

Monrovia Unified School District
District Technology Plan

July 1, 2007 - June 30, 2012

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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 PreK 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, 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. 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 2006, the racially and ethnically diverse student population was approximately 6,257. MUSD has been experiencing declining enrollment; however, enrollment held steady between 2005-2006 and 2006-2007. The Preschool program serves 228 students. Total enrollment for the Adult School for 2006-2007 is 4,396. The following chart shows the district's K-12 population percentages by ethnicity as taken from 2006-2007 CBEDS data.

Population	American Indian	Asian	Pacific Islander	Filipino	Hispanic	African American	White	Other
Students	0.8%	2.8%	0.4%	2.2%	53.6%	10.6%	26.1%	3.5%
Teachers	0.7%	3.6%	0.0%	0.3%	16.6%	4.2%	73.9%	0.7%

According to Dataquest, in spring 2006 about 17.8% of district students were considered English Learners. The district percentage of students receiving free and reduced lunch is 54%. Special Education students comprise about 9.25% of the total (Dec. 2005); GATE (Gifted and Talented Education) students comprise 10% of the total. In 2006-2007, 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.

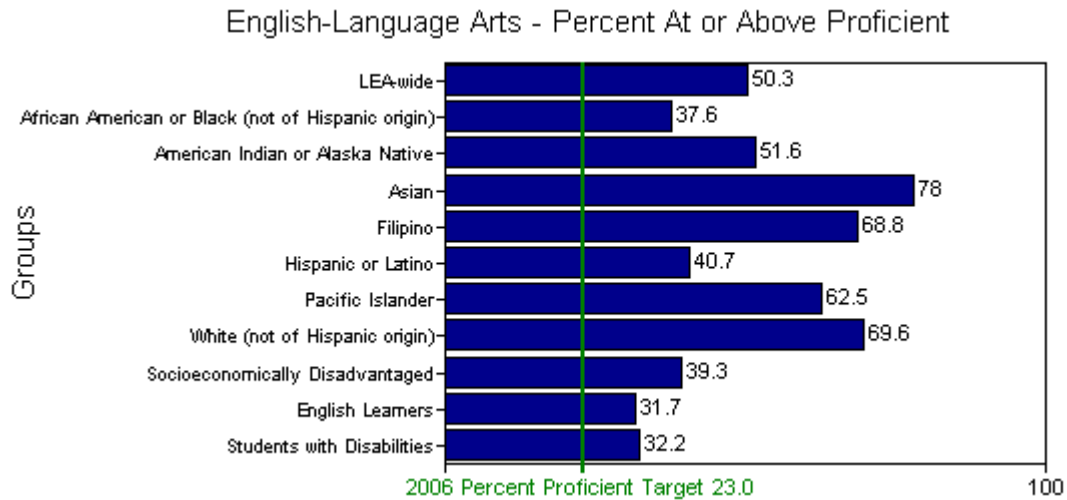
Student Achievement:

In 2005-2006, Monrovia USD met all 34 of its Annual Yearly Progress (AYP) criteria. District-wide, 50.3% of students scored at or above Proficient on the AYP Annual Measurable Objectives in English language arts; 55.4% scored at or above Proficient in mathematics. All schools but two met all their AYP criteria.

