B. Goals and Objectives for 2010-2013

Goal 1: All students will be prepared to excel in the community, work place and in our global society using 21st century skills.

Objective 1.1: Revise curriculum guides to promote 21st Century Learning and concepts of Sustainability

Objective 1.2: Integrate the revised New Jersey Core Curriculum Standards Content Standards (2009) and incorporate appropriate elements from the state's model.

Objective 1.3: Encourage and facilitate the development of student portfolios of learning demonstrating mastery of concepts and skills

GOAL 2: All educators, including administrators, will attain the 21st century skills and knowledge necessary to effectively integrate educational technology in order to enable students to achieve the goals of the core

curriculum content standards and experience success in a global society.

Objective 2.1: Provide necessary resources to enable present and future faculty and administrations to deliver 21st Century Skills instruction.

Objective 2.2: Provide support and opportunities for education in and the use of technology applications necessary for 21st Century Learning

Objective 2.3: Future revision of curriculum guides will be infused with or linked to a repository of related technology resources.

Objective 2.4: District will use available technologies to streamline and improve efficiency of curricular revision, enhancement, and access.

GOAL 3: Educational technology will be accessible by students, teachers and administrators and utilized for instructional and administrative purposes in all learning environments, including classrooms, library media centers, and other educational settings such as community centers and libraries.

Objective 3.1: Use of technology in all stages of the learning process: as a learning tool, in facilitating differentiation, for research, as a vehicle for demonstrating learning and in assessment.

Objective 3.2: Provision for the integration of technology in the classroom as a standard learning tool.

V. THREE-YEAR IMPLEMENTATION AND STRATEGIES TABLES (July 2010 – June 2013)

A. Describe the implementation strategies/activities that relate to the goals and objectives. Include in the description the timeline, person responsible and documentation (or evidence) that will prove the activity occurred.

Goal & Objective: 1.1 Revise curriculum guides to promote 21 st Century Learning and concepts of Sustainability			
Action Plan	Suggested Timeline	People Involved	Indicators of Success
1. A review of the district curricular templates with an evaluation of how the template can reflect new LREP goals (in addition to 2009 standards)	Spring 2010	Administrative Team	Recommendation from Administrative regarding template.
2. Template is presented to the district faculty and revised based on teacher feedback.	Fall 2010	Faculty & Administrative Team	Through First Class, the entire faculty will have the opportunity to review and comment on the new template prior to its adoption.
3. Curricula is examined and future courses and topics including the 21 st century themes such as global awareness & economic literacy are explored	Fall 2010	Faculty & Administrative Team	New curriculum proposals are sent to the Board of Education; District is in compliance with state curricular mandates
4. Board of Education approves the adoption of the revised curriculum model for the district.	Spring 2011	Administrative Team, Program Committee	Board approval and dissemination of the template
5. The district faculty begin the process of rewriting curriculum guides using the online template	Summers of 2011-2014	Curriculum writers, Administrative Team	Board approval of curricula and postings on First Class

Goal & Objective: 1.2 Integrate the revised New Jersey Core Curriculum Standards Content Standards (2009) and incorporate appropriate elements from the state's model.			
Action Plan	Suggested Timeline	People Involved	Indicators of Success
1. Distribution and discussion of the 2009 Revised Content Standards	2009-2010 School year	Administrative Team, Faculty	Attendance & discussion at faculty & departmental meetings focused on

