



District Technology Plan

July 1, 2012 - June 30, 2015

Table of Contents

I. DISTRICT PROFILE	4
1. PLAN DURATION	9
2. STAKEHOLDERS INVOLVEMENT	9
3. CURRICULUM COMPONENT	10
3A. TEACHERS' AND STUDENTS' CURRENT ACCESS.	10
3B. DISTRICT'S CURRENT USE OF TECHNOLOGY TO SUPPORT TEACHING AND LEARNING.	11
3C. DISTRICT'S CURRICULAR GOALS	11
3D. TEACHING AND LEARNING GOALS (MEASURABLE OBJECTIVES, BENCHMARKS)	13
GOAL 3D.1: <u>STUDENTS, TEACHERS, AND INSTRUCTIONAL SUPPORT STAFF WILL INCREASE THEIR EFFECTIVE USE OF TECHNOLOGY TO ENHANCE TEACHING AND LEARNING.</u>	14
GOAL 3D.2: <u>ALL STUDENTS WILL INCREASE THEIR PROFICIENCY IN ENGLISH LANGUAGE ARTS AND MATHEMATICS, SUPPORTED BY THE USE OF TECHNOLOGY.</u>	14
GOAL 3D.3: <u>ALL STUDENTS WILL MEET GRADUATION REQUIREMENTS.</u>	14
3E. ACQUIRING TECHNOLOGY SKILLS AND INFORMATION LITERACY SKILLS (MEASURABLE OBJECTIVES, BENCHMARKS).	19
GOAL 3E.1: <u>STUDENTS WILL USE TECHNOLOGY TO ACQUIRE TECHNOLOGY SKILLS AND INFORMATION LITERACY SKILLS, AS APPROPRIATE PER GRADE LEVEL.</u>	20
3F. ETHICAL USE OF TECHNOLOGY.	23
3G. INTERNET SAFETY.	23
3H. PROGRAMS AND METHODS OF UTILIZING TECHNOLOGY THAT ENSURE APPROPRIATE ACCESS TO ALL STUDENTS.	24
3I. TECHNOLOGY USE FOR EFFICIENT STUDENT RECORD KEEPING AND ASSESSMENT AND SUPPORT OF TEACHERS' EFFORTS TO MEET INDIVIDUAL STUDENT ACADEMIC NEEDS.	24
GOAL 3I.1: <u>ALL TEACHERS AND ADMINISTRATORS WILL USE DISTRICT TECHNOLOGY FOR STUDENT RECORD-KEEPING AND INSTRUCTIONAL DECISION-MAKING BASED ON ASSESSMENT DATA.</u>	25
3J. TECHNOLOGY USE TO MAKE TEACHERS AND ADMINISTRATORS MORE ACCESSIBLE TO PARENTS.	26
GOAL 3J.1: <u>TECHNOLOGY WILL BE USED TO ENHANCE HOME-SCHOOL COMMUNICATION.</u>	27
3K. MONITORING OF CURRICULUM COMPONENT:	28
4. PROFESSIONAL DEVELOPMENT COMPONENT	29
4A. SUMMARY OF TEACHERS' AND ADMINISTRATORS' CURRENT TECHNOLOGY SKILLS AND NEEDS FOR PROFESSIONAL DEVELOPMENT.	29
4B. PLAN FOR PROVIDING PROFESSIONAL DEVELOPMENT OPPORTUNITIES BASED ON THE NEEDS ASSESSMENT AND THE CURRICULUM COMPONENT.	34
GOAL 4B.1: <u>DISTRICT STAFF WILL BE QUALIFIED TO USE TECHNOLOGY AS A TOOL FOR TEACHING AND LEARNING.</u>	35
4C. MONITORING PROCESS FOR PROFESSIONAL DEVELOPMENT COMPONENT	39
5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT	41
5A. EXISTING HARDWARE, INTERNET ACCESS, LEARNING, AND TECHNICAL SUPPORT RESOURCES.	41
5B. NEEDED HARDWARE, LEARNING, NETWORK AND TELECOMMUNICATIONS INFRASTRUCTURE, PHYSICAL PLANT, AND TECHNICAL SUPPORT.	42
5C. BENCHMARKS AND TIMELINE FOR OBTAINING THE NEEDED RESOURCES.	45

5D. MONITORING PROCESS	49
6. FUNDING AND BUDGET COMPONENT	50
6A. ESTABLISHED AND POTENTIAL FUNDING SOURCES AND COST SAVINGS.	50
6B. ESTIMATED ANNUAL IMPLEMENTATION COSTS FOR THE TERM OF THE PLAN.	51
6C. EQUIPMENT REPLACEMENT POLICY	54
6D. MONITORING PROCESS:	54
7. MONITORING AND EVALUATION COMPONENT	55
7A. DESCRIPTION OF THE PROCESS FOR EVALUATING THE PLAN'S OVERALL PROGRESS AND IMPACT ON TEACHING AND LEARNING.	55
7B. SCHEDULE FOR EVALUATING THE EFFECT OF PLAN IMPLEMENTATION.	55
7C. COMMUNICATING EVALUATION RESULTS.	56
8. EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS TO MAXIMIZE THE USE OF TECHNOLOGY	57
9. EFFECTIVE, RESEARCH-BASED METHODS AND STRATEGIES	58
9A. RESEARCH SUMMARY, DISTRICT APPLICATION.	58
9B. TECHNOLOGY TO DELIVER RIGOROUS CURRICULUM.	61
APPENDIX A	62
APPENDIX C – CRITERIA FOR EETT TECHNOLOGY PLANS	64
APPENDIX J – TECHNOLOGY PLAN CONTACT INFORMATION	73

i. DISTRICT PROFILE

Monrovia Unified School District is located in Los Angeles County, approximately 20 miles northeast of the city of Los Angeles, at the base of the San Gabriel Mountains. The District operates five elementary schools, two middle schools, a comprehensive high school, a continuation high school, an alternative program campus housing Independent Study and Home Study, Canyon Early Learning Center housing Child Development and Pre-K programs, and the Monrovia Community Adult School. Monrovia Unified School District serves the city of Monrovia and portions of unincorporated Los Angeles County.

Mayflower, Monroe, Bradoaks, and Wild Rose Elementary Schools, Clifton Middle School, Santa Fe Middle School and Monrovia High School have received California Distinguished School awards. Monroe, Mayflower, Plymouth, and Wild Rose Elementary Schools have been designated as Title I Academic Achieving Schools. Canyon Oaks High School is designated a Model Continuation High School by the California Department of Education. In the past ten years, Monrovia USD programs have received eight Golden Bell Awards presented by the California School Boards Association for successful and innovative educational programs: Monrovia Reads, MUSD Nutrition Network, CELC Early-Childhood Education, Village After-School Program, Plymouth Responsive Classroom, AVID, Pro-Active Tutoring (PAT) program, and the Safe City Safe Campus cooperative safety program.

In October 2011, the racially and ethnically diverse student population was approximately 5,961. MUSD has been experiencing declining enrollment; however, enrollment held steady between 2009-2010 and 2010-2011 with a increase in enrollment this year. The Preschool program serves 228 students. The following chart shows the District's K-12 population percentages by ethnicity as taken from 2010-2011 CBEDS data.

Population	American Indian	Asian	Pacific Islander	Filipino	Hispanic	African American	White	Other
Students	0.2%	4.0%	0.4%	3.6%	59.3%	9.7%	80.2%	3.5%
Teachers	0.7%	3.6%	0.0%	0.3%	16.6%	4.2%	73.9%	0.7%

According to Dataquest, in spring 2012 about 12.1% of District students were considered English Learners. The District percentage of students receiving free and reduced lunch is 63%. Special Education students comprise about 9.25% of the total (Feb. 2012); GATE (Gifted and Talented Education) students comprise 16% of the total. In 2010-2011, the District's 307 teachers had served an average of 11.85 years in the District (14.3 years total in education); 15 (4.9%) were in their first year of teaching and 10 (3.3%) were in their second year; 46% held a master's degree or better; 94.5% were fully credentialed.

Student Achievement:

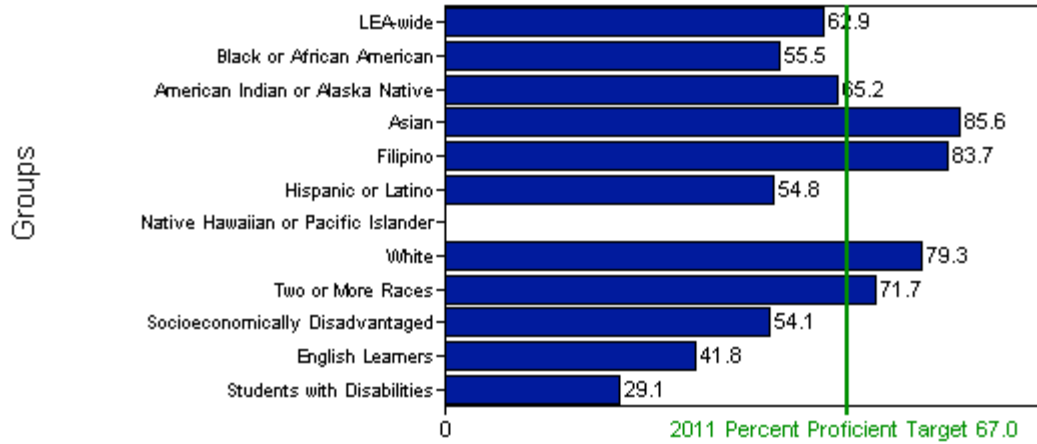
In 2010-2011, Monrovia USD met 23 of its Annual Yearly Progress (AYP) criteria. District-wide, 63.4% of students scored at or above Proficient on the AYP Annual Measurable Objectives in English language arts; 64.1% scored at or above Proficient in mathematics. All schools but two met all their AYP criteria.

The following charts show data from the 2011 Accountability Progress Report. The first shows per-school AYP information.

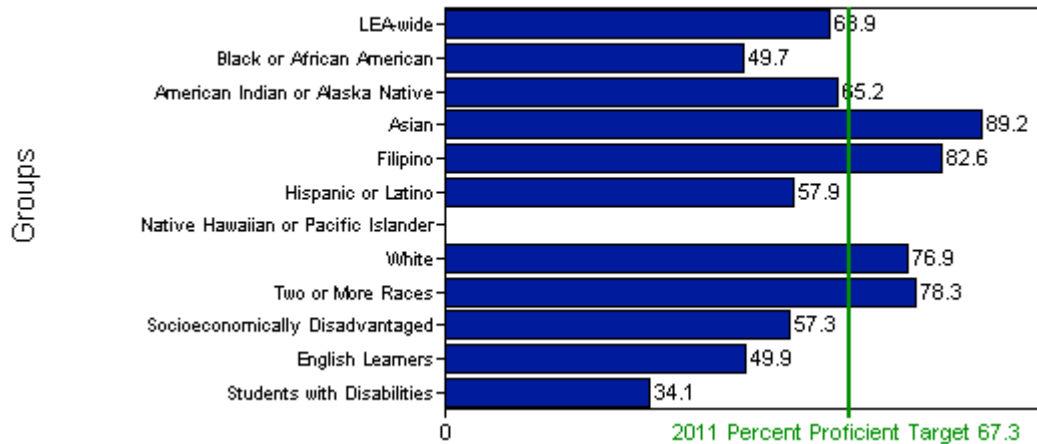
	Overall AYP Met?	AYP Eng/LA Met?	AYP Math Met?	API Req. met?	Graduation Rate	Program Improvement Status
Monrovia USD	Yes	Yes	No	Yes	Yes	Year 2
Elementary						
Bradoaks Elementary	No	Yes	Yes	No	N/A	In PI
Mayflower Elementary	No	Yes	Yes	No	N/A	In PI
Monroe Elementary	No	No	No	No	N/A	Not in PI
Plymouth Elementary	Yes	Yes	Yes	Yes	N/A	Not in PI
Wild Rose Elementary	No	No	No	Yes	N/A	Not in PI
Middle						
Clifton Middle	No	Yes	No	Yes	N/A	Not Title I
Santa Fe Middle	No	No	No	Yes	N/A	Not Title I
High Schools						
Monrovia High	Yes	Yes	Yes	Yes	Yes	Not Title I
Small Schools						
Mountain Park	Yes	Yes	Yes	N/A	Yes	Not Title I
ASAM Schools						
Canyon Oaks High	Yes	Yes	Yes	N/A	Yes	Not in PI

The following charts show the percentage of students in subgroups District-wide scoring at or above Proficient on the tests used to determine Annual Measurable Objectives for AYP.

English-Language Arts - Percent At or Above Proficient



Mathematics - Percent At or Above Proficient



The following chart shows per-school results on the California Academic Performance Index (API).

	2011 Base API	2011 Growth API	10-11 Growth Target	10-11 API Growth	Met target school wide?	Comparable Improvement? What's This?	Met API Target Overall?
Monrovia USD	797	804	4	7			
Elementary							
Bradoaks Elemen.	818	833	A	15	Yes	Yes	No
Mayflower Elem.	865	869	A	4	Yes	Yes	No
Monroe Elemen.	829	802	A	27	Yes	Yes	No
Plymouth Elem.	782	780	A	-2	No	No	No
Wild Rose Elem.	822	821	A	-1	Yes	Yes	No
Middle							
Clifton Middle	843	854	A	11	Yes	Yes	No
Santa Fe Middle	814	816	A	2	Yes	Yes	No
High Schools							
Monrovia High	765	778	5	13	Yes	No	Yes
Small Schools							
Mountain Park	728	793*	5	65	Yes	Yes	Yes
ASAM Schools							
Canyon Oaks HS	607*	578*	10	-29	No		No

* means this API is calculated for a small school or LEA, defined as having between 11 and 99 valid Standardized Testing and Reporting (STAR) Program test scores included in the API. The API is asterisked if the school or LEA was small in either 2010 or 2011. APIs based on small numbers of students are less reliable and therefore should be carefully interpreted.
A means the school scored at or above the statewide performance target of 800 in 2005.
D means this is either an LEA or an Alternative Schools Accountability Model (ASAM) school. Target information is not applicable to LEAs or to ASAM schools.

The following chart shows selected results from the 2011 California Standards Tests.