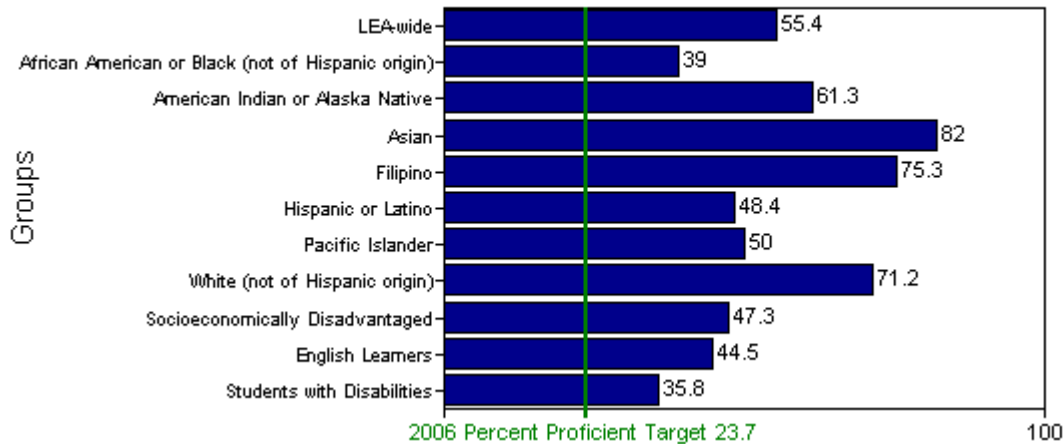
The following charts show data from the 2006 Accountability Progress Report. The first shows per-school AYP information.

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



Mathematics - Percent At or Above Proficient



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

	2005 Base API	2006 Growth API	05-06 Growth Target	05-06 API Growth	Met target school wide?	Comparable Improvement?	Met API Target Overall?
Monrovia USD	732	743	D	11			
Elementary							
Bradoaks Elemen.	756	773	2	17	Yes	Yes	Yes
Mayflower Elem.	841	850	A	9	Yes	Yes	Yes
Monroe Elemen.	764	782	2	18	Yes	Yes	Yes
Plymouth Elem.	813	803	A	-10	Yes	No	No
Wild Rose Elem.	761	784	2	23	Yes	Yes	Yes
Middle							
Clifton Middle	747	773	3	26	Yes	Yes	Yes
Santa Fe Middle	727	767	4	40	Yes	Yes	Yes
High Schools							
Monrovia High	685	683	6	-2	No	No	No
Small Schools							
Mountain Park	535*	528*	13	-7	No	Yes	No
ASAM Schools							
Canyon Oaks HS	464*	524*	D	60			N/A

* 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 2005 or 2006. 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 2006 California Standards Tests.

	2	3	4	5	6	7	8	9	10	11
CST English-Language Arts										
% Advanced & Proficient	50%	43%	56%	48%	50%	51%	44%	42%	30%	25%
CST Mathematics										
% Advanced & Proficient	61%	65%	64%	56%	47%	50%				
CST Gen. Math (Gr. 6 & 7)										
% Advanced and Proficient							41%			
CST Algebra I										
% Advanced & Proficient							93%	7%	4%	5%
CST Geometry										
% Advanced and Proficient								46%	5%	6%
CST Algebra II										
% Advanced and Proficient									27%	3%
CST Summative HS Math										
% Advanced and Proficient										39%
CST Science										
% Advanced and Proficient				33%			40%		32%	
CST History, Gr. 8 Cumulative										
% Advanced and Proficient							31%			
CST World History										
% Advanced and Proficient									33%	
CST U. S. History										
% Advanced and Proficient										29%

For the class of 2004-2005, the graduation rate was 86.3%. In 2006, the California High School Exit Exam (CAHSEE) pass rate for sophomores was 81% in mathematics and 78% in English language arts (ELA). The combined pass rate in 2005-2006 was 68% in math and 65% in ELA.