<p>2. Comparison of 2009 standards with 2004 standards & LREP goals</p> <p>3. Summer Curriculum writing & revision to reflect new standards</p>	<p>Spring 2010</p> <p>Summer 2010- June 2014 (Ongoing)</p>	<p>Administrative Team, Faculty</p> <p>Curriculum writers, Administrative Team</p>	<p>curriculum revision</p> <p>List of similarities and differences formulated and collected</p> <p>Supervisors & Administrative Team send curricula to Board for approval</p>
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Goal & Objective: 1.3 Encourage and facilitate the development of student portfolios of learning demonstrating mastery of concepts and skills	Suggested Timeline	People Involved	Indicators of Success
<p>Action Plan</p> <p>1. An exploration of digital tools and research of e-folios to be conducted by PLCs in each building</p>	<p>Fall 2010</p>	<p>Faculty & guidance</p>	<p>PLC attendance and research to be shared during PD in-services and departmental and/or grade level meetings</p>
<p>2. Student Portfolios will house content & technology skills related to real-world situations (e.g.) 4th graders produce a media-rich digital story about a significant local event; 8th graders synthesize and publish information about a local or global issue on a collaborative, web-based service; 12th graders design and pilot a digital learning game to demonstrate knowledge and skills related to a real world situation. (NJCCCS 8.1.B)</p>	<p>Beginning Fall 2011</p>	<p>Faculty & Administrative Team</p>	<p>Examples of student work will be collected and evaluated with a rubric</p>
<p>3. Student samples evaluated and contrasted with 2010 baseline materials</p>	<p>2013-2014</p>	<p>Faculty & Administrative Team</p>	<p>Data is to be evaluated and findings are to be presented to Board and faculty in Spring 2014</p>

Goal & Objective: 2.1 Provide necessary resources to enable present and future faculty and administrations to deliver 21st Century Skills instruction.

Action Plan	Suggested Timeline	People Involved	Indicators of Success
<p>1. The district will provide the necessary resources to enable present and future faculty and administrators to deliver 21st Century Skills instruction.</p> <p>2. All staff will be provided with the "Partnership for 21st Century Skills Framework Definitions Document" as a reference for lesson design</p> <p>3. The Institute Coordinator will infuse 21st Century Skills courses into each semester offering of the Institute Course Guides.</p> <p>4. On-site professional development as well as Web-based and off-site opportunities that focus on 21st Century Skills and Sustainability will be promoted.</p>	<p>Fall 2009 - June 2014 (ongoing)</p> <p>Fall 2009</p> <p>Fall 2009 - June 2014 (ongoing)</p> <p>Fall 2009 - June 2014 (ongoing)</p>	<p>Administrative Team, LPDC</p> <p>Admin Team</p> <p>Institute Coordinator</p> <p>Administrative Team, LPDC, SPDC, Institute Coordinator</p>	<p>As evidenced by registration records for 21st Century Skills workshops, all members of the administrative team & at least 2 members from each department will attend at least 2 professional development opportunities on this topic.</p> <p>Distribution record; lesson plan evaluations that evidence implementation of 21st Century Skills in lesson implementation.</p> <p>Institute Course Guides with 21st Century Skills courses highlighted</p> <p>Institute Attendance Records, Professional Development Day Attendance Records, Annual report of the LPDC, District Membership in Morris Union Jointure and similar organizations that provide free, reduced and online professional development for educators.</p>

Goal & Objective: 2.2 Provide support and opportunities for education in and the use of technology applications necessary for 21 st Century Learning		
Action Plan	Suggested Timeline	People Involved
		Indicators of Success