	2	3	4	5	6	7	8	9	10	11
CST English-Language Arts										
% Advanced & Proficient	60%	48%	70%	63%	59%	66%	70%	59%	49%	48%
CST Mathematics										
% Advanced & Proficient	64%	66%	73%	67%	55%	64%				
CST Gen. Math (Gr. 8)										
% Advanced and Proficient							33%			
CST Algebra I										
% Advanced & Proficient							76%	12%	15%	12%
CST Geometry										
% Advanced and Proficient								0%	72%	26%
CST Algebra II										
% Advanced and Proficient								29%	6%	2%
CST Summative HS Math										
% Advanced and Proficient										37%
CST Science										
% Advanced and Proficient				58%			74%		58%	
CST History, Gr. 8 Cumulative										
% Advanced and Proficient							63%			
CST World History										
% Advanced and Proficient									49%	
CST U. S. History										
% Advanced and Proficient										57%

For the class of 2010-2011, the graduation rate was 90.72%. In 2011, the California High School Exit Exam (CAHSEE) pass rate for sophomores was 85% in mathematics and 85% in English language arts (ELA). The combined pass rate in 2010-2011 was 83% in math and 81% in ELA.

1. PLAN DURATION

This plan will guide Monrovia Unified School District's use of technology for the three-year period from July 1, 2012, through June 30, 2015. It serves as both the Enhancing Education Through Technology (EETT) education technology plan and the E-rate plan for the District.

2. STAKEHOLDERS INVOLVEMENT

A District Technology Committee was formed in order to recommend specific actions that need to be taken to meet short and long-term goals. The Committee, which consisted of a variety of stakeholders who will implement the plan, met five times.

The following chart lists Committee members' names, titles and affiliations:

Name	Title	Affiliation
Tamille Buckell	Library Media Tech	Santa Fe Middle
Julie Vitale	Asst. Supt., Educational Services	Monrovia USD
Connie Wu	Chief Business Officer	Monrovia USD
Laurie Burton	Library Media Tech	Wild Rose Elementary
Erika Cobain	Teacher	Canyon Oaks High
Jason Buchanan	Chief Technology Officer	Monrovia USD
Gigi Johnson	Parent, Community Member	Monrovia Resident
Susan Sauvageau	Teacher	Plymouth Elementary
Cindy Lathrop	Principal	Monroe Elementary
Henry Paiz	Teacher	Monroe Elementary
Lisa Woods	Secretary	Monrovia USD
Sharon Sager	Teacher	Mayflower Elementary
Allen Widdows	Teacher	Clifton Middle
Tom Reale	Teacher	Monrovia High

3. CURRICULUM COMPONENT

3a. Teachers' and students' current access.

Monrovia USD has achieved a solid technology infrastructure and is now engaged in several major initiatives. Students and teachers have access to technology tools both during the school day and outside of school hours. All instructional areas are connected to the Internet, with a minimum of eight network drops (five for student computers, two for presentation equipment, and one for the teacher) standard in permanent classrooms. All classrooms have a dedicated teacher desktop computer and at least one student computer. Elementary classrooms have one to four student computers. In the middle schools, English language arts rooms have three to five student computers; other subject areas have fewer. At Monrovia High School, Special Education classes have five student computers; most other rooms have 3. At Canyon Oaks, all classrooms have at least two student computers. The Adult School has six classrooms with 25 computers each. Classroom computers are available to students before, during, and after school by teacher permission.

All schools have at least one computer lab. Elementary school labs are used by classes on an assigned schedule for both instruction and assessment (grades 2-5, using Illuminate); labs generally available for signup by teachers desiring extra lab time. Clifton Middle School has two full labs (one of which serves three classes of technology courses) plus 25 computers in the library. Santa Fe Middle School has one lab used mostly for technology courses and one lab for teacher sign-up. At the elementary schools, current labs are heavily used for benchmark assessments. Some labs are available to individual students before school, during lunch, and/or after school. Monrovia High School has four labs: three used as classrooms and one lab in the library available for teacher sign-up and individual student use. Canyon Oaks has a lab for use of Apex Learning. Computer labs are also used for teacher and administrator in-service.

Most media centers have computers available for student use. At the middle schools and Monrovia High School, media centers are open to students a half hour or hour before school, during lunch, and an hour after school.

The Village After School Program operates at elementary and middle schools until 6:00 each school day, with a few computers available to students. At some schools, children in this program are also able to use the computer lab. Some schools also offer before or after school intervention or enrichment classes that use technology.

Outside of school, students use computers at the Boys and Girls Club, Monrovia City Youth Center, and the public library.

3b. District's current use of technology to support teaching and learning.

Monrovia USD uses technology resources extensively to support teaching and learning at all grade levels. All teachers, administrators, and office staff have web-accessible District email accounts. Google Docs is the District's standard productivity suite for staff and students.

Aeries is used as the Student Information System (SIS); it is accessible via Aeries Basic Interface (ABI) on the District Intranet. Teachers have access to their own students' information (state test scores, attendance, parent contact information, demographics, EL designation, grades, transcripts, and graduation status); they use ABI to post grades. Attendance at all grades is taken using ABI.

Teachers use electronic gradebooks. All teachers at Clifton Middle School, Santa Fe Middle School, Monrovia High School, Canyon Oaks High School and Mountain Park School teachers use the SchoolLoop online gradebook. COHS and Mountain Park use APEX Learning to provide classes in various subjects.

Illuminate is used at all schools to administer, record, and report monthly benchmark assessments for grades k-12. Staff use reports from Illuminate in order to identify student needs and plan instruction.

School libraries use Follett library automation software. Staff develop IEPs using the SEIS system. The middle and high schools use Aeries for textbook inventory and sign-out.

All site administrators use technology for financial and/or personnel management, analysis and monitoring of student achievement data, assistance with instructional leadership and management strategies regarding using instructional technology to improve pupil performance, and communication with parents, the District Office, and other schools via email. Some use technology (including the EdTechProfile Technology Assessment Profile) to monitor professional development needs of staff.

As part of new curriculum adoptions, the District makes content available to students online. Some teachers use LCD projectors or television monitors to present lessons to their classes.

3c. District's curricular goals

Monrovia Unified School District is guided by the principle that technology is a device, tool or equipment that is used to maintain, increase, or improve the functional capabilities of individuals. Technology is a ubiquitous part of a high-quality learning environment. Students and staff use technology everyday to accomplish a multitude of tasks. Our technology vision is to find the most useful, versatile and cost effective technologies to support our various learning objectives and to do so in a way that keeps the focus on student learning.

The Board of Education adopted a Vision for Monrovia Schools that holds Student Success as the ultimate goal. The Vision includes the following elements.

Vision:

- Distinguished Schools
- Achieving Students
- Graduates Prepared for Life

Guiding Goals:

1. Learning for all students
2. Safe, orderly, positive learning environments
3. Quality staff providing the highest quality service
4. School/home/community partnerships and communication

Mission Statement:

By working actively and cooperatively as students, staff, parents, and community, the Monrovia Unified School District is committed to devoting its energy, resources, and support to provide:

- Academically rigorous educational programs that foster the maximum development of each student's potential;
- A challenging, safe, orderly, and positive learning environment;
- Quality staff and
- Quality service-

Strategic 5-Year Goals, 2010-2015:

1. All eligible schools will continue to gain State recognition as California Distinguished Schools and each school meet criteria for designation as a National Blue Ribbon Schools by 2015.
2. All schools will meet or exceed their annual API State growth targets (for the school and for subgroups), and maintain the State target API school score of 800 with the goal to get to 900 or higher by 2015.
3. Students will be provided the opportunity to participate in extended learning opportunities that prepare them for post-secondary education or vocational careers. Attainment of this goal will be measured by at least:
 - By 2015, 75% of our high school graduates will satisfy A-G requirements for admissions to UC and CSU;
 - By 2015, opportunities for students to participate in advanced coursework will increase by 100%;
 - By 2015, upon graduation 100% of our high school students will be prepared to enter college, advanced training, or a career, as evidenced by completion of a high school to post-secondary 6-year plan.

Values and Beliefs:

- Respect for the worth of the individual
- Integrity and honesty
- Human experiences that are enriched by diversity

In addition to the Board adopted goals above, MUSD has a current District Local Educational Agency (LEA) Plan which runs through June 2012, with a plan rewrite schedule for the 2012-

2013 school year. Other relevant District and site planning documents include instructional pacing guides, Site Single Plans for Student Achievement, Comprehensive Site Safety Plans, English Learning development plan, and the high school ESLRs/WASC Action Plan. MUSD is in the process of developing instructional pacing guides (PreK to Adult) in the four core areas and health and physical education. Basic versions of these guides will be updated by June 2012. Guides will include common assessments and curriculum resources. The District currently gives monthly benchmark assessments in English language arts and mathematics in grades 2-8. District end-of-course CRTs (Criterion Reference Tests) are given in writing (K-12), reading fluency (1-5), and math.

To achieve the adopted board goals Monrovia Schools are embarking on a transformative journey using technology to redefine the meaning and delivery of high-quality instruction. The world now has constant instant access to global communities of people, information and learning resources. Access to these new “always-on” global information resources necessitates a re-imagining of our learning expectations. Our schools must transform from places people go to learn facts to places that provide context and processes students can use to quantify and qualify information from various sources. Teacher changes from arbiters of information to guides and coaches helping students navigate information resources and assimilate new knowledge. Our students need the skills to make sense of information, understand its context, determine its usefulness, decide its application to their needs. Students will engage with and share their learning with teachers and peers locally and globally. Schools must leverage new technologies to provide individualized learning to every student while maintaining the ability to assess and monitor student and school performance. To ensure Monrovia students and teachers have 24/7 access to these global learning resources and new learning models the District has developed the iMonrovia initiative with the goal of equipping every student and teacher with a mobile technology device.

iMonrovia is a four (4) phase plan for providing every Monrovia student and teacher with an always connected wireless mobile learning device. Phase one (1) began with a deployment of mobile learning devices to the District’s Instructional Leaders in June 2011. Phase two (2) of the plan is a roll out of mobile learning devices to classroom teachers in Spring of 2012. Phase three (3) of the plan includes the piloting of mobile learning devices with students in several classrooms throughout the District In June and August of 2012. The first three phases of the initiative are planned to be complete before the start date of this technology plan. Phase four (4) of the plan is to roll out a mobile learning device to every students and all new students as they enter the District. The first three phases of the iMonrovia initiative are funded with existing School improvement bonds. As describe in sections 5 and 6 of this plan, phase four of the iMonrovia initiative are contingent of identifying suitable ongoing funding source.

3d. Teaching and learning goals (Measurable Objectives, Benchmarks)

The section that follows describes what the District expects its students to be able to do academically in the core subjects, and describes how student academic achievement can be improved. Teaching and Learning goals are supplemental to our existing academic goals described in the District LEA plan and the School Site Single Plans for Student Achievement.

GOAL 3d.1: Students, teachers, and instructional support staff will increase their effective use of technology to enhance teaching and learning.

	OBJECTIVES & BENCHMARKS:	2013	2014	2015
1	By June 2015 100% of teachers will use technology tools as part of daily classroom instruction will increase over the previous year (as reported on the Personal Use section, Question 15, of the Lite TAP).	80%	90%	100%

GOAL 3d.2: All students will increase their proficiency in English Language Arts and Mathematics, supported by the use of technology.

	OBJECTIVES & BENCHMARKS:	2013	2014	2015
1	Students in grades 2-11, District-wide and all significant subgroups, will meet or exceed LEA Annual Measurable Objectives in English language arts. (Percentage of students scoring Proficient or better.)	88.5%	100%	100%
2	Students in grades 2-11, District-wide and all significant subgroups, will meet or exceed LEA Annual Measurable Objectives in mathematics. (Percentage of students scoring Proficient or better.)	86%	100%	100%
3	By June 2014, and in each year thereafter, 100% of MUSD schools will have API scores of 800 or better.	50%	100%	100%

GOAL 3d.3: All students will meet graduation requirements.

	OBJECTIVES & BENCHMARKS:	2013	2014	2015
1	By June 2011, and thereafter, 100% of students otherwise meeting all graduation requirements will have passed the CAHSEE.	100%	100%	100%

Action Plan (for goals 3d. 1-3)		Timeline
a	Teachers and students will engage in a coherent, systematic implementation of research-based, State Board of Education-approved core text programs that include technology components such as audio, tutorials, exam-builders, lesson planners, online textbooks, and web resources.	Sept. – June each year
b	Students will use applications and online resources such as A Novel Idea, iWriteWords, Waterford, for reinforcement and practice to improve achievement in English language arts.	Sept. – June each year
c	K-8 students District-wide will use Accelerated Reader for reading encouragement and tracking and improvement of reading comprehension. Assisted by the vendor, District will work to align available books and AR quizzes and will train library staff in use and best practices. Numbers of library books with matching quizzes have been doubled. AR is now managed centrally.	STAR Reading used to assess student reading at least at beginning and end of year;
d	Middle school students will use the Read180 practice and assessment program to improve skills.	Sept. – June each year; schools make license renewal decision annually
e	Students will use applications and online resources such as Kahn Academy and Elevated Math for instruction, reinforcement, and practice to improve achievement in mathematics.	Sept. – June each year
f	Apex Learning online courseware will be used by students for original coursework in independent study and Adult Education and for credit recovery at Canyon Oaks and Monrovia High Schools. Courseware is available in ELA, math, science, social studies, and health.	Began Summer 2011. Fully implemented beginning fall 2012.
g	Students will attend CAHSEE intervention classes before and after school, during the summer, and/or during the school day. Apex Learning and the CAHSEE Prep website will be used for intervention.	Students identified in Sept. of junior year; as students pass CAHSEE, they exit intervention

Action Plan (for goals 3d. 1-3)		Timeline
h	Students will use productivity software to complete assignments, including Pages for essays, reports, and note-taking (Cornell Notes template), Numbers for charts and graphs, and Keynote for presentations.	Sept. – June each year
i	K-8 students will use concept mapping software such as Freemind, Inspiration, or Thinking Maps to assist with the writing process and to organize concepts in subject areas to improve content knowledge acquisition. (All teachers were trained several years ago to use Thinking Maps on paper. District will consider reinvigorating use of concept maps, including technology tools.)	Sept. – June each year
j	A focus will be on students using the Internet effectively for research for all subject areas.	Sept. – June each year
k	Students will be able to use the 24/7 Reference Service and Live Homework Help provided online by the Monrovia City and Los Angeles County Public Libraries. Through their Los Angeles County Public Library accounts, students will access full-text periodical and newspaper articles, reference databases (such as Opposing Viewpoints, Social Studies Fact Cards, World Book Reference Center, Biography and Literature Reference Centers), audiobooks, and online multimedia books (such as iBooks).	Ongoing (available from home and school)
l	Principals will be encouraged to invite public library staff to visit their schools to promote library services and provide library card signup opportunities. Public library staff attends monthly MUSD library staff meetings.	Annual visits, in the fall
m	Teachers will use the Internet for lesson planning and resources to present in class.	Ongoing
n	Teachers will be encouraged to place course materials, assignments, and discussions online for access by students and parents; may use services such as ABI and School Loop.	Ongoing

Action Plan (for goals 3d. 1-3)		Timeline
o	MUSD will investigate, pilot, and, if desired, adopt an online course management system and standardize use by teachers across the district.	12-13 Investigate & make purchase decision; 13-14 Pilot, evaluate implementation, make adjustments; 14-15 Begin rollout with training
p	The District (via grade level/content and vertical teams) will develop instructional pacing guides for the core subject areas, Pre-K through Adult. These guides will provide suggested resources, including preferred software and online resources, and will eventually be correlated with new student technology skills standards which will be developed. As instructional pacing guides are followed by teachers, use of a select group of core technology tools will become more standardized throughout the District.	Benchmark assessment data analysis by content/grade teams 11-12. Review & add to guides during full day meetings May 12.
q	The District will research, study, and implement ways to use mobile learning devices as a tool to enhance student engagement in the curriculum. Content area/grade level teams will make suggestions; resources/lesson ideas will be included in instructional pacing guides.	Ongoing updating of pacing guides.
r	The District (Kindergarten Team)/schools will investigate and acquire/use technology resources and mobile devices to enhance the kindergarten program.	Ongoing
s	The District/schools (led by CTO) will investigate setting up a Technology Teaching Space (“tech-ready classroom”) at each school: a classroom (not a computer lab) optimally arranged for the use of technology, permanently equipped with an LCD projector, interactive whiteboard, document camera, audio system, videoconferencing equipment, and other new technologies. Teachers would bring their classes to this room to use the technology for instruction, student presentations, and connections to the outside world. This room would also be used for staff development. As individual technologies prove most useful, their use can be expanded into all classrooms.	Began 2011-2012. Completed By 2015.