1. PLAN DURATION

This plan will guide Monrovia Unified School District's use of technology for the five-year period from July 1, 2007, through June 30, 2012. 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 Plan 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
Debbie Blum	Library Media Tech	Plymouth Elementary
Jim Coombs	Asst. Supt., Curriculum and Instructional Services	Monrovia USD
Linda Dempsey	Chief Business Officer	Monrovia USD
Stacy Escarcega	Principal	Wild Rose Elementary
Flint Fertig	Principal	Canyon Oaks High
Bob Geiger	Director of Technology Services	Monrovia USD
Jann Hoechlin	Teacher, Technology	Santa Fe Middle
Michael Hoon	Principal	Plymouth Elementary
Cindy Lathrop	Elementary Curriculum and Instruction Program Coordinator	Monrovia USD
Ron Letourneau	Principal	Santa Fe Middle
Jeanette Loghry	Teacher, Math; Technology Coordinator	Monrovia High
Cheli McReynolds	Assistant Principal	Monrovia High
Carol Packard	Secondary Curriculum and Instruction Program Coordinator	Monrovia USD
Deb Rinder	Principal	Clifton Middle
Tom Rosenstein	Teacher, Social Studies	Canyon Oaks High
Michael Shafer	Teacher, Office Applications	Adult Education

The following chart shows individuals and groups who were also consulted. Needs commonly mentioned by stakeholders include technology standards for students integrated with the content curriculum, new equipment (with a schedule for replacing old equipment at all sites), home access to grading for teachers and parents, and substantial, continuing training for teachers and classified staff.

Name	Title	Affiliation
Students	Interviews of 316 juniors and seniors conducted by student newspaper staff	Monrovia High

Name	Title	Affiliation
Teachers	Response to survey Faculty meeting Academic Senate meeting	Wild Rose Elem. Clifton Middle Monrovia High Santa Fe Middle
Site & district administrators	Instructional Leaders meeting (Mar. 6): listing, discussion, and prioritizing of technology issues by school level groups Superintendent's Cabinet	Monrovia USD
Program Advisors	Response to survey	Monrovia USD
	Policy Agenda Cabinet	Monrovia USD
Parents (and staff)	School Site Councils ELAC GATE parents	Plymouth, Bradoaks, Monroe, Wild Rose, Clifton, Santa Fe
Rosby Murga	Data Support Specialist	Monrovia USD
Gail Crotty	Director, Special Education	Monrovia USD
Gary Hartstein	District Strategic Planning Specialist	Tech Ed Services, Inc.
Catherine Steinhoff	Planning Consultant	Tech Ed Services, Inc.

3. CURRICULUM COMPONENT

Monrovia Unified School District has achieved a solid technology infrastructure and is now engaged in several major initiatives that will be supported by that technology. Instructional pacing guides with common assessments and suggested resources for the core subjects at all grade levels are under development. Already strong use of standards-based assessments using technology tools will increase. A data warehouse program will provide integrated access to student data. A number of activities, including development of student and staff standards for technology skills, will encourage an increased level of standardization in technology use around the district.

3a. Teachers' and students' current access to technology tools both during the school day and outside of school hours.

All Monrovia USD 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 one. 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 except Canyon Oaks (which has a classroom with 14 computers) 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 Tungsten Learning Systems); some spots are generally available for sign-up 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; another open lab is being set up in the spring of 2007. As 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 is getting a lab for use of NovaNet. Computer labs are also used for teacher and administrator in-service.

Most libraries have computers available for student use. At the middle schools and Monrovia High School, libraries 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.

The following chart shows per-school ratios of students to instructional computers and students to “up-to-date” computers (those 48 months old or less) in March 2007 as per October 2006 enrollment data and the 2007 State Technology Survey. It also shows numbers of computers in libraries and labs.

School	Student Enrollment	Total Computers	Student: Comp. Ratio	Up-to-date Comp. <4 yrs	Student: up-to-date Comp. Ratio	# of comp. in libraries	# of comp in labs
Bradoaks Elementary	582	145	4.0:1	37	15.7:1	2	32
Mayflower Elementary	606	137	4.4:1	16	37.9:1	4	30
Monroe Elementary	504	143	3.5:1	36	14.0:1	2	33
Plymouth Elementary	486	169	2.9:1	74	6.6:1	2	32
Wild Rose Elementary	514	142	3.6:1	13	39.5:1	2	21
Elem. Totals	2692	736	3.7:1	176	15.3:1	12	148
Clifton	747	264	2.8:1	79	9.5:1	25	71
Santa Fe Middle	727	286	2.5:1	144	5.0:1	11	91
MS Totals	1474	550	2.7:1	223	6.6:1	36	162
Monrovia HS	1871	479	3.9:1	119	15.7:1	54	75
Canyon Oaks	136	50	2.7:1	1	136.0:1	0	0
HS Totals	2007	529	3.8:1	120	16.7:1	54	75
Mountain Park	84	8	10.5:1	0	none	0	0
K-12 Totals	6257	1823	3.4:1	519	12.1:1	102	385