<p>Provide support and opportunities for education in and the use of technology applications necessary for 21st Century Learning.</p>	<p>Fall 2009 - June 2014 (ongoing)</p>	<p>Administrative Team, Technology Director, Program Committee, LPDC</p>	<p>The District Technology Plan will evidence support for the infrastructure needed to develop 21st Century Skills.</p> <p>By 2014, all teachers will access their curricula online and contribute at least one model lessons that evidence the use of Web 2.0 technologies</p> <p>By 2014, all 6-12 teachers will establish an Interactive, First Class Workspace that evidences communication, collaboration, relevant problem solving, and flexibility</p>
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Goal & Objective: 2.3 Future revision of curriculum guides will be infused with or linked to a repository of related technology resources.			
Action Plan	Suggested Timeline	People Involved	Indicators of Success
<p>1. Technology training with Web 2.0 features as a focus should continue and be expanded</p>	<p>Spring 2010- Spring 2011</p>	<p>Administrative Team, LPDC, Teacher Institute Director, Briarcliff IDE Team</p>	<p>A significant increase of PD opportunities regarding the authentic learning during PD in-service days and Institute courses</p>
<p>2. Teacher participation in Phase 2 of NJ Revision Project</p>	<p>September 2010</p>	<p>District Faculty, LPDC</p>	<p>Completion of a Phase 2 Module from NJ DOE website for PD credit</p>
<p>3. "Best Practices" Professional Learning Communities formed in each building with a focus on incorporating Web 2.0 technology in 21st century classrooms</p>	<p>Spring 2011-Fall 2011</p>	<p>District faculty</p>	<p>Teacher attendance and discussion regarding examples of authentic learning</p>
<p>4. Dissemination of "Best Practices" from the PLCs during Department Meetings, Faculty Meetings, and PD in-service days</p>	<p>Spring 2012</p>	<p>"Best Practice" PLC, Administrative Team, LPDC</p>	<p>Teacher completion of an online Web 2.0 module from the NJ DOE website</p>
<p>5. Incorporation of "Best Practices" in online curriculum</p>	<p>2013-2014</p>	<p>Administrative Team, Faculty</p>	<p>Hyperlinks added to online curricula demonstrating "best practices"</p>

Goal & Objective: 2.4 District will use available technologies to streamline and improve efficiency of curricular revision, enhancement, and access.			
Action Plan	Suggested Timeline	People Involved	Indicators of Success
1. Curriculum software and online resources evaluated and contrasted with current model	Spring 2010-Fall 2010	Technology Staff & Administrative Team	Findings to be reported to Board
2a. Current curriculum model updated based on earlier report	Spring 2011	Administrative Team	Curriculum model update ready for Summer 2011 curriculum writing
2b. Should the current curriculum model be revamped, a new model based on emerging technologies is to be created	Spring 2011-Spring 2012	Technology Staff & Administrative Team	Curriculum model update ready for Summer 2012 curriculum writing

Goal & Objective: 3.1 Use of technology in all stages of the learning process: as a learning tool, in facilitating differentiation, for research, as a vehicle for demonstrating learning and in assessment.			
Action Plan	Suggested Timeline	People Involved	Indicators of Success
1. First Class expansion initiated & teacher training provided to foster Web 2.0 & other emerging technologies	2010-2011	Technology staff, LPDC & Teacher Institute	In-service attendance
2. Incorporation of 2009 NJ Technology Core Curriculum Standards within core subjects	2010-2011	Administrative team & faculty	Technology tasks from standards identified by faculty
3. Incorporation of Information, Communication and Technology Skills (ICT Skills) from 21st Century Skills Partnership Maps	2011-2012	Administrative team & faculty	ICT tasks from standards identified by faculty
4. Technology themes to be expanded in Professional Development in-services and Teacher Institute classes	2011-2012 and after	Faculty, Administrative Team, LPDC & Teacher Institute Director	Attendance records from targeted workshops
5. Technology budget to reflect & support curricular initiatives	Throughout the plan	Administrative Team & Technology staff	Budgetary meetings among Administrative Team, Technology staff and the Program Committee

Goal & Objective: 3.2 Provision for the integration of technology in the classroom as a standard learning tool.			
Action Plan	Suggested Timeline	People Involved	Indicators of Success
<p>1. Learning spaces and technical support will be provided for on-site, distance, and virtual learning opportunities that maximize learning potential in the most economical way.</p>	Fall 2009- June 2014 (Ongoing)	Administrative Team, Program Committee	Each budget cycle, members of the administrative team, specifically at the high school, will present an analysis of student enrollment numbers and offer proposals for alternative, cost effective instructional models.
<p>2. Every classroom will have regular access to working laptop computers.</p>	Fall 2009- June 2014 (Ongoing)	Director of Technology, Building Principals, Program and Finance Committees	Lease agreements with Apple, Long Range Technology Plan, and School Report Indicator on student-computer ratio.
<p>3. Consistency, speed, and performance of Internet connections available for pod casts, videoconferencing, blogs, wikis, etc. will be maximized. Hardware, such as videoconferencing equipment, will be available to assist students in using technology in order to be engaged and connected to the world and to each other</p>	Fall 2009- June 2014 (Ongoing)	Director of Technology, Administrative Team, Program Committee	Annually, the Director of Technology will conduct a survey of the district faculty on the effectiveness of the infrastructure in place to support web 2.0 technologies and promote videoconferencing. Results of this survey will be shared with the Administrative Team and the Program Committee

B. Develop strategies to ensure that the technology plan addresses the use of technology, including assistive technology, to support 21st century learning communities.