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Students	<ul style="list-style-type: none"> ● Take state standardized tests as scheduled
Teachers	<ul style="list-style-type: none"> ● Take the EdTechProfile Technology Assessment Profile annually Feb. – April (used to determine type and frequency of teacher and student use of technology) ● Evaluate student technology-based work processes and products; teach/re-teach as needed; modify lessons for next year ● Determine/track student need for intervention
Site administrators	<ul style="list-style-type: none"> ● Monitor classroom instruction via multiple formal and informal observations of various lengths and review of lesson plans ● Examine TAP results; determine need for professional development ● Monitor teacher use of online course/content management systems; determine need for more training ● Monitor use of classroom technology tools in full-day kindergarten ● Monitor use of “Technology Teaching Space”; maintain calendars/sign-ups; decide which technologies to expand to all classrooms
District content area/grade level and vertical teams	<ul style="list-style-type: none"> ● Develop instructional pacing guides (including selection of standards that address technology/information literacy), suggest & select technology resources to include in pacing guides, analyze implementation of guides, annually update guides ● Investigate and select classroom technology tools for full-day kindergarten; determine effectiveness of selected tools and make modifications
Asst. Supt., Educational Services (Ed. Services)	<ul style="list-style-type: none"> ● Analyze and report results of relevant questions on Technology Assessment Profile ● Conduct periodic site visits, meetings with principals, and monthly administrator meetings ● As new adoptions occur, examine technology components of textbook series, choose texts (oversee process) ● Oversee/lead development and implementation of instructional pacing guides ● Monitor use of technology as a means to increase student engagement ● Oversee process of selecting, implementing, and evaluating use of technology tools for full-day kindergarten

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Chief Technology Officer	<ul style="list-style-type: none"> ● As new adoptions occur, examine technology components of textbook series, compare against District hardware/network resources, make recommendations ● Suggest technology resources to be included in instructional pacing guides; check to ensure compatibility with District equipment ● Monitor use of “Technology Teaching Spaces”

3e. Acquiring technology skills AND information literacy skills (Measurable Objectives, Benchmarks).

Instruction in California content standards that address technology and information literacy skills (such as elements of Writing Strategies—Research and Technology and Writing and Speaking Applications in English language arts and Historical and Social Sciences Analysis Skills in history/social science) is addressed in the core academic areas.

The District holds development of explicit technology and information literacy standards to be essential; together with the instructional pacing guides, these standards will be part of our educational practice throughout the District.

Information literacy is defined as the ability to define, locate, select, organize, present, and assess information in and through a variety of media technologies and contexts to meet diverse learning needs and purposes. An information literate person knows and follows safety, ethical, and legal procedures in the use of technology. Monrovia USD will use materials from the ISTE’s National Educational Technology Standards for Students (NETS*S), curriculum from Common Sense Media Inc., and California content standards. Annually during the School Board’s Internet Safety Month all students will receive instruction on the ethical and safe use of technology, including respecting the work, including copyrighted material, of others, securing personal information, cyberbullying and proper online behavior. The technology and information literacy skills will be implemented across all grade levels simultaneously.

Currently, elementary students learn technology skills while doing classroom assignments and using curriculum-oriented applications; at all schools, classes are scheduled to use computer labs regularly for assignments and developing technology skills. Teachers provide instruction, necessary or appropriate.

At both middle schools many students are able to take a technology course as part of the exploratory wheel (Clifton) or as an elective (Santa Fe). These courses include Office applications, keyboarding skills, PhotoShop, conducting research, and career exploration programs. In addition, teachers can take their classes to a computer lab on a sign-up basis; there they can learn or practice skills while working on assignments.

High school students can take a variety of courses that focus on using technology, including Geometry Through Technology, journalism, forensic science, astronomy, physics, Communications Academy courses, computer graphics and animation, video production, commercial photography, film production, web design, TV production, automotive, and income tax preparation/personal finance.

Monrovia USD has a Board-approved Mobile Technology Device Acceptable Use/Safety Agreement for both staff and students. As part of the iMonrovia initiative students and parents receive and sign the Acceptable Use Agreement each year as part of registration packets and/or when receiving their mobile learning device. Teachers sign the AUP every year and/or when they receive their mobile learning device. Teachers or school offices collect the student AUPs; principals must sign a form stating that their school has collected signed permissions from 100% of students.

Students will be provided a unique login ID that gives access to personal educational resources and allows for the identification of their information and activity on MUSDnet.

GOAL 3e.1: Students will use technology to acquire technology skills and information literacy skills, as appropriate per grade level.

	OBJECTIVES & BENCHMARKS:	2013	2014	2015
1	MUSD will develop and implement a set of standards, benchmarks, and evaluation measures for student acquisition of technology and information literacy and safety skills.	Identify NETS*S standards and online safety resources, begin implementation; develop plan detail	Continue implementation; revise as needed	Continue implementation; revise as needed
2	By June 2015, 90% of teachers will rate their students and themselves at least Intermediate in information literacy skills on Question 3 and 20, on the Lite Technology Assessment Profile.	70%	80%	90%

Action Plan		Timeline
a	Committee will develop a set of standards, benchmarks, and evaluation measures for student acquisition of technology and information literacy skills, from NET*S for students, teachers and administrators and Common Sense Media resources. Plan will be developed, evaluated, and updated over time.	Tech standards by summer 2012. Full scale plan by June 2013. Annual evaluation in June.

Action Plan		Timeline
b	Administrators and teachers will be informed about the new standards and provided training as needed.	Begin training fall 2012. Extensive training summer and fall 2013.
c	District will consider adding identified technology and information literacy skills standards to the elementary-level standards-based report card.	2012-2013 at the earliest
d	District will consider designing a course for middle and/or high school students that will address all identified standards, so that in passing the course, students would meet grade level technology standards.	2013-2014 at the earliest
e	Elementary and middle school students will be taught technology and information literacy and safety skills by their classroom teachers during the course of academic instruction in California content standards. Some middle school students will be able to take technology courses.	Ongoing; scheduled as per new technology skills plan and District instructional pacing guides
f	High school students will be taught technology and information literacy and safety skills through academic subjects and chosen electives.	Ongoing; scheduled as per new technology skills plan and District instructional pacing guides
g	Students (PreK-Adult) will be taught basic computer knowledge and skills and application-specific procedures required to access and use each piece of required application/courseware (such as technology components of core text series, reinforcement and practice resources, Accelerated Reader, Apex Learning, resources placed online by teachers); they will be taught how to use program feedback to track and improve their achievement.	Whenever a new piece of software is introduced
h	Students will be taught to use productivity software, including Word for essays, reports, and note-taking; Excel for graphing; Power Point for presentations.	Scheduled as per new technology skills plan/pacing guides, or as needed for assignments

Action Plan		Timeline
i	Students will be taught about, and will have the opportunity to use, peripherals needed for use with productivity software (as needed for assignments and as appropriate by grade level), such as printers, projectors, digital still and video cameras.	Scheduled as per new technology skills plan/pacing guides, or as needed for assignments
j	Students (K-8) will be taught how to create various types of concept maps using software such as Kidspiration, Inspiration, and Thinking Maps.	Ongoing
k	Library Media Teachers will work with high school teachers and academic classes in order to develop information literacy and safety skills.	Ongoing. Library research lesson for gr. 9 every fall.
l	Students will be taught how to effectively locate, access, and evaluate information and resources (including online reference databases) on the Internet. Search strategies will be taught as appropriate per grade level.	Scheduled as per new technology skills plan/pacing guides, or as needed for assignments
m	Board will declare an Online Safety Month during which students will receive instruction and complete online modules, such as those from Common Sense Media, in the ethical and safe use of technology, including respecting the work, including copyrighted material, of others, securing personal information, cyberbullying and proper online behavior.	Begin fall 2012 and annually thereafter.

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Library staff	<ul style="list-style-type: none"> ● Keep, evaluate library class use schedules
Teachers	<ul style="list-style-type: none"> ● Take the EdTechProfile Technology Assessment Profile annually Feb. – April (used to show teacher and student technology and information literacy skills) ● Assess student technology and information literacy skills using the new District plan; teach as necessary
Site administrators	<ul style="list-style-type: none"> ● Monitor instruction in classrooms, libraries, and computer labs ● Ensure that computer lab schedules are kept; evaluate lab use ● Examine TAP results; determine need for professional development

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Assistant Superintendent Educational Services	<ul style="list-style-type: none"> ● Monitor and evaluate implementation of the technology and information literacy skills plan ● Annually re-examine the plan, make modifications as needed; decide if more support is needed, report on milestones reached ● Coordinate technology and information literacy skills plan with ongoing instructional pacing guide process ● Evaluate need for new middle or high school technology course that would enable students to meet standards upon completion; evaluate success of course if implemented, consider changes annually ● Analyze and report results of relevant questions on Technology Assessment Profile
Chief Technology Officer	<ul style="list-style-type: none"> ● Advise on technology compatibility issues/logistics and technical feasibility of technology and information literacy skills plan ● Annually request the Board approve a resolution declaring Online Safety Month

3f. Ethical use of technology.

An information literate person knows and follows ethical, and legal procedures in the use of technology. Monrovia USD will use materials from the ISTE’s National Educational Technology Standards for Students (NETS*S), curriculum from Common Sense Media Inc., and California content standards to guide our instruction. Annually during the School Board’s Adopted Internet Safety Month all students and staff will receive instruction and complete online training in the ethical and use of technology, including respecting the work of others, understanding the proper use copyrighted material, and proper online behavior. The technology and information ethics skills will be implemented across all grade levels simultaneously. Administrators and teachers will be trained on the standards, benchmarks, and assessment measures for technology and information ethics skills. Teachers will be taught how to teach the standards to students. Assistant Superintendent of Educational Services will supervise and online training and a train-the-trainers model will be used. Online training completion logs for all students and staff will be collected during the Board adopted Internet Safety Month.

Additional ethical technology use goals are contained in section 3e and goal 3e. 1 action plan e, f, k, and m of this plan.

3g. Internet Safety.

An information literate person knows and practices the safe use of technology. Monrovia USD will use materials from the ISTE’s National Educational Technology Standards for Students (NETS*S), curriculum from Common Sense Media Inc., and California content standards to guide our Internet safety instruction. Annually during the School Board’s Adopted Internet

Safety Month all students and staff will receive instruction and complete online training in the safe use of technology, securing personal information, appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms, and cyberbullying awareness and response. The technology and information safety skills will be implemented across all grade levels simultaneously. Administrators and teachers will be trained on the standards, benchmarks, and assessment measures for technology and information safety skills. Teachers will be taught how to teach the standards to students. Assistant Superintendent of Educational Services will supervise and online training and a train-the-trainers model will be used. Online training completion logs for all students and staff will be collected during the Board adopted Internet Safety Month.

Additional Internet Safety goals, including cyberbullying, is contained in section 3e and goal 3e. 1 action plan e, f, k, and m of this plan.

3h. Programs and methods of utilizing technology that ensure appropriate access to all students.

Monrovia USD is ADA compliant and ensures equal and appropriate access to technology for all students. Should students require additional equipment or facilities to enjoy equal access to technology tools, additional assistive technologies will be provided to meet their needs, as outlined in their IEPs or 504 Plans. Assistive technologies currently in use include one-handed typing software, adaptive keypads, IntelliTools/Keys, Brain Fingers, DynaVox, AlphaSmarts, audio enhancements, and PECS (a pictorial communications system for the nonverbal autistic). Special Education classrooms have computers for student use; students use iPads, Inspiration for concept mapping, and Edmark software. The LACOE program SEIS is used for IEP development.

English Learner needs are addressed in the District English Learner Master Plan last revised May 2010.

GATE students can attend a summer Technology Class, and in fifth grade can take part in AstroCamp (a space/science camp). GATE students have used digital cameras to take part in competitions; some have developed web pages. At Santa Fe Middle School, GATE students take part in the Electronic Field Trips program.

The iMonrovia 1-to-1 Mobile Learning Device initiative is designed to ensure that all students have equitable access to MUSD educational resources regardless of socioeconomic class, disability, age, gender, ethnicity or any other protected class status.

3i. Technology use for efficient student record keeping and assessment and support of teachers' efforts to meet individual student academic needs.

Aeries is used as the Student Information System; it is accessible via ABI on the District Intranet. Teachers have access to their own students' information (state test scores, attendance, parent contact information, demographics, EL designation, grades, transcripts, and graduation status);

they use ABI to post grades. By the start of next year, attendance at all grades will be taken using ABI.

All teachers at Clifton Middle School, Sante Fe Middle School, Monrovia High School, COHS and Mountain Park use SchoolLoop gradebook. All teachers can use the ABI gradebook if they desire.

Illuminate is used at all schools to administer, record, and report monthly benchmark assessments in English language arts and mathematics for grades 2-8. Staff use reports from Illuminate in order to identify student needs and plan instruction.