3b. District’s current use of hardware and software 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. Microsoft Office is the district’s standard productivity suite for staff and students.

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.

Teachers have their choice of electronic or manual methods of keeping gradebooks. All teachers at Clifton Middle School use GradePro. Some staff at Sante Fe Middle School use GradeKeeper. About half of Monrovia High School teachers use the ABI online gradebook. (All teachers can use the ABI gradebook if they desire.)

Tungsten Learning Systems is used at all elementary and middle schools to administer, record, and report monthly benchmark assessments for grades 2-8. Staff use reports from Tungsten in order to identify student needs and plan instruction. The online writing program MY Access! is used for the district sixth and eight grade writing assessments. During the spring of 2007, the district will introduce the data warehouse and standards-based test-bank program Data Director

and will plan new benchmark assessments for middle and high school students using Action Learning Systems. Student data from Aeries, Tungsten, and Action Learning Systems will be available via Data Director.

School libraries use Follett library automation software or are moving to Follett. Staff develop IEPs using the standalone program SESP. 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.

Elementary schools use a variety of programs for reinforcement and practice, including online resources and Get Ahead Math (for intervention). Currently, elementary and middle schools use Accelerated Reader; MUSD is moving toward a coordinated, district-wide implementation. MY Access! is used for writing instruction at the middle schools. The high school uses Accelerated Math with students needing intervention. The MHS Geometry Through Technology class uses Geometer's Sketchpad.

Rosetta Stone is used by Adult Education (for ESL students) and Santa Fe Middle School (for English Learners and Spanish classes). NovaNet online courseware will soon be used for Adult Education, for credit recovery at Canyon Oaks and Monrovia High Schools, and for original coursework for independent study.

In middle school technology courses, students use Microsoft Office applications, keyboarding (Glencoe Keyboarding or UltraKey), PhotoShop, and career programs (COIN or Bridges). Keyboarding tutorials such as Type to Learn and Mavis Beacon are used at the elementary level. Students at the middle and high schools, and some fourth and fifth graders, use Power Point to make presentations. Excel is used for charts and graphs for science projects.

As part of new textbook adoptions, the district makes textbooks available to students online. Some teachers use LCD projectors or television monitors to present lessons to their classes. Some teachers, particularly at the middle and high schools, place course materials and assignments online for students and parents, using such services as TeacherWeb and Quia.

Data for Table 1, Classroom Teacher Technology Use, comes from the EdTechProfile teacher Technology Assessment Profile as reported in March 2007. Data is included for 185 teachers, 59% of the district total. Email is the technology most commonly used for classroom management (including record-keeping and home/school communication), with 69% of respondents saying they use it daily; computers/peripherals are used for the same purposes by 83% of teachers at least two days a week. Computers and peripherals are the most commonly used form of technology for classroom instruction, with 65% saying they use them at least twice a week. The Internet is used for instruction at least two days a week by 45% of respondents. The most common teacher uses of technology tools at school (at least two days a week) are to communicate with colleagues (72% of respondents), manage student grades and attendance (70%), create instructional materials (67%), and gather information for lesson planning (57%). Technology is used most often for reading/language arts (48% of those who teach the subject use

technology at least twice a week).