Teachers and administrators and support will receive training in Institute classes and professional learning communities before the implementation of technology initiatives. Small group instruction from CST teachers and outside consultants will assist teachers in learning about new technologies that can be used in the classroom to ensure student have access to technology.

C. Provide details of the process for meeting the NCLB requirement that all students be technologically literate by the end of grade eight.

All student in 5th-8th grade are enrolled in a ¼ cycle class of technology instruction. This is proceeded by regular technology infused projects at the K-5 level and augments the classroom experience. The curriculum for the technology course is aligned with the NJCCS and assessment is given on a per-project and unit basis. Technology standards are incorporated into curriculum revisions across all content areas. Technology is a key component in the curriculum in grades 6-8 since curriculum is designed around authentic learning tasks and PBLs which, by design, draw teachers and students to utilize technology.

D. Identify specific telecommunications and information technologies and any other specific resources that are useful to reach the stated goal.

Access to the internet is the key to the majority of the activity in the goals in this technology plan. Increased bandwidth, monitoring and filtering of internet access is crucial in successfully meeting the plan goals.

VI. FUNDING PLAN (July 2010 – June 2011)

A. Provide the anticipated costs for 2010-2011 and then indicate the projected funding for 2012-2013 of the technologies to be acquired. Include expenses such as hardware/software, digital curricula including NIMAS compliance, upgrades and other services including print media that will be needed to achieve the goals of this plan. Also incorporate specific provisions for interoperability among components of such technologies to successfully achieve the goals of this plan.

Three-Year Technology Plan Anticipated Funding Table (2010-2011)				
ITEM	FEDERAL FUNDING	STATE FUNDING	LOCAL FUNDING	MISC. (e.g. Donations, Grants)
Digital curricula (see NIMAS in the HELP section)	\$0	\$0	\$1,000	
Print media needed to achieve goals	\$0	\$0	\$800	
Technology Equipment	\$0	\$0	\$105,000	
Network	\$0	\$0	\$12,000	
Capacity	\$0	\$0	\$15,000	
Filtering	\$0	\$0	\$3,800	
Software	\$0	\$0	\$13,600	
Maintenance	\$0	\$0	\$3,500	
Other services	\$0	\$0	\$4,500	

Three-Year Technology Plan Anticipated Funding Table (2011-2012)				
ITEM	FEDERAL FUNDING	STATE FUNDING	LOCAL FUNDING	MISC. (e.g. Donations, Grants)
Digital curricula (see NIMAS in the HELP section)	\$0	\$0	\$1,000	
Print media needed to achieve goals	\$0	\$0	\$800	
Technology Equipment	\$0	\$0	\$105,000	
Network	\$0	\$0	\$12,000	
Capacity	\$0	\$0	\$15,000	
Filtering	\$0	\$0	\$3,800	
Software	\$0	\$0	\$13,600	
Maintenance	\$0	\$0	\$3,500	

Other services	\$0	\$0	\$4,500
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**Three-Year Technology Plan Anticipated Funding Table
(2012-2013)**

ITEM	FEDERAL FUNDING	STATE FUNDING	LOCAL FUNDING	MISC. (e.g. Donations, Grants)
Digital curricula (see NIMAS in the HELP section)	\$0	\$0	\$1,000	
Print media needed to achieve goals	\$0	\$0	\$800	
Technology Equipment	\$0	\$0	\$105,000	
Network	\$0	\$0	\$12,000	
Capacity	\$0	\$0	\$15,000	
Filtering	\$0	\$0	\$3,800	
Software	\$0	\$0	\$13,600	
Maintenance	\$0	\$0	\$3,500	
Other services	\$0	\$0	\$4,500	

VII. PROFESSIONAL DEVELOPMENT

A. Provide the name and title of the person responsible for coordinating the professional development activities as stated in the district's professional development plan and noted in this plan.