GOAL 3i.1: All teachers and administrators will use District technology for student record-keeping and instructional decision-making based on assessment data.

	OBJECTIVES & BENCHMARKS:	2013	2014	2015
1	By June 2013, and each year thereafter, 100% of teachers will use Illuminate, Aeries, and other assessment software (Exam View etc...) to inform instruction and monitor student progress.	100%	100%	100%

Action Plan		Timeline
a	Sites will ensure that all teachers have an appropriate computer available in their classrooms for their use. District will provide sufficient scanners for use Illuminate assessments.	All teachers have a dedicated computer. Scanners to be provided at each site and/or one super-scanner at DO by fall 2012.
b	All teachers will take attendance online using ABI/Aeries. (May exclude physical education teachers)	By fall 2012
c	Sites will pilot and if desired expand use of teacher secure access to ABI from home.	Plymouth pilots spring 2012; expand to schools that desire it in 2012-2013
d	All teachers will have web-based access to Illuminate for student assessment data and developing standards-based tests. Illuminate will include information from Aeries, CSTs, and Gradebooks.	Available by August 2011; training for administrators and key teachers by June 2011, training for other teachers fall 2011; use for classroom standards-based tests by 2011-2012

Action Plan		Timeline
e	Teachers will meet regularly in collaborative groups (Wednesday is early release day) to examine assessment data and plan appropriate instructional strategies, including re-teaching and addressing gaps in student learning.	Weekly to monthly
f	Illuminate will be used for benchmark assessments at the secondary level.	Begin 11-12; adapt packaged tests for 12-13 and beyond.

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Teachers	<ul style="list-style-type: none"> ● Produce agendas, notes, record sheets, and reports from collaboration meetings ● Take the EdTechProfile Technology Assessment Profile annually Feb. - April (used to show teacher use of technology for student record-keeping and assessment)
Site administrators	<ul style="list-style-type: none"> ● Schedule and attend collaboration meetings, review reports or notes of collaboration meetings ● Review usage/access records of Illuminate; determine if additional training or encouragement is required ● Ensure that teachers receive adequate training
Assistant Superintendent Educational Services	<ul style="list-style-type: none"> ● Analyze and report results of relevant questions on Technology Assessment Profile
Asst. Supt., Educational Services	<ul style="list-style-type: none"> ● Conduct periodic site visits, meetings with principals, and monthly administrator meetings

3j. Technology use to make teachers and administrators more accessible to parents.

Currently, Monrovia USD parents have access to teachers, administrators, and school information through email, voicemail, and websites.

All classrooms have phones. All teachers and administrators have and use voicemail; all phones have a voicemail notification light. During the school day, office staff can put outside calls through to classrooms or to voicemail, or callers can use the automated attendant. Teachers can call out from rooms to anywhere in southern California.

The District uses a centralized auto dialer service (currently SchoolMessenger) for attendance calling and event announcements and emergency notifications.

The District website is maintained by the District with specified/authorized staff can add information to the site. All schools but one have their own website maintained by a variety of

personnel (principals, librarians, lead teachers), generally on a voluntary basis. MUSD has adopted a District standard for school websites.

GOAL 3j.1: Technology will be used to enhance home-school communication.

	OBJECTIVES & BENCHMARKS:	2013	2014	2015
1	By June 2013, 100% of teachers will check their District email daily (as reported on the Technology Assessment Profile).	100%	100%	100%
2	By June 2013, and each year thereafter, all schools will have websites with teacher contact information (voicemail extension and District email address).	100%	100%	100%
3	Monrovia Unified School District will maintain high speed voice and data networks including phone systems at each school.	100%	100%	100%

Action Plan		Timeline
a	All teachers will have and use web-accessible District email accounts.	As new teachers are hired, they are given accounts
b	District and site administrators will encourage and promote staff use of electronic communications media, in order to facilitate better home/school communication.	Increasing effort beginning July 2012
c	Administrators will distribute important information to staff via email rather than on paper, including messages that require a response.	Middle & high schools by July 2012; elementary schools by June 2013
d	Teachers will be encouraged to place course materials, assignments, and discussions online for access by parents. District will investigate, pilot, and, if desired, adopt a course management system that would standardize this process.	Ongoing. For District-wide system, 12-13 Investigate & make purchase decision; 13-14 Pilot, evaluate implementation, make adjustments; 14-15 Begin rollout with training
e	The District will investigate allowing parent online access to their children's records in Aeries.	Capability in 2012-2013; access decision by June 2013
f	All teachers will have and use voicemail.	Current and ongoing

Action Plan		Timeline
g	The District and schools will maintain/keep up-to-date District and school websites including staff contact information and other information for parents.	All but one school have sites; all will have websites that are kept current by June 2013
h	All schools will have phone systems that meet District needs.	Ongoing; upgrade if needed

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Teachers	<ul style="list-style-type: none"> ● Take the EdTechProfile Technology Assessment Profile annually Feb. - April (used to show teacher use of technology for home/school communication)
Site administrators (or designee)	<ul style="list-style-type: none"> ● Ensure teacher prompt use of voicemail and email; determine if further training is needed ● Check District and school websites for up-to-date content, including staff contact information ● Monitor teacher use of online content/course management systems ● Analyze results of relevant questions on Technology Assessment Profile
District webmaster (consultant)	<ul style="list-style-type: none"> ● Provide monthly website exception report to principals
Director of Technology Services	<ul style="list-style-type: none"> ● Ensure that all staff have email accounts and that the District email system is available.
Assistant Superintendent Educational Services	<ul style="list-style-type: none"> ● Analyze and report results of relevant questions on Technology Assessment Profile

3k. Monitoring of Curriculum Component:

The monitoring and evaluation components for the curriculum section are listed under the section goals with the specific tasks and individuals indicated in the sections charts.

4. PROFESSIONAL DEVELOPMENT COMPONENT

4a. Summary of teachers' and administrators' current technology skills and needs for professional development.

In March 2007, an EdTechProfile Technology Assessment Profile report was run, showing responses from 11 administrators, about half of the District total. Table 3 summarizes the results. In overall computer knowledge and skills, 10 scored as experienced computer users (Intermediate or Proficient), with strengths in general skills, Internet, email, word processing, and presentation software. It appears that a significant percentage of respondents have lesser skills in spreadsheet and database software. Anecdotal evidence suggests that almost all District and site administrators are intermediate or proficient in computer knowledge and skills.

TABLE 3 : Administrator Computer Knowledge and Skills				
EdTechProfile Technology Assessment Profile				
	Not applicable (Non-User)	Beginning	Intermediate	Proficient
Overall computer knowledge & skills	0	1	6	4
General computer knowledge & skills	0	0	5	6
Internet skills	0	1	4	5
Email skills	0	0	4	6
Word processing skills	0	0	3	7
Presentation software skills	0	1	2	7
Spreadsheet software skills	1	2	2	5
Database software skills	1	4	2	3

Results from a March 2007 Technology Assessment Profile report are shown in Table 4. The results include 185 teachers, 59% of the District total. Of respondents, 58% are experienced computer users, scoring Intermediate or Proficient in overall computer knowledge and skills. Strengths are word processing, general computer skills, email, and Internet. Areas to address include presentations (56% beginning or non-users), spreadsheets (57%), and databases (71%).

TABLE 4 : Classroom Teacher Computer Knowledge and Skills				
EdTechProfile Technology Assessment Profile				
	Not applicable (Non-User)	Beginning	Intermediate	Proficient
Overall computer knowledge & skills	3%	39%	38%	20%
General computer knowledge & skills	1%	25%	46%	29%
Internet skills	3%	37%	35%	25%
Email skills	2%	35%	34%	29%
Word processing skills	3%	15%	38%	44%
Presentation software skills	19%	37%	18%	27%
Spreadsheet software skills	19%	38%	30%	13%
Database software skills	32%	39%	19%	11%

Tables 5 and 6 show the results of the two sections of the Technology Assessment Profile which deal with skills in integrating technology into the curriculum. In these areas, in order to score Proficient and sometimes Intermediate, teachers must not only meet each standard themselves, but must know how to teach students how to do similar things, and must report that their students have learned these skills. On Standard 9 questions, 3% of teachers scored as Proficient, with strengths being records management/communication (25% Proficient) and online collaboration (22%) and areas to address being knowledge of research and best practices (72% beginning or non-users), knowledge of law, policy, and safety issues (73%), use and evaluation of electronic research tools (77%), and evaluation and selection of educational software (78%). On Standard 16 questions, 3% of teachers scored as Proficient, with strengths being use of data to assess and communicate student learning (37% Intermediate or Proficient) and use of technology resources in curriculum-aligned lessons (43%). An area of particularly low skills is use of computer-based collaborative tools (85% beginning or non-users).

TABLE 5: Standard 9, Using Technology in the Classroom		Not applic. (Non-User)	Beginning	Inter-mediate	Proficient
Standard 9 Overall		15%	54%	28%	3%
9a	Use of technology appropriate to lesson content and student abilities/skills	7%	60%	28%	5%
9b	Knowledge of research & best practices in technology in education	18%	54%	25%	4%
9d	Record management; communication through printed- or multi-media	7%	30%	39%	25%
9e	Online collaboration	8%	48%	22%	22%
9f	Knowledge, selection and use of tech resources according to District policies to meet individual student needs	26%	41%	27%	6%
9g	Evaluation and selection of educational software	27%	51%	19%	3%
9h	Use and evaluation of electronic research tools	37%	40%	18%	4%
9i	Knowledge of law, policy, and safety issues	29%	44%	17%	10%

TABLE 6, Standard 16: Using Technology to Support Student Learning		Not applic. (Non-User)	Beginning	Interme- diate	Proficient
Standard 16 Overall		22%	53%	21%	3%
16a	Communication using a variety of electronic media	17%	50%	30%	3%
16b	Use of computer-based collaborative tools	36%	49%	12%	2%
16c	Use of technology resources in curriculum-aligned lessons	10%	47%	36%	7%
16d	Development of student information literacy & problem-solving skills for lifelong learning	24%	48%	23%	6%
16e	Creation of technology-enhanced lessons for students to plan, locate, evaluate, select and use information for problem-solving; creation of effective learning environments; evaluation of technology use and quality of student products	29%	48%	20%	3%
16f	Use of data to assess and communicate student learning	25%	38%	17%	20%

TABLE 6, Standard 16: Using Technology to Support Student Learning		Not applic. (Non-User)	Beginning	Interme- diate	Proficient
16g	Evaluation, monitoring, and adjustment of technology- enhanced lessons	40%	35%	21%	3%

The following chart shows teacher proficiency in the components of information literacy. At most 10% of teachers score Proficient in any one area, meaning that they both know these skills and have taught their students similar skills. This is an issue to be addressed by professional development in as much as information literacy is one of the goals of this plan.

		Not applic. (Non-User)	Beginning	Interme- diate	Proficient
9h	Use and evaluation of electronic research tools	37%	40%	18%	4%
9i	Knowledge of law, policy, and safety issues	29%	44%	17%	10%
16d	Development of student information literacy & problem-solving skills for lifelong learning	24%	48%	23%	6%
16e	Creation of opportunities to engage students in planning, locating, evaluating, selecting and using technology resources for problem-solving	36%	41%	18%	5%

Out of 146 teachers responding to the Technology Assessment Profile Staff Development section, 53 (36%) said they need opportunities to participate in educational technology staff development focused on basic computer/technology skills; 118 (81%) said they need opportunities for training on integrating technology into the curriculum. Among administrators who filled out the TAP, 3 said they needed basic computer/ technology skills training; 10 said they needed technology integration training. These figures are borne out by the preceding charts, and will be addressed in professional development opportunities offered by the District.

As expressed on the TAP, teacher preferences for technology training at their schools were one-on-one informal training (27% of respondents), small group training (73%), and online web-based training (31.5%). Preferences for when technology training should be offered were during the school day (75%), after school (31.5%), in the evening (10%), on weekends (7.5%), off-track or during the summer (30%). Administrator preferences for training format were one-on-one informal (2), small group (10), and online (5).

4b. Plan for providing professional development opportunities based on the needs assessment and the Curriculum Component.

Professional development in Monrovia Unified School District is handled both District-wide or District-directed by several different administrators and departments (depending on the subject of training) and site-directed by individual school choice. The Superintendent, Assistant Superintendent of Educational Services, the Associate Superintendent of Human Resources, and the Chief Technology Officer plan whole-District training. Site administrators and teacher leaders plan site-level training. Delivery of professional development is a mixture of District-mandatory (all relevant staff are trained), site-based, District-offered (with paid incentives), and Adult Education-provided (technology training is free to all District staff).

Under this Technology Plan, support for teachers integrating technology into the curriculum will be provided in three main ways: substantive training based on high quality instructional practices for teachers, detailed instructional pacing guides that include suggested technology resources, and an informal network of site-level assistance..

Training will focus on delivering high-quality student learning. Curriculum standards as a whole will provide a framework for staff development planning; in addition, individual teachers' instructional proficiencies will be compared with the standards and appropriate training offered.

For just-in-time support at the school sites, teachers and principals rely on an informal network of instructional leaders who are willing to help out when asked. Grade level teams (at the elementary level) and departments (at the secondary level) work together to plan instruction, including the use of technology.

GOAL 4b.1: District staff will be qualified to use technology as a tool for teaching and learning.