Data for Table 2, Student Technology Use, comes from the EdTechProfile teacher Technology Assessment Profile as reported in March 2007. Of respondents, 24% said that they assign their students work requiring the use of computers at least twice a week; an additional 36% give such assignments at least once a month. Most common types of technology-related assignments involve word processing (45% give such at least once a month), reinforcement and practice (43%), creating reports or projects (42%), and research (40%). Of respondents, 59% said their students use technology in the classroom to complete assignments; 54% have students use computer labs; 62% reported their students using technology in a library.

**Table 1: Classroom Teacher Technology Use, March 2007
(EdTechProfile Technology Assessment Profile Personal Use Section)**

Technology used for classroom management, record-keeping, home/school communication	Daily	2-4 days/ week	Once a week to monthly	Less than monthly	Available, don't use	Not available
Computers/peripherals	65%	18%	8%	3%	5%	1%
Internet	59%	17%	8%	11%	6%	0%
Email	69%	11%	6%	7%	6%	1%
Handheld electronic devices	5%	6%	5%	2%	11%	71%

Technology tools used for classroom instruction	Daily	2-4 days/ week	Once a week to monthly	Less than monthly	Available, don't use	Not available
Computers/peripherals	42%	23%	13%	9%	9%	4%
Video-based presentation device	9%	15%	32%	23%	10%	19%
Video-based creation tools (video or digital camera)	6%	5%	15%	14%	29%	31%
Internet	27%	18%	24%	15%	13%	2%
Email	33%	10%	16%	10%	27%	5%
Handheld electronic devices	3%	3%	5%	3%	15%	72%

In what subjects are technology tools used for instruction?	Daily	2-4 days/ week	Once a week to monthly	Less than monthly	Never	# of teachers responding
Reading/language arts	24%	24%	30%	12%	10%	106
Mathematics	16%	15%	31%	18%	19%	99
Science	12%	14%	18%	29%	27%	83
History/social science	15%	14%	20%	26%	26%	86

How do teachers use technology tools at schools?	Daily	2-4 days/ week	Once a week to monthly	Less than monthly	Never
Create instructional materials	31%	36%	19%	9%	5%
Deliver classroom instruction	16%	22%	26%	16%	21%
Manage student grades and attendance	54%	16%	8%	9%	13%
Communicate with colleagues	50%	22%	10%	9%	9%
Communicate with parents or students	26%	22%	26%	12%	13%
Gather information for lesson planning	26%	31%	21%	14%	8%
Access model lesson plans and best practices	12%	24%	35%	15%	13%

Do you use an electronic student information system to make decisions in lesson design and implementation to improve student academic achievement?	Yes	No	No access
	22%	49%	29%

Use of technology tools to support & improve home/school communication	Daily	2-4 days/ week	Once a week to monthly	Less than monthly	Never
Voice mail	49%	28%	12%	1%	10%
School web site	22%	18%	16%	12%	32%
Video conferencing	0%	0%	1%	5%	94%

Use of technology tools to support & improve home/school communication	Daily	2-4 days/ week	Once a week to monthly	Less than monthly	Never
Electronic grading system	43%	15%	12%	9%	21%
Online student assessments	5%	9%	22%	12%	52%

Level of teacher familiarity with assistive technologies	Didn't realize these are AT	Familiar, but haven't used	Use/have used in classroom	Can identify student's need for levels of AT
Low-level technologies	39%	35%	12%	14%
Medium-level technologies	24%	59%	8%	9%
High-level technologies	25%	58%	6%	11%

**Table 2: Student Technology Use
(EdTechProfile Technology Assessment Profile Student Use Section, March 2007)**

Where do students use technology tools for classroom assignments?	Library	Computer lab	Class-room
	62%	54%	59%