B. Describe the planned professional development activities for teachers, administrators, and school library media personnel that include:

1. How ongoing, sustained professional development for all administrators will be provided to further the effective use of technology in all learning environments.

See Goal 2, Objectives 2.1, 2.2, 2.3

2. How ongoing, sustained professional development for all educators will be provided that furthers the effective use of technology, models 21st century skills and demonstrates global outreach and collaboration in the classroom or library media center.

See Goal 2, Objectives 2.1, 2.2, 2.3

3. The professional development opportunities and resources that exist for technical staff.

Vendor specific training & certification (Apple Server, FirstClass Administration, SmartBoard technical training) as well as regional training opportunities (NJ ECC subcommittee). Much of the technical training currently comes on a project-based need basis and training will be sought through online sources as well when appropriate.

4. How professional development is provided to all staff on the application of assistive technologies to support all students in their learning.

Staff are offered opportunities to learn about assistive technologies during in-service workshops and 10 hour Institute classes. Additional help is offered in collaboration with CST staff, Lake Drive (hard of hearing program) teachers & support and outside consultants such as Kurzweil implementation with JanTech.

C. Based on educators' proficiency and the identified needs for professional development, describe only the ongoing, sustained high-quality professional development opportunities planned for 2010-2011 as they relate to the infusion of technology into the curricular process. Include a description of in-class support, such as coaching, that is used to ensure effective use of technology to improve learning. Also, include a description of the involvement of all partners associated with professional development for the district.

See Goal 2, Objectives 2.1, 2.2, 2.3

The focus on professional development for the Mountain Lakes Long Range Education Plan (2009-14) is through the formation of Professional Learning Communities. District-wide opportunities will continue to be fed through the Teacher Institute program which also adds the incentive of credit on the guide for participation. We have a tremendous resource in our train-the-trainer model with Innovative Designs for Education Corp. (IDE) that means we have an in-house group of teachers that works with other teachers on designing and implementing innovative PBL curriculum.

D. Project professional development activities that will continue to support identified needs through 2013, including all partners.

See Goal 2, Objectives 2.1, 2.2, 2.3

Mountain Lakes has embraced the work of the Partnership for 21st Century skills and is using the skills framework for the basis of district-wide as well as school based PBLs. Our Teacher Institute will continue to provide extended opportunities for teachers to learn new skills while collaborating with colleagues.

VIII. EVALUATION PLAN

Describe the evaluation process and accountability measures that monitor progress and mid-course corrections that are used to regularly evaluate the extent to which goals, objectives, activities, resources and services are

effective in

1. Integrating technology into curricula and instruction to promote 21st century skills and global collaboration and outreach,

The 2009-2014 Long Range Education Plan for Mountain Lakes places significant emphasis on 21st Century Skills and technology in all stages of the learning process. As such, teachers and administrators are called upon to revise curricula with integration & 21st century skills in mind. PLCs will continually evaluate the direction of these goals and supervisors & principals will evaluate the progress during the implementation of the plan. Reports to the board emphasize the progress the district is making as a whole.

2. Enabling students to meet challenging state academic standards, and

Classroom teacher review of lessons & student work is a key component to ensuring students meet the state academic standards. The Technology Coordinator, building administrators and department supervisors, do additional assessment on ongoing basis. Feedback from all staff are considered when constructing a budget to address the needs of student to meet and exceed the state academic standards.

3. Developing life-long learning skills.

Teachers, administrators and students are all invaluable in evaluating the progress based on life-long learning skills. Student development of portfolios of learning will assist students and teachers to evaluate their progress and, by extension, the effectiveness of this plan in achieving the the goal of developing life-long learning skills.