	OBJECTIVES & BENCHMARKS:	2013	2014	2015
1	By June 2015, 100% of teachers and administrators will have been trained to access and use data from District online standards-based assessment tools (such as Illuminate).	Develop advanced topics; train new hires each year 95%	100%	100%
2	MUSD will develop a set of technology standards for teachers, including both personal and instructional proficiency.	Identify standards, begin implementation	Full implementation	Revise if needed
3	By June 2015, 80% of teachers will rate themselves at least Intermediate in overall Computer Knowledge and Skills on the Technology Assessment Profile.	70%	75%	80%
4	By June 2015, 75% of teachers will rate themselves at least Intermediate in Using Technology to Support Student Learning, on the Technology Assessment Profile.	55%	65%	75%

Action Plan		Timeline
a	Committee will develop a set of standards, benchmarks, and evaluation measures for teacher acquisition of technology skills, including suggestions for ways in which each skill can be acquired. Plan will be developed, evaluated, and updated over time.	Tech standards by summer 2012. Full-scale plan by June 2013. Implement tech standards beginning 2013-2014.
b	Administrators (at Instructional Leaders meetings) and teachers (at Wednesday meetings) will be informed about the new teacher standards.	After standards are determined

Action Plan		Timeline
c	Professional development plans for each year will be developed by Educational Services, Human Resources, and Technology Services from the teacher technology standards, analysis of data of technology use by teachers and students from multiple sources, and identified needs related to this Technology Plan's academic and communication goals. Technology training will be incorporated into the District professional development calendar annually.	Training plans normally finalized by June of each year
d	Administrators and teachers will be trained on using the new District instructional pacing guides (via train-the-trainer and large group District-sponsored training models).	Begin summer and fall 2012
e	Administrators and teachers will be trained on NET*S, Common Sense Media resources, benchmarks, and assessment measures for technology and information literacy skills, including interacting with other individuals on social networking websites and in chat rooms, cyberbullying awareness and response, use of copyrighted material and appropriate online behavior. Teachers will be taught how to teach the standards to students. Asst. Supt. of Educational Services will supervise; train-the-trainers model will be used.	Begin fall 2012 with tech standards; continue as detail of standards is developed
f	All teachers will be trained on using the technology components of the iMonrovia initiative (training provided at the site level at beginning of implementation; peer sharing and modeling of best practices as teachers develop experience with the iMonrovia devices).	Begin summer 2012 with tech standards; continue as detail of standards is developed
g	Teachers and classified staff will be offered training in productivity applications, particularly Microsoft Office Professional, for personal and instructional use (on-demand one-on-one or small group training at sites or via Adult School classes).	Ongoing

Action Plan		Timeline
h	Elementary teachers and relevant instructional support staff will be trained on the operation and use of reinforcement and practice resources referenced in instructional pacing guides (such as Get Ahead Math and Waterford). Training will be arranged by Curriculum leaders and subject vertical teams.	Beginning fall 2012, continuing as resources are identified & recommended
i	Administrators, teachers, and library staff will be trained on use and best practices in regard to Accelerated Reader. AR training will be a District-wide implementation; training will be provided by the vendor (Renaissance Learning) or District staff.	Under development in spring 2012
j	As software is purchased, teachers at individual sites will be trained on developing concept maps using software such as Inspiration, Kidspiration, or Thinking Maps.	When needed (if sites purchase software)
k	District will provide training on online course management system when/if it becomes available (including both operational/how-to aspects and effective instructional practices), via a train-the-trainers model.	13-14 for pilot; full rollout in 14-15
l	Teachers will be offered training in using the Internet (including online reference databases) for research and in teaching students such research skills. Training will be on-demand (individual or small group), possibly by subject areas, provided by Technology teachers and the high school Library Media Teacher. Library Techs will help teachers one-on-one with research.	Ongoing, as needed
m	Relevant staff (intervention and Canyon Oaks teachers) will be trained in the use of Apex Learning. Initial formal training for the group provided by the vendor.	Spring 2012 initial training; follow-up for individuals as needed
n	Kindergarten teachers will be trained (operation/procedures and best educational practices) on technology enhancements chosen for all-day kindergarten.	Training for all-day K will take place before fall 2012; additional tech training as needed
o	Teachers will be trained in classroom management procedures for effectively using technology resources (such as single-computer, projection, center rotation, and lab/one to one models). Training will be at the site level, by master teachers within the District.	As requested by sites

Action Plan		Timeline
p	As sites establish Technology Teaching Spaces, teachers will be trained (operation/procedures and best instructional practices) on all equipment included.	As sites establish Technology Teaching Spaces
q	If sites purchase presentation equipment (such as projectors, interactive whiteboards, or document cameras), teachers will be trained in how to use this equipment.	As sites receive the equipment
r	Administrators and teachers will receive training on Illuminate: accessing data, running reports, how to analyze and use the data to improve instruction, using the standards-based test bank for developing classroom assessments. The vendor will provide training for key leaders, who will then train the rest of the staff.	Initial training spring 2012. Training for rest of staff 2012-2013
s	Teachers will be trained on using ABI to take attendance. District Data Support Specialist will train the trainers who will conduct staff development at the sites.	Training needed for elementary & one middle school; by start of school Sept. 2012
t	As schools decide to use a particular online gradebook, teachers will receive training, via a train-the-trainers model using a master teacher.	At schools when needed
u	Teachers will receive training in the technology used for benchmark assessments and interpretation/use of resulting data. Illuminate as needed for new users. District content/grade teams meet after each benchmark assessment to analyze data.	ALS beginning spring and summer 2012, continuing throughout year
v	Staff will be provided training on using District email. Technology Services has prepared a handout on how to use District webmail.	For new teachers in the summer, otherwise on-demand as needed
w	New teachers will attend a weeklong New Teacher Institute during the summer; the focus will be on curriculum. They will receive an overview of technology they need to know, including email, attendance, ABI, AUP, and grading, with follow-up at their sites. Induction training includes weekly meetings, one of which is devoted to technology.	Annual summer New Teacher Institute and induction training
x	Site administrators receive training on all new programs before they are introduced to teachers.	Ongoing policy

Action Plan		Timeline
y	Site administrators will receive training on how to analyze and use Technology Assessment Profile reports and data.	By Sept. 2012 (at IL meeting or in August)
z	Training for instructional support staff including instructional aides, Special Education, Title I, Lab Techs, and Library Techs will be offered as needed, including on-the-job training (often from the teachers with whom they work), invitations to attend relevant site-based training for teachers, and Adult Education classes. Special Education staff will receive training in regard to IEPs.	Ongoing, as needed
aa	The District will provide flexible training options, such as before/after school, Saturdays, summer academies, in-class modeling, small group, one-on-one, online, and sub release. Direct instruction and train-the-trainers models will be used.	Ongoing
bb	Training will be provided by the most appropriate of the following: District and site administrators and staff (including selected trainers and master teachers), textbook publishers, software vendors, data analysis services, and other outside consultants.	Ongoing
cc	Incentives (such as sub release, compensation for workshops, or professional growth credit) will be offered to teachers to attend training, depending on the circumstances.	Ongoing

4c. Monitoring Process for Professional Development Component

The monitoring and evaluation components for the professional development section are listed under the section goals with the specific tasks and individuals indicated in the sections charts.

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Teachers	<ul style="list-style-type: none"> Take the EdTechProfile Technology Assessment Profile annually Feb. - April (used to show teacher proficiency levels in personal computer skills and integration of technology into the curriculum). Complete evaluation forms during training sessions
Trainers	<ul style="list-style-type: none"> Develop/collect/maintain agendas, sign-ins, and participant evaluations after training sessions Analyze evaluations; decide on training modifications as needed

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Site administrators	<ul style="list-style-type: none"> ● Fill out the Technology Assessment Profile annually to show proficiency levels in personal computer skills ● Fill out (or provide information to designee) State Technology Survey, professional development and technology use sections (Feb. - April annually) ● With site leadership teams, analyze results of the TAP and District needs assessment; develop site training schedule for the year ● Informally observe/look for specific uses of technology after teachers have attended training ● Using the new teacher technology skills standards, assess gaps in proficiency for individuals and staff as a whole and advise Educational Services ● Monitor sign-ups for courses; maintain professional development records ● At end of year, analyze success/appropriateness of training offered and consider improvements for the following year ● Be evaluated by Supt. on site professional development: submit agendas, highlights of what worked and what didn't, reflections after each major training summarizing feedback received from participants
Teacher Standards Committee	<ul style="list-style-type: none"> ● Develop teacher standards; design trainings; evaluate and update standards document itself
Asst. Supt., Educational Services Assoc. Supt., Human Resources	<ul style="list-style-type: none"> ● At end of year, analyze success/appropriateness of training offered and consider improvements for the following year ● With Teacher Standards Committee, oversee development of teacher standards, design of trainings, and evaluation and updating of standards

5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT

5a. Existing Hardware, Internet Access, Learning, and technical support resources.

Hardware:

Monrovia USD finished in, Winter 2011-2012, a major network infrastructure upgrade, that included adding wireless access to every classroom, replacing our phones system and upgrading all switching hardware. MUSD has 34 network servers providing a variety of services.

All Classrooms have one dedicated teacher computer and at least two student computers.

Santa Fe Middle School currently has about 15 projectors; Clifton has 10 laptop/projector combos which are all checked out. Monrovia High School has 29 digital classroom.

Printing capacity is currently adequate. Every lab and library has a networked laser printer. All classrooms have at least one laser or ink jet printer, most of which are shared or networked. No central inventory of printers is kept to reference here. Some sites (including the District Office) have networked fast copier services.

All schools except Canyon Oaks High School currently have at least one lab that can be used for assessment and instruction.

Internet:

MUSDNet is a 1-Gigabit Fiber network connecting all schools to the District Office and from the District Office over a 1-Gigabit connection to our Internet Service Provider (ISP) that provides a connection to the California K12 High Speed Network (K12HSN). Our connection to our ISP is located at our Canyon Oaks High School.

School sites have fiber optic backbones, Cat-6 wiring, and Gigabit connection to the desktop. Wireless access is provided for up to 30 devices in every classroom. All classrooms have a minimum of 8 network drops (5 for students, 2 for presentations, 1 for the teacher). All instructional areas are connected to the network. All campuses also have a TV/coaxial network.

The voice network is a centralized, and runs over MUSDnet Internally but has a separate connection to our VoIP service provider at the District Office. The primary switch is located at the District Office, with a PBX at each site connected back to the District Office. School sites have some trunk lines of their own as well.

Electronic Learning Resources:

Monrovia uses a variety of Learning Resources as describe in section 3a and 3b of this plan.

Technical Support:

Monrovia existing Technology Support staffing is two Technical Support Specialists and a Technical Support Assistant provide hands-on technical support in the District. The Technical Support Specialists are assigned to work at schools on a regular schedule, barring major problems; every site gets a tech one day a week, except Monrovia High School, which gets a tech twice a week. A Coordinator of District Applications deals with the student information system and District websites and manages Service Support and Service Delivery. A secretary in

the Technology Department also provides assistance. The Chief Technology Officer (CTO) provides oversight of the all District technology resources and the Technology Services Department, in addition to assisting in day to day support as needed.

Computers are purchased with four-year warranties. The vendor sends parts or comes to the site to perform warranty repairs. The District covers repairs on core equipment items; schools are billed for parts required in the repair of non-core items.

When staff members experience technical problems, they notify the office manager or speak directly with the site staff member (compensated or volunteer) who is designated to create a work order electronically. The District uses the web-based MyTechDesk work ticket management system from Imperial County Office of Education. The CTO Services prioritizes work for the technicians, with the goal that all tickets are completed in at most a week.

5b. Needed hardware, learning, network and telecommunications infrastructure, physical plant, and technical support.

Hardware:

The goals and activities of the Curriculum and Professional Development Components of this Technology Plan require the following technology hardware and infrastructure if they are to be implemented.

- Reliable, safe Internet service of sufficient bandwidth, with web server
- A mobile learning device (MLD) for every student by September 2013 (iMonrovia initiative)
- A dedicated teacher computer in each classroom
- Sufficient printing capacity for students and teachers
- Presentation devices available for teachers to use in delivering instruction
- Recording equipment available for student and teacher projects and presentations (such as digital audio and video recorders, digital cameras, scanners)
- Adaptive devices for students needing them

Mobile and Classroom Learning Devices:

Need: A District-wide 1-to-1 deployment of a mobile learning devices to every student and teacher (iMonrovia initiative).

To be acquired: The chart hardware 5.c. item 5.2 shows the numbers of new mobile learning devices that will need to be purchased or leased in each year in order to meet the District objectives of providing a mobile learning device to every student. If devices are leased, the leases will be for three years.

Need: A dedicated teacher computer in each classroom

To be Acquired: The status quo will be maintained through computer purchases shown in the chart hardware 5.c. item 5.1.

Need: Computer labs for assessment and instruction

To be Acquired: At minimum, the status quo will be maintained. Schools may choose to update their labs per available funding. As we roll out the 1-to-1 MDL program we will continually evaluate the need to support computer labs at each school.

Printers:

Need: Sufficient printing capacity for students and teachers

To be Acquired: The District is currently exploring the move to a managed print system. See chart hardware 5.c. item 5.3.

Equipment for Digital Classrooms:

Need: At each school, upgrading every classroom to be a digital classroom with equipment permanently set up to be a “Technology Teaching Space” to which teachers can bring their classes. Technology will include an LCP/DLP projector, interactive whiteboard, document camera, audio system, video-conferencing equipment, and other new technologies as developed.

To be Acquired: Digital Classroom infrastructure in every classroom. A digital classroom consists of a display (2000 lumens projector and/or minimum 55 inch LED LCD TV), Voice augmentation (speakers and microphones), document camera, a digital media player capable of playing current physical media formats, Cable TV Tuner, a device for wireless screen sharing from classroom and student MLDs, a teacher MLD (to act as an interactive whiteboard), a computer for running digital classroom control and lesson delivery software, an additional A/V input for teacher and student supplied sources, and a network connected A/V controller/switcher that allows the MLD to wirelessly control the sources for the A/V and allows display from the MLD and the lesson delivery software computer. See chart hardware 5.c. items 5.4 and 5.5.

Recording Equipment:

Need: Recording equipment available for student and teacher projects and presentations (such as digital audio and video recorders, digital cameras, scanners)

Have: School purchases of this equipment have varied widely.

To be Acquired: Acquisition of recording equipment will be entirely a site decision. See chart hardware 5.c. item 5.6.

Policies and procedures:

The District maintains published standards for all District technology resources. These standards are updated about every six months. All hardware requisitions are routed to the Technology Services Department; hardware is then ordered centrally. If a school has special needs not covered by standard configurations, the CTO will evaluate those needs on a case-by-case basis.

Electronic Learning Resources/Administrative Software:

Need: The goals and activities of the Curriculum and Professional Development Components of this Technology Plan require the following electronic learning resources and administrative software if they are to be completely implemented.

To be Acquired: The items listed below will be investigated, piloted, and/or acquired during the course of this Plan. Additional licenses, upgrades, and new versions of current software will be acquired as needed.

- Technology resources accompanying adopted text series (such as electronic textbooks, audio, tutorials, exam-builders, lesson planners, and web resources) **(for new adoptions)**
- Software and online resources for reinforcement and practice in English language arts and math
- **Content/Learning Management System** (such as Haiku or Moodle)
- Administrative software and services (Aeries/ABI **with parent portal capability**, grade book programs, library automation)
- Email for all appropriate staff

Policies and procedures:

The District maintains published standards for all District technology resources. These standards are updated about every six months. All Learning resources are routed to the Educational Services Department; resources are then ordered centrally. If a school has special needs not covered by standard configurations, the CTO will evaluate those needs on a case-by-case basis.