How often do assignments require students to use technology tools?						
	Daily	2-4 days/ week	Once a week to monthly	Less than monthly	Available, don't use	No access
Computers/peripherals	10%	14%	36%	18%	15%	8%
Video-based presentations	3%	7%	23%	22%	24%	21%
Video-based creation tools	2%	1%	7%	14%	36%	40%
Internet	9%	8%	30%	21%	22%	11%
Email	6%	3%	12%	14%	39%	27%
Hand-held electronic devices	1%	3%	7%	5%	16%	68%

How often are students assigned work that involves technology?					
	Daily	2-4 days/ week	Once a week to monthly	Less than monthly	Never
Word processing	3%	13%	29%	27%	27%
Reinforcement & practice	5%	13%	25%	23%	34%
Research	3%	10%	27%	32%	28%
Creating reports or projects	1%	7%	34%	31%	27%
Demonstrations/simulations	1%	6%	16%	26%	50%
Correspondence with experts, other schools, etc.	0%	2%	7%	24%	67%
Solving problems or analyzing data	0%	5%	15%	25%	55%
Graphically presenting information	2%	3%	13%	25%	57%

3c. District’s curricular goals and academic content standards in district and site comprehensive planning documents

This Technology Plan will be aligned to district curricular goals and standards for student achievement, based on the California State Content Standards and district-developed planning documents.

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

Mission Statement:

The Monrovia Unified School District is committed to devoting its energy, resources, and support to provide, through quality staff and quality service:

- Academically rigorous educational programs which foster the maximum development of each student’s:
 - desire, skill, and confidence to learn;
 - academic potential and success;
 - vocational, avocational, and technological interests, talents, and skills;
 - social, civic, and cultural understanding and participation;
 - sense of accomplishment, self-responsibility, and self-worth, within
- A challenging, supportive, safe, orderly, and positive learning environment, by working actively and cooperatively as students, staff, parents, and community.

Guiding Principles:

1. Learning for all Students
2. Safe, Orderly, Positive Learning Environments
3. Quality Staff Providing Quality Service
4. School/Home/Community Partnerships and Communication
5. Acquisition and Allocation of Resources to Support Goals 1-4

Strategic 5-Year Goals, 2004-2009

1. All eligible schools gain State recognition as California Distinguished Schools by 2009.
2. All schools meet or exceed their annual API state growth targets (for the school and for subgroups), aiming toward the state target API school score of 800 or higher by 2009.
3. Monrovia graduates leave high school prepared to enter college, advanced training, and/or the workplace.

Four immediate staff Focus Areas are academic vocabulary, standards-based instruction, student engagement (monitoring and adjusting), and classroom procedures and routines. In the WOW (Working on the Work) program, which focuses on student engagement, teachers examine and critique each other’s sample lesson plans or student work samples.

The current district Local Educational Agency (LEA) Plan runs through June 2008. Other relevant district and site planning documents include instructional pacing guides, Site Single Plans for Student Achievement, Comprehensive Site Safety Plans, 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 completed by June 2007. 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.

3d. Technology use to improve teaching and learning by supporting the district curricular goals and academic content standards

The section that follows describes what the district expects its students to be able to do academically in the core subjects and describes how, through meaningful integration of technology, student academic achievement can be improved.

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

	OBJECTIVES & BENCHMARKS:	2008	2009	2010	2011	2012
1	By June 2012, students of 75% of teachers will be assigned work at least two to four days a week that involves the use of computers/peripherals (as reported on the Student Use section of the	35%	45%	55%	65%	75%

	OBJECTIVES & BENCHMARKS:	2008	2009	2010	2011	2012
	Technology Assessment Profile) .					
2	By June 2012, students of 75% of middle and high school teachers will be assigned work at least once a week to monthly that involves the use of technology for research (as reported on the Student Use section of the TAP).	55%	60%	65%	70%	75%
3	By June 2012, students of 60% of elementary school teachers will be assigned work at least two to four days a week that involves the use of technology for reinforcement and practice (as reported on the Student Use section of the TAP).	20%	30%	40%	50%	60%
4	In each year, the percentage of teachers using technology tools to create instructional materials at least two to four days a week will increase over the previous year (as reported on the Personal Use section of the TAP).	Up 3 points over 2007	Up 5 points over 2008	Up 5 points over 2009	Up 5 points over 2010	Up 5 points over 2011
5	In each year, the percentage of teachers using technology tools to deliver classroom instruction at least two to four days a week will increase over the previous year (as reported on the Personal Use section, Question 4, of the TAP).	Up 2 points over 2007	Up 5 points over 2008	Up 5 points over 2009	Up 5 points over 2010	Up 5 points over 2011