Telecommunications and Networking Infrastructure:

Need: The District will maintain an up-to-date telecommunications and data network to support increased student academic achievement, data-driven decision-making, and home/school communication. The Director of Technology Services will annually conduct an assessment of the District's network and infrastructure to determine optimization and potential needs for upgrades and repairs.

To be Acquired: Planned upgrades (with associated maintenance):

- The District is investigating adding additional wireless capability (moving to a wireless WAN and wireless backbone and expanding the WLAN to allow increased capacity for MDLs).
- The District will acquire server upgrades and replacements (many servers are aging) and UPS (Uninterrupted Power Supplies) as needed.
- Additional switches to get network access at more desktops to higher speeds will be purchased as needed.
- The District is investigating additional Network Storage resources
- The District is considering developing a connection between the TV/coaxial network and the data network.
- The District is considering the upgrading our site-to-site fiber WAN to 10 Gigabits or higher as needed to support our 1-to-1 MDL initiative.

- The District is considering upgrading our Internet connection up to 10 Gigabits or higher as needed to support our 1-to-1 MDL initiative.

Physical Plant:

All school sites and District offices have sufficient electrical capacity for the current and expected technology.

Technical Support:

Need: The Monrovia Unified School District will maintain adequate technical support structures to ensure reliable access to technology/the Internet for users. The CTO will regularly assess technical support to ensure maximum efficiency; the District will make adjustments as needed per available funding.

To do: We will provide support resources in staffing and maintenance contracts and service/consulting agreements for our network equipment, switches, routers, proxy servers, network operating systems and wireless devices. We will need staffing and support contracts, consulting agreements for our server infrastructure, including server hardware, server operating systems support and upgrades, storage area networking support and maintenance, and server virtualization licensing, installation and maintenance. We will investigate developing a student tech support program in which students will provide front-line support for our MDL program.

5c. Benchmarks and timeline for obtaining the needed resources.

Hardware:

The following equipment-acquisition objectives or recommendations may be dependent on the acquisition of additional funding, including grants and state one-time moneys.

	OBJECTIVES & BENCHMARKS:	2013	2014	2015
5.1	By June 2015, every classroom will have 3 up-to-date computers District-wide.	Acquire 304 computers	Acquire 307 computers	Acquire 304 computers
5.2	Provide 1 mobile Learning device, as described in the District hardware standards, for every Teacher and Student (iMonrovia)	Acquire 6000 mobile learning devices	Acquire 500 mobile learning devices	Acquire 500 mobile learning devices
5.3	In each year, printers will be replaced as needed to maintain current capacity.	Buy 20 to 25	Buy 20 to 25	Buy 20 to 25
5.4	Equipment will be purchased and Technology Teaching Spaces will be set up in schools.	Aquire 260	As needed	As needed

	OBJECTIVES & BENCHMARKS:	2013	2014	2015
5.5	Schools will have sufficient LCD/DLP projectors for instructional use.	Install 260	As needed	As needed
5.6	Schools will purchase other presentation equipment as desired.	TBD	TBD	TBD
5.7	Schools will purchase recording equipment as desired.	TBD	TBD	TBD
5.8	District will have sufficient scanners for use with assessments.	Buy 105	TBD	TBD
5.9	Adaptive devices will be acquired for Special Education students as per IEPs.	As needed	As needed	As needed

Action Plan:

Implementation Plan, Data to be Collected, and/or Evaluation Instruments		Timeline or Schedule for Evaluation	Program Monitoring, Evaluation, and Modification Process	Target Obj. #
a	Sites will determine priorities for deployment of computers and other equipment.	Ongoing	Chief Technology Officer acts in advisory role.	5.1-5.9
b	The State Technology Survey will be filled out for/by each school accurately reflecting the number, age, and locations of computers, within the required window.	Jan. – March, annually	Chief Technology Officer oversees at the District level. Surveys are filled out centrally with information provided by sites.	5.1 5.2

Electronic Learning Resources:

Please note that the following software/service purchase objectives or recommendations may be dependent on the acquisition of additional funding, including grants and state one-time moneys.

	OBJECTIVES & BENCHMARKS:	2013	2014	2015
5.10	By June of each year, District/sites will purchase upgrades, additional licenses, and/or service contracts for existing software and services as needed.	100%	100%	100%
5.11	Apex Learning courseware will be used at the high schools and the Adult School.	Expand use	Use	Use
5.12	District will investigate and, if desired, acquire an online content/learning management system.	Invest. & pilot	Pilot	Roll-out
5.13	Illuminates Benchmark Assessments will be used in middle and high schools.	Use purchased tests	Adapt purchased tests	Revise as needed
5.14	Software and online resources will be used by the all-day kindergarten program.	Choose, buy, roll out	Use, add titles	Use
5.15	Teachers will have access to technology resources accompanying adopted text series.	New science materials implemented	New math materials implemented	New ELA materials implemented
5.16	The District will enable the Aeries parent portal.	Capability; decision by June	TBD	TBD

Action Plan:

Implementation Plan, Data to be Collected, and/or Evaluation Instruments		Timeline or Schedule for Evaluation	Program Monitoring, Evaluation, and Modification Process	Target Obj. #
a	At the end of each school year, examine current software and online services for needed upgrades or additional licenses. Make purchases as needed.	May/June of each year	Continuous evaluation process. Chief Technology Officer supervises licensing. Site Administrators and District Educational Assistant Superintendent and designated staff monitor and evaluate software and services.	5.10-5.16

Telecommunications and Networking Infrastructure:

	OBJECTIVES & BENCHMARKS:	2014	2015	2011
5.17	The District will upgrade and replace servers and UPSs as needed.	Upgrade/replace 24	Upgrade/replace 24	Upgrade/replace 24
5.18	Network hardware will be updated as needed.	As needed	As needed	As needed
5.19	The District will provide a connection between the TV/coaxial network and the data network.	Maintain	Maintain	Maintain

Physical Plant:

	OBJECTIVES & BENCHMARKS:	2013	2014	2015
5.20	The District will review modernization needs at all schools.	Ongoing	Ongoing	Ongoing

Technical Support:

Please note that the following technical support objectives or recommendations may be dependent on the acquisition of additional funding.

	OBJECTIVES & BENCHMARKS:	2013	2014	2015
5.21	Student interns will be available to provide technical support.	Begin program	Maintain	Maintain
5.22	The District will consider hiring an additional Technical Support Specialist as needed.	----	----	Hire if needed

5d. Monitoring Process

The monitoring and evaluation components for the infrastructure section are listed under the section goals with the specific tasks and individuals indicated in the sections charts.

Monitoring Activity	Person Responsible	Schedule
Purchase of classroom, lab, and library equipment carried out; inventory kept up to date; numbers and placement of computers reported on State Technology Survey	Chief Technology Officer(inventory and State Tech Survey) Assistant Superintendent, Educational Services Site administrators	Purchase and inventory throughout the year; State Technology Survey in March
Software/online services investigated, piloted, decided upon, purchased, implemented	Chief Technology Officer; Assistant Superintendent, Educational Services; Site administrators	Purchase throughout the year; ordering by July of each year
Network and telecommunications upgrades planned and carried out	Chief Technology Officer	Ongoing
New building/modernization carried out	Chief Business Officer	As per plan
Technical support performance monitored for consistent and timely response	Chief Technology Officer	Ongoing

6. FUNDING AND BUDGET COMPONENT

6a. Established and potential funding sources and cost savings.

All technology objectives will be obtained through current and potential funding resources at Monrovia Unified School District and sites. These include, but are not limited to:

District Level	Site Level
<ul style="list-style-type: none"> ● General Fund ● Categorical: <ul style="list-style-type: none"> Title I Title II A Title II D Title V (Innovative Programs) GATE Professional Development Block Grant ● One-time block grants ● Economic Impact Aid ● Facilities Budget: <ul style="list-style-type: none"> State construction funds Local G.O. bonds Developer fees ● Monrovia Schools Foundation ● E-Rate discounts and rebates ● Donations ● Community Based English Tutoring ● K-12 Ed Tech Voucher 	<ul style="list-style-type: none"> ● All categorical funds ● Agricultural Incentive Grants ● Site budgets ● Local fund-raising efforts ● Donations ● ELAP (English Language Acquisition Program) ● Grants ● CAHSEE Intensive Instruction ● Instructional Materials/Library Block Grant ● Carl Perkins ● ROP ● PTA/PTSA ● One-time block grants

Options for reducing costs include maintaining standards for hardware and software, hardware and software purchasing agreements, state contracts/master purchasing agreements, leasing, and coordination of network and telecommunications upgrades with the E-Rate cycle. Hardware warranties will be extended when possible to cover potential technical support needs. The District is investigating a three or four-year leasing plan for computers and the iMonrovia mobile learning device initiative. Appropriate grant and partnership opportunities will be pursued as they become available.

6b. Estimated annual implementation costs for the term of the plan.

The following chart breaks down estimated costs associated with implementation of this Technology Plan. **PLEASE NOTE: ALL OF THE FIGURES ARE ESTIMATES AND WILL ONLY BE SPENT ONCE FUNDING BECOMES AVAILABLE.**

	2013	2014	2015	Potential Funding Sources
Computer Hardware and Peripherals				
Student and teacher Mobile Learning Devices (iMonrovia initiative)	\$1,200,400	\$1,000,000	\$1,000,000	i3 Grant; Perkins; Categorical; EdTech Voucher, G.O. Bonds,
B&W laser printers	\$10,350	\$10,350	\$10,350	" "
Equipment for Technology Teaching Spaces (Digital Classroom)	\$1,300,000	----	----	ERate; i3 Grants; Perkins; Categorical; EdTech Voucher; G.O. Bonds
LCD Projectors/ Classroom digital displays	\$312,000	\$9,750	\$7,500	i3 Grants; Perkins; Categorical; EdTech Voucher; G.O. Bonds
Classroom Computers	\$182,000	\$182,000	\$182,000	i3 Grants; Perkins; Categorical; EdTech Voucher; G.O. Bonds
Supplies (bulbs, toner)	\$45,000	\$47,250	\$49,625	Site categoricals; site budgets (Gen. Fund)
Network servers*	\$20,000	\$20,000	\$20,000	ERate; EETT; Title I; Gen. Fund: EdTech Voucher
Electronic Learning Resources & Administrative Software	2013	2014	2015	Potential Funding Sources
Accelerated Reader	\$24,000	\$24,000	\$24,000	District categorical; site budgets
Apex Learning	\$59,000	\$59,000	\$59,000	CAHSEE Prep

	2013	2014	2015	Potential Funding Sources
Concept mapping software	TBD	TBD	TBD	Site categoricals; site budgets
Resources for kindergarten	TBD	TBD	TBD	Site & District categorical; Gen. Fund
Technology components of adopted text series	TBD	TBD	TBD	IMF
Other curriculum-oriented applications	\$60,000	\$60,000	\$60,000	Site & District categoricals)
Online content/learning management system (CMS/LMS)	TBD	TBD	TBD	Site & District categorical; Gen. Fund
Illuminate	\$25,000	\$25,000	\$25,000	" "
Aeries/ABI	\$10,500	\$10,500	\$10,500	Gen. Fund
Services facilitating home/school communication (web-hosting)*	\$12,000	\$12,000	\$12,000	General Fund; ERate
Library automation	\$10,000	\$10,000	\$10,000	Site budgets
Website design, development/maintenance software	TBD	TBD	TBD	General Fund
Microsoft licenses (universal CALs)*	\$8,000	\$8,000	\$8,000	Gen. Fund; EdTech Voucher
Infrastructure Upgrades (Internal Connections for Voice, Data, Video Networks)				
Phone system upgrades*	-----	-----	\$150,000	Gen. Fund; Categoricals; ERate
UPS*	\$10,000	\$10,000	\$10,000	" "
Ethernet switches*	\$20,000	\$20,000	\$20,000	" "
Cables and connectors*	\$3,000	\$3,000	\$3,000	" "
Wireless components*	\$6,000	\$6,000	\$6,000	" "
TV/coaxial network connection*	\$5,000	\$5,000	\$5,000	Gen. Fund; EdTech Voucher; ERate; one-time grants
Professional Development				
Staff (subs, extra duty, incentives)	\$10,000	\$30,000	\$30,000	Categoricals

	2013	2014	2015	Potential Funding Sources
Training costs (outside vendors, conferences)	\$25,000	\$25,000	\$25,000	Categoricals
Technical Support and Maintenance				
Technology support salaries and benefits	\$600,000	\$600,000	\$600,000	General Fund
Help desk / work order tracker	\$5,000	\$5,000	\$5,000	General Fund
Maintenance contracts*	\$15,000	\$15,000	\$15,000	Gen. Fund; ERate
Network Management				
Network operating system*	\$20,000	\$20,000	\$20,000	Gen. Fund
Mail server software*	\$5,000	\$5,000	\$5,000	Gen. Fund; ERate
Firewall*	\$5,000	\$5,000	\$5,000	Gen. Fund
Filtering	\$7,000	\$7,000	\$7,000	Gen. Fund
Anti-Virus	\$5,000	\$5,000	\$5,000	Gen. Fund
Other network management software	\$7,500	\$7,500	\$7,500	Gen. Fund
Telecommunications Services & Internet Access				
Telecommunications/WAN services*	\$15,000	\$15,000	\$15,000	General Fund; ERate; CTF
Internet Access*	\$36,000	\$36,000	\$36,000	General Fund; ERate

*The items marked with an asterisk are partially or entirely eligible services under the ERate program. The amounts shown are total costs (District share plus ERate discounts). MUSD usually receives ERate discounts on Priority 1 items only (Telecommunications Services and Internet Access).

The following chart summarizes estimated yearly costs of plan implementation, taken from the charts shown above:

Year	Cost	Still TBD	Notes
12-13	\$4,077,750	Presentation equipment, recording equipment, concept mapping software, resources for kindergarten, technology components of adopted text series, online content management system, wireless components.	-----

13-14	\$2,297,350	Same as above	-----
14-15	\$2,447,475	Same as above.	-----

6c. Equipment Replacement Policy

MUSD is planning to institute a consistent refresh cycle; this cycle will be for four years if the choice is made to lease computers. In 2012-2013, the District plans to retire 505 older computers, and will continue this process until, by June 2015, all computers will be four years old or less. New computers will in most cases initially be placed in labs, with replaced lab computers moved to classrooms based on site-determined priorities.

Schools will be allowed to keep older computers (five or six years old) as long as they still work. When equipment becomes obsolete, warehouse staff picks it up from the school. The Board of Education accepts it as Discarded. It is then given to the community or sold to a third party company.

6d. Monitoring Process:

The monitoring and evaluation components for the budget section are listed under the section goals with the specific tasks and individuals indicated in the sections charts.

Individual(s) Responsible	Responsibilities	Feedback Loop
Site Administrators	<ul style="list-style-type: none"> Develop and monitor site budgets Work with site-based planning teams to determine site technology needs and priorities Budget to meet those needs and priorities as appropriate Complete required surveys & reports 	<ul style="list-style-type: none"> Report progress and needs as assessed Submit recommended plan changes Address in Principal Accountability Report (Oct.) and Site Single Plan (Dec.)
Chief Technology Officer	<ul style="list-style-type: none"> Approves all Tech PO's (hardware and software) Provides quotes & suggestions 	<ul style="list-style-type: none"> Sends problems/issues back to principals for justification
Asst. Supt., Ed Services	<ul style="list-style-type: none"> Review for categorical program compliance and for alignment to site and District plans 	<ul style="list-style-type: none"> Report to other stakeholders as appropriate
Chief Business Officer Director of Fiscal Services	<ul style="list-style-type: none"> Budget check Interim reporting Budget and expense review 	<ul style="list-style-type: none"> Alerts sent to site principals Monthly budget reports

7. MONITORING AND EVALUATION COMPONENT

7a. Description of the process for evaluating the plan's overall progress and impact on teaching and learning.

A standing District Technology Committee, composed of teachers, site and District administrators, and classified staff and led by the Chief Technology Officer, will have overall responsibility for evaluating and updating this Technology Plan. The Committee will meet at least once a year, including a meeting in June. Based on collected data, as described in the chart above, the Committee will review and reflect on progress made on the Plan and will adjust the timing and sequence of objectives and benchmarks as needed.

If assessment measures referenced in the objectives and benchmarks change, the Committee will modify the objectives as needed to meet District goals. In particular, the District will monitor the content of the EdTechProfile Technology Assessment Profile.

Technology Plan updates will be coordinated with the Technology Services Department for ERate purposes. A supplemental budgetary analysis will be completed annually as needed.

Communications as appropriate will be provided to affected stakeholders and to principals, the Superintendent, and the Board of Education. Progress on the Technology Plan will be discussed at the annual Administrators Retreat.

Additional information is described in Section 4c, Professional Development Monitoring Component, and the Monitoring, Evaluation, and Program Modification Process charts of each goal in Sections 3d-3k.

7b. Schedule for evaluating the effect of plan implementation.

This information is described in the Monitoring, Evaluation, and Program Modification Process charts of each goal in Sections 3d-3k; in Section 4d, monitoring of the Professional Development Component; in Section 5d, monitoring of the Technology Component; and in the Action Plans (including timeline) of Section 5.

The following chart shows the schedule for meetings and assessment measures that will be used in the evaluation of Technology Plan implementation.

Forum	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
District Technology Committee			X		X		X		X		X	
Administrator Retreat		X										X
Technology Assessment Profile								X	X	X		

Forum	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Student technology skills (as per new standards)											X	X
Usage/access records of Illuminate			X	X	X	X	X	X	X	X	X	
California Standards Tests		report									X	
CAHSEE	X			X	X		X		X		X	
Teacher technology skills (as per new standards)											X	X
Professional development records												X
State Technology Survey							X	X	X			

7c. Communicating evaluation results.

Communications as appropriate will be provided to affected stakeholders and to principals, the Superintendent, and the Board of Education. Progress on the Technology Plan will be discussed at the annual Administrators Retreat. Additionally, the CTO provides the School Board, in regularly scheduled public board meetings, quarterly updates on the progress of the technology plan.

8. EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS TO MAXIMIZE THE USE OF TECHNOLOGY

The main provider of adult literacy services to Monrovia residents is the Monrovia Community Adult School. Adult basic skills instruction is provided in an individualized program in the areas of reading, language arts, writing, and mathematics. In addition, classes are available in general science, keyboarding, basic writing, and health. English as a Second Language classes help students to learn listening, speaking, reading, and writing skills within a life-skill context. Community Based English Tutoring (CBET) classes are available to help adults learn English skills in order to help their or other children in school. A home study ESL option loans videos, cassettes, and printed materials free of charge. An ESL Computers course offers instruction in Windows and Office applications. Adult Education also offers a job placement program.

Open-entry open-exit self-paced courses leading to a diploma or the GED are offered in the Adult School Academic Learning Lab. Numerous additional courses, oriented towards careers and/or personal interests, are offered during the day and evening, including a Computer Career Paths course series based on Microsoft Office applications. Online classes are offered through e-Learning Courses Online.

An Adult School teacher served on the committee that developed this Technology Plan.

The Monrovia Public Library has a free literacy program for adults living and working in Monrovia and the surrounding communities. This program is open to all adults who speak at least very basic English. Literacy learners work individually with tutors trained in adult literacy. Literacy Services supplies all materials and on-going support for learners and tutors. Learners generally meet once a week for 1 1/2 hours at the Monrovia Library. The schedule varies based upon the learner's time and needs.

9. EFFECTIVE, RESEARCH-BASED METHODS AND STRATEGIES

9a. Research Summary, District Application.

The annotated bibliography that is included in Section 9b describes the research that was used in the preparation of this Plan and how the District has used and will use the research findings in the development and implementation of the Plan. The research was selected for its focus on strategies and methods to integrate technology in order to improve learning, teaching, and management.

Research and Models/Strategies Literature:

CEO Forum (2001). The CEO Forum School Technology and Readiness Report: Key Building Blocks for Student Achievement in the 21st Century.
<http://www.ceoforum.org/downloads/report4.pdf>.

This report concludes that effective uses of technology to enhance student achievement are based on four elements: alignment to curricular standards and objectives, assessment that accurately and completely reflects the full range of academic and performance skills, holding schools and Districts accountable for continuous evaluation and improvement strategies, and an equity of access across geographic, cultural, and socioeconomic boundaries. State, District, and site policies, programs, and resources must be consistently aligned to meet educational objectives. Technology transforms the learning environment so that it is student-centered, problem and project centered, collaborative, communicative, customized, and productive. Students must acquire 21st century skills in order to thrive in the new knowledge-based economy, including technological and information literacy, inventive thinking, effective communication and high productivity skills.

The Monrovia Unified School District and each school maintain alignment of instruction with state content standards through long-range planning and instructional pacing guides. Software is chosen to align with state standards. Student achievement is monitored through standards-based common benchmark and end-of-course exams. Through ongoing data collection and analysis, the District will continuously monitor its attainment of the goals and objectives of the Technology Plan, and will report results annually to the Superintendent, the Board of Education, and the public through the Board meetings. Throughout the Plan, attention is paid to providing equitable access to all students in the community, including students in special populations. The District will implement a plan for staff training and instruction of students in information literacy.

CEO Forum (2000). The CEO Forum School Technology and Readiness Report. The Power of Digital Learning: Integrating Digital Content. <http://www.ericit.org/fulltext/IR020402.pdf>

This report offers a vision for digital learning and focuses on actions that schools, teachers, students, and parents must take to integrate digital content into the curriculum to create the learning environments that develop 21st Century skills. The power of digital learning is

discussed, including the need for digital learning, reasons why digital content is essential, shifting to digital learning environments, models from the business community, readjustment (expanding the scope of technology integration), the critical importance of professional development, and integrating digital content.

Consistent with this research, in the development of this Plan, Monrovia USD has followed, and will continue to follow, the steps recommended in the report. In alignment with the report, the District has identified educational goals and linked technology resources to those objectives; established student outcomes and performance standards that will be achieved by the inclusion of technological resources; and determined a process for measurement and evaluation of the outcomes and modification of the Plan accordingly.

Yancey, Kathleen Blake (2004). "Using Multiple Technologies to Teach Writing." Educational Leadership. October 2004: 38-40.

Writers now use digital technologies to write many new kinds of text, such as Web logs, hypertexts, and electronic portfolios. Helping writers develop fluency and competence in a variety of technologies is a key part of teaching writing in this century. Students need to learn to comfortably use and combine print, spoken, visual, and digital processes in composing a piece of writing.

Under this Technology Plan, students will use computers, Internet-based and other online resources, analog and digital recording equipment, and projection devices to plan, develop, and present work in core and additional subject areas. Middle school students use MY Access! to improve their writing composition skills.

Wenglinsky, Harold (1998). "Does It Compute? The Relationship Between Education Technology and Student Achievement in Mathematics." Educational Testing Service.
<http://ftp.ets.org/pub/res/technolog.pdf>.

This article reports the findings from a national study of the relationship between different uses of educational technology and various educational outcomes. Data was drawn from the 1996 NAEP test in mathematics. The study concluded that, when they are properly used, computers may serve as important tools for improving student proficiency in mathematics, as well as the overall learning environment in the school. For eighth graders, teachers' professional development in technology and the use of computers to teach higher-order thinking skills were both positively related to student achievement in math.

Consistent with this research, Monrovia USD holds improving student work in mathematics as a major goal of its Technology Plan. Teacher professional development includes the use of productivity tools to encourage higher order thinking skills.

Bialo, Ellen R. and Sivin-Kachala, Jay (1996). "The Effectiveness of Technology in Schools: A Summary of Recent Research." School Library Media Quarterly, Fall 1996.
http://www.ala.org/aasl/SLMR/slmr_resources/select_bialo.html.

This article describes the authors' ongoing study of research on the effectiveness of technology in schools and relates it to the role of the school library. It has been found that educational technology has positive effects on student attitudes toward learning and on student self-concepts. This is particularly true when the technology allows students to control their own learning. However, low-achieving students and those with little prior content knowledge are likely to require more structure than other students. Hence, a wide variety of software types is required. Two of the most important characteristics of effective learning environments are personal interaction (student-teacher and student-student) and inclusion of activities that allow students to direct their own learning or to express themselves. Instructors must provide structure for students engaging in complex problem-solving.

Consistent with this research, Monrovia USD and individual schools will examine software and the lessons developed which use it from the point of view of varying student needs (including more or less direction or control by the student and emphasis on individual, pair, or team interactions). The Technology Plan includes the use of the high school library media centers as a place for research, small group and staff-student interaction, and the systematic teaching of information/problem-solving skills.

Designs for learning: An introduction to high quality professional development for teachers.

The California Department of Education. <http://www.cde.ca.gov/pd/pdf/designsintro.pdf>

This document provides the framework for designing high quality professional development. It is based on three guiding principles: (1) High quality professional development helps teachers to more ably address the learning needs of every student, thereby improving the learning of all students; (2) High quality professional development designs will vary in accordance with the different phases of a teacher's development; and (3) Administrators who are actively involved in their own learning are better able to create and support conditions that result in high levels of teacher competency and students achievement.

Monrovia USD has designed a professional development program consistent with the recommendations made in this document. The professional development programs address the needs of professionals at their respective levels. The training of administrators is also addressed. All professional development activities will be monitored, evaluated, and modified, as described in the Plan.

Ringstaff, Cathy; Kelley, Loretta. (2002). The learning return on our educational technology investment. A review of findings from research. West Ed.

http://www.wested.org/online_pubs/learning_return.pdf.

This paper summarizes major research findings related to educational technology use and draws out implications for how to make the most of technology resources, focusing on pedagogical and policy issues. The distinctions between learning "from" computers and learning "with" computers are delineated. The findings of the research focus on adequate and appropriate teacher training; changing teacher beliefs about learning and teaching; sufficient and accessible equipment, including adequate computer-to-student ratio; long-term planning; technical and instructional support.

Consistent with this research, Monrovia USD's Technology Plan has been designed to address the benefits and rationale for both learning "from" technology (i.e., using computers to assist students in learning skills, etc.) and learning "with" technology (i.e., using technology to assist students with projects and other higher order thinking skills lessons). The Plan also addresses sufficient and accessible equipment, especially as it relates to student-to-computer ratios, and technical and instructional support. Long-term planning and monitoring are built into the plan.

(2012). HMH Fuse: Algebra I Results of a yearlong Algebra pilot in Riverside, CA. Retrieved from <http://www.hmheducation.com/fuse/pdf/hmh-fuse-riverside-whitepaper.pdf>

This whitepaper is the result of a study of the use of the iPad in middle-school algebra. The results of the study support the use of mobile devices, such as the iPad, in the classroom. To explore the possibilities of the impact of iPads in District classrooms the District is initiating the iMonrovia program. We will use the structure of this study in our pilot classroom to determine if we can achieve similar results.

9b. Technology to Deliver Rigorous Curriculum.

Monrovia USD offers numerous opportunities for students to use technology to access rigorous or specialized courses and content, including via distance learning.

At the high school level, Advanced Placement courses in Statistics, Biology, and Chemistry use online resources. Automotive Physics, an academic course in applied physics, emphasizes technology. The District is applying for a grant for a Math/Technology/Science Academy that will serve as a career pathway and will include rigorous instruction in the use of technology. One high school student is currently taking a course via BYU Online. As a member of the K12 High Speed Network (K12HSN), MUSD has access to videoconferencing opportunities at community colleges, California State University, and other institutions of higher education for students who need this access.

At Santa Fe Middle School, GATE students take part in Ball State University's Electronic Field Trips program. On five school days a year, using video streaming, students "visit" five different locations; during visits, they can communicate with other students via email or telephone. Middle and elementary school students can take part in the California State Parks PORTS (Parks Online Resources for Teachers and Students) videoconferencing program. Using K12HSN, PORTS delivers live, interactive presentations to classrooms from parks throughout the state. PORTS also provides fully developed units of study that furnish support, structure, preparation, and follow-up for these live presentations. PORTS includes study in science, history, language arts, and other academic content standards.

MUSD will seek to increase its use of the PORTS program. The K12video.org state videoconferencing clearing house website will also be used more frequently.

Appendix A

Explanation of Selected Evaluation Measures

Objective 3d.1.1

EdTechProfile Technology Assessment Profile (TAP), Certificated (Classroom) respondents, Student Use Category, Question 2: “Of the technology tools to which you have access, how often do your classroom assignments require students to use them?” Responses of Daily or 2-4 days a week for “Computers and peripherals (scanners, printers, etc.)”

Objective 3d.1.2

TAP, Certificated (Classroom) respondents, School Types: middle and high schools, Student Use Category, Question 3: “How often do you assign students in your typical class, work that involves using technology (computers, video, Internet, and hand-held devices)?” Responses of Daily, 2-4 days a week, or Once a week to monthly for “Research, using the Internet and/or CD-ROMs.”

Objective 3d.1.3

TAP, Certificated (Classroom) respondents, School Type: elementary schools, Student Use Category, same question as Obj. 3.1.2. Responses of Daily or 2-4 days a week for “Reinforcement and practice.”

Objective 3d.1.4

TAP, Certificated (Classroom) respondents, Personal Use Category, Question 4: “In what ways and to what degree do you use technology tools (computers, video, Internet, and hand-held devices) at your school?” Responses of Daily or 2-4 days a week for “Create instructional materials.”

Objective 3d.1.5

TAP, Certificated (Classroom) respondents, Personal Use Category, same question as 3d.1.4. Responses of Daily or 2-4 days a week for “Deliver classroom instruction.”

Objective 3e.1.2

TAP, Certificated (Classroom) respondents, CCTC Program Standard 16 Category, Standard 16d, Question 1. Percentage selecting answer choices C (Intermediate) or D (Proficient).

Question 1: Development of information literacy skills

(C) My students use print, electronic, and online resources I recommend to gather information they need to complete learning goals. They evaluate the quality of the information they gather using criteria I have given them.

(D) I expect my students to identify, locate, and select appropriate print, electronic and online information resources and to evaluate the quality of the information they find based on the criteria I have given them.

Objective 3h.1.1

TAP, Certificated (Classroom) respondents, Personal Use Category, Question 1: “How often do you use the following technology tools for classroom management (pupil recordkeeping, home/school communication, etc.)?” Responses of Daily for “Email.”

Objective 4b.1.3

TAP, Certificated (Classroom) respondents, Computer Knowledge and Skills Category, Intermediate or Proficient, information taken from the Score Based Pie Chart, which uses a formula to arrive at an overall rating based on ratings in seven individual subcategories: General computer knowledge and skills, Internet skills, Email skills, Word processing skills, Presentation software skills, Spreadsheet software skills, and Database software skills.

Objective 4b.1.4

TAP, Certificated (Classroom) respondents, Standard 16 Category, Intermediate and Proficient, information taken from the Score Based Pie Chart, which uses a formula to arrive at an overall rating based on answers to individual questions for each of seven standards.

In developing the TAP charts in Section 4a, the following reports were used:

Administrator Computer Knowledge and Skills subcategories: TAP Response Tables report

Classroom Teacher Computer Knowledge and Skills subcategories: Subcategory Bar Chart report

Standard 9 and 16 subcategories: Subcategory Bar Chart reports

In Appendix I, data on teacher Computer Knowledge and Skills (word processing, presentation software) was taken from the Subcategory Bar Chart report. Data on Standard 9 scores was taken from the Subcategory Bar Chart report.

Appendix C – Criteria for EETT Technology Plans

(Completed Appendix C is REQUIRED in a technology plan)

In order to be approved, a technology plan needs to “Adequately Addressed” each of the following criteria:

- *For corresponding EETT Requirements, see the EETT Technology Plan Requirements (Appendix D).*
- *Include this form (Appendix C) with “Page in District Plan” completed at the end of your technology plan.*

1. PLAN DURATION CRITERION	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
The plan should guide the district’s use of education technology for the next three to five years. (For a new plan, can include technology plan development in the first year)	9	The technology plan describes the districts use of education technology for the next three to five years. (For new plan, description of technology plan development in the first year is acceptable). Specific start and end dates are recorded (7/1/xx to 6/30/xx).	The plan is less than three years or more than five years in length. Plan duration is 2008-11.
2. STAKEHOLDERS CRITERION Corresponding EETT Requirement(s): 7 and 11 (Appendix D).	Page in District Plan	Example of Adequately Addressed	Not Adequately Addressed
Description of how a variety of stakeholders from within the school district and the community-at-large participated in the planning process.	9	The planning team consisted of representatives who will implement the plan. If a variety of stakeholders did not assist with the development of the plan, a description of why they were not involved is included.	Little evidence is included that shows that the district actively sought participation from a variety of stakeholders.

3. CURRICULUM COMPONENT CRITERIA Corresponding EETT Requirement(s): 1, 2, 3, 8, 10, and 12 (Appendix D).	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. Description of teachers' and students' current access to technology tools both during the school day and outside of school hours.	10	The plan describes the technology access available in the classrooms, library/media centers, or labs for all students and teachers.	The plan explains technology access in terms of a student-to-computer ratio, but does not explain where access is available, who has access, and when various students and teachers can use the technology.
b. Description of the district's current use of hardware and software to support teaching and learning.	11	The plan describes the typical frequency and type of use (technology skills/information and literacy integrated into the curriculum).	The plan cites district policy regarding use of technology, but provides no information about its actual use.
c. Summary of the district's curricular goals that are supported by this tech plan.	11	The plan summarizes the district's curricular goals that are supported by the plan and referenced in district document(s).	The plan does not summarize district curricular goals.
d. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to improve teaching and learning by supporting the district curricular goals.	13	The plan delineates clear goals, measurable objectives, annual benchmarks, and a clear implementation plan for using technology to support the district's curriculum goals and academic content standards to improve learning.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
e. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire the technology skills and information literacy skills needed to succeed in the classroom and the workplace.	19	The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire technology skills and information literacy skills.	The plan suggests how students will acquire technology skills, but is not specific enough to determine what action needs to be taken to accomplish the goals.

<p>f. List of goals and an implementation plan that describe how the district will address the appropriate and ethical use of information technology in the classroom so that students and teachers can distinguish lawful from unlawful uses of copyrighted works, including the following topics: the concept and purpose of both copyright and fair use; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; and avoiding plagiarism</p>	<p>23</p>	<p>The plan describes or delineates clear goals outlining how students and teachers will learn about the concept, purpose, and significance of the ethical use of information technology including copyright, fair use, plagiarism and the implications of illegal file sharing and/or downloading.</p>	<p>The plan suggests that students and teachers will be educated in the ethical use of the Internet, but is not specific enough to determine what actions will be taken to accomplish the goals.</p>
<p>g. List of goals and an implementation plan that describe how the district will address Internet safety, including how students and teachers will be trained to protect online privacy and avoid online predators.</p>	<p>23</p>	<p>The plan describes or delineates clear goals outlining how students and teachers will be educated about Internet safety.</p>	<p>The plan suggests Internet safety education but is not specific enough to determine what actions will be taken to accomplish the goals of educating students and teachers about internet safety.</p>
<p>h. Description of or goals about the district policy or practices that ensure equitable technology access for all students.</p>	<p>24</p>	<p>The plan describes the policy or delineates clear goals and measurable objectives about the policy or practices that ensure equitable technology access for all students. The policy or practices clearly support accomplishing the plan's goals.</p>	<p>The plan does not describe policies or goals that result in equitable technology access for all students. Suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.</p>

i. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs.	24	The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to support the district's student record-keeping and assessment efforts.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
j. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to improve two-way communication between home and school.	26	The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to improve two-way communication between home and school.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
k. Describe the process that will be used to monitor the Curricular Component (Section 3d-3j) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.	28	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding procedures, roles, and responsibilities.
4. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA Corresponding EETT Requirement(s): 5 and 12 (Appendix D).	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. Summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development.	29	The plan provides a clear summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development. The findings are summarized in the plan by discrete skills that include Commission on Teacher Credentialing (CTC) Standard 9 and 16 proficiencies.	Description of current level of staff expertise is too general or relates only to a limited segment of the district's teachers and administrators in the focus areas or does not relate to the focus areas, i.e., only the fourth grade teachers when grades four to eight are the focus grade levels.

<p>b. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing professional development opportunities based on your district needs assessment data (4a) and the Curriculum Component objectives (Sections 3d - 3j) of the plan.</p>	<p>34</p>	<p>The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing teachers and administrators with sustained, ongoing professional development necessary to reach the Curriculum Component objectives (sections 3d - 3j) of the plan.</p>	<p>The plan speaks only generally of professional development and is not specific enough to ensure that teachers and administrators will have the necessary training to implement the Curriculum Component.</p>
<p>c. Describe the process that will be used to monitor the Professional Development (Section 4b) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.</p>	<p>39</p>	<p>The monitoring process, roles, and responsibilities are described in sufficient detail.</p>	<p>The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.</p>

<p>5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT CRITERIA Corresponding EETT Requirement(s): 6 and 12 (Appendix D).</p>	<p>Page in District Plan</p>	<p>Example of Adequately Addressed</p>	<p>Example of Not Adequately Addressed</p>
<p>a. Describe the existing hardware, Internet access, electronic learning resources, and technical support already in the district that will be used to support the Curriculum and Professional Development Components (Sections 3 & 4) of the plan.</p>	<p>41</p>	<p>The plan clearly summarizes the existing technology hardware, electronic learning resources, networking and telecommunication infrastructure, and technical support to support the implementation of the Curriculum and Professional Development Components.</p>	<p>The inventory of equipment is so general that it is difficult to determine what must be acquired to implement the Curriculum and Professional Development Components. The summary of current technical support is missing or lacks sufficient detail.</p>

<p>b. Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed by the district's teachers, students, and administrators to support the activities in the Curriculum and Professional Development components of the plan.</p>	<p>42</p>	<p>The plan provides a clear summary and list of the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support the district will need to support the implementation of the district's Curriculum and Professional Development components.</p>	<p>The plan includes a description or list of hardware, infrastructure, and other technology necessary to implement the plan, but there doesn't seem to be any real relationship between the activities in the Curriculum and Professional Development Components and the listed equipment. Future technical support needs have not been addressed or do not relate to the needs of the Curriculum and Professional Development Components.</p>
<p>c. List of clear annual benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components identified in Section 5b.</p>	<p>45</p>	<p>The annual benchmarks and timeline are specific and realistic. Teachers and administrators implementing the plan can easily discern what needs to be acquired or repurposed, by whom, and when.</p>	<p>The annual benchmarks and timeline are either absent or so vague that it would be difficult to determine what needs to be acquired or repurposed, by whom, and when.</p>
<p>d. Describe the process that will be used to monitor Section 5b & the annual benchmarks and timeline of activities including roles and responsibilities.</p>	<p>49</p>	<p>The monitoring process, roles, and responsibilities are described in sufficient detail.</p>	<p>The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.</p>

6. FUNDING AND BUDGET COMPONENT CRITERIA Corresponding EETT Requirement(s): 7 & 13, (Appendix D)	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. List established and potential funding sources.	50	The plan clearly describes resources that are available or could be obtained to implement the plan.	Resources to implement the plan are not clearly identified or are so general as to be useless.
b. Estimate annual implementation costs for the term of the plan.	51	Cost estimates are reasonable and address the total cost of ownership, including the costs to implement the curricular, professional development, infrastructure, hardware, technical support, and electronic learning resource needs identified in the plan.	Cost estimates are unrealistic, lacking, or are not sufficiently detailed to determine if the total cost of ownership is addressed.
c. Describe the district's replacement policy for obsolete equipment.	54	Plan recognizes that equipment will need to be replaced and outlines a realistic replacement plan that will support the Curriculum and Professional Development Components.	Replacement policy is either missing or vague. It is not clear that the replacement policy could be implemented.
d. Describe the process that will be used to monitor Ed Tech funding, implementation costs and new funding opportunities and to adjust budgets as necessary.	54	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.

7. MONITORING AND EVALUATION COMPONENT CRITERIA Corresponding EETT Requirement(s): 11 (Appendix D).	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. Describe the process for evaluating the plan's overall progress and impact on teaching and learning.	55	The plan describes the process for evaluation using the goals and benchmarks of each component as the indicators of success.	No provision for an evaluation is included in the plan. How success is determined is not defined. The evaluation is defined, but the process to conduct the evaluation is missing.
b. Schedule for evaluating the effect of plan implementation.	55	Evaluation timeline is specific and realistic.	The evaluation timeline is not included or indicates an expectation of unrealistic results that does not support the continued implementation of the plan.
c. Describe the process and frequency of communicating evaluation results to tech plan stakeholders.	56	The plan describes the process and frequency of communicating evaluation results to tech plan stakeholders.	The plan does not provide a process for using the monitoring and evaluation results to improve the plan and/or disseminate the findings.
8. EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS TO MAXIMIZE THE USE OF TECHNOLOGY CRITERION Corresponding EETT Requirement(s): 11 (Appendix D).	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed

<p>If the district has identified adult literacy providers, describe how the program will be developed in collaboration with them. (If no adult literacy providers are indicated, describe the process used to identify adult literacy providers or potential future outreach efforts.)</p>	<p>57</p>	<p>The plan explains how the program will be developed in collaboration with adult literacy providers. Planning included or will include consideration of collaborative strategies and other funding resources to maximize the use of technology. If no adult literacy providers are indicated, the plan describes the process used to identify adult literacy providers or potential future outreach efforts.</p>	<p>There is no evidence that the plan has been, or will be developed in collaboration with adult literacy service providers, to maximize the use of technology.</p>
<p>9. EFFECTIVE, RESEARCHED-BASED METHODS, STRATEGIES, AND CRITERIA Corresponding EETT Requirement(s): 4 and 9 (Appendix D).</p>	<p>Page in District Plan</p>	<p>Example of Adequately Addressed</p>	<p>Not Adequately Addressed</p>
<p>a. Summarize the relevant research and describe how it supports the plan's curricular and professional development goals.</p>	<p>58</p>	<p>The plan describes the relevant research behind the plan's design for strategies and/or methods selected.</p>	<p>The description of the research behind the plan's design for strategies and/or methods selected is unclear or missing.</p>
<p>b. Describe the district's plans to use technology to extend or supplement the district's curriculum with rigorous academic courses and curricula, including distance-learning technologies.</p>	<p>61</p>	<p>The plan describes the process the district will use to extend or supplement the district's curriculum with rigorous academic courses and curricula, including distance-learning opportunities (particularly in areas that would not otherwise have access to such courses or curricula due to geographical distances or insufficient resources).</p>	<p>There is no plan to use technology to extend or supplement the district's curriculum offerings.</p>

California Department of Education

Appendix J – Technology Plan Contact Information

Education Technology Plan Review System (ETPRS)
Contact Information

County & District Code: **19 64790**

School Code (Direct funded charters only): _____

LEA Name: Monrovia Unified School District

*Salutation: Dr.

*First Name: Linda

*Last Name: Wagner

*Job Title: Superintendent

*Address: Monrovia Unified School District, 325 East Huntington Drive

*City: Monrovia

*Zip Code: 91016

*Telephone: (626) 471-2010

Fax: (626) 471-2077

*E-Mail: lwagner@monrovia.k12.ca.us

Please provide backup contact information.

1st Backup Name: Jason Buchanan

1st Backup E-Mail: jbuchanan@monrovia.k12.ca.us

2nd Backup Name: Julie Vitale

2nd Backup E-Mail: jvitale@monrovia.k12.ca.us

*Required information in the ETPRS