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

	OBJECTIVES & BENCHMARKS:	2008	2009	2010	2011	2012
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.)	34%	45%	56%	67%	78%
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.)	34.6%	45.5%	56.4%	67.3%	78.2%
3	By June 2009, and in each year thereafter, 100% of MUSD schools will have API scores of 800 or better.	50%	100%	100%	100%	100%

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

OBJECTIVES & BENCHMARKS:		2008	2009	2010	2011	2012
1	By June 2011, and thereafter, 100% of students otherwise meeting all graduation requirements will have passed the CAHSEE.	97%	98%	99%	100%	100%

Action Plan (for all three goals)		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 (such as GeoSkills).	Sept. – June each year
b	Students will use software and online resources such as Starfall, Reading A-Z, Rosetta Stone, Waterford, Perfect Copy, Reader Rabbit, and Jump Start Reading 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; AR use expected to increase in 2007-2008
d	Middle school students will use the MY Access! writing practice and assessment program to improve writing skills.	Sept. – June each year; schools make license renewal decision annually
e	Students will use software and online resources such as Get Ahead Math, Accelerated Math, and Geometer’s Sketchpad for instruction, reinforcement, and practice to improve achievement in mathematics.	Sept. – June each year
f	NovaNet 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.	Beginning spring 2007. Fully implemented beginning fall 2007.
g	Students will attend CAHSEE intervention classes before and after school, during the summer, and/or during the school day. NovaNet and the CAHSEE Prep website will be used for intervention.	Students identified in Sept. of junior year; as students pass CAHSEE, they exit intervention
h	Students will use productivity software to complete assignments, including Word for essays, reports, and note-taking (Cornell Notes template), Excel for charts and graphs, and PowerPoint for presentations.	Sept. – June each year

Action Plan (for all three goals)		Timeline
i	K-8 students will use concept mapping software such as Kidspiration, 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 TumbleBooks).	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 TeacherWeb and Quia.	Ongoing
o	MUSD will investigate, pilot, and, if desired, adopt an online course management system and standardize use by teachers across the district.	07-08 Investigate & make purchase decision; 08-09 Pilot, evaluate implementation, make adjustments; 09-10 Begin rollout with training
p	The district (via grade level/content and vertical teams) will develop instructional pacing guides for the core subject areas, PreK 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.	Begin development March 2007. Summer 2007 training. Benchmark assessment data analysis by content/grade teams 07-08. Vertical team meetings Feb. 08. Review & add to guides during full day meetings May 08.

Action Plan (for all three goals)		Timeline
q	The district will research, study, and implement ways to use technology 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.	Begin 2007-2008, then ongoing updating of pacing guides.
r	The district (Kindergarten Team)/schools will investigate and acquire/use technology resources to enhance the kindergarten program as it moves to a full day implementation in 2007-2008.	Begin investigation spring 2007; continue 2007-2008
s	The district/schools (led by Dir., Technology Services) 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.	Plan 2007-2008. Begin rollout, 2 schools per year, in 2008-2009

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

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Asst. Supt., Curriculum & Instruction (C&I) C&I Program Coordinators	<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
Dir., Technology Services	<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. Students' acquisition of technology and information literacy skills needed to succeed in the classroom and the workplace.

Currently, Monrovia USD does not have a set of sequential, explicit standards for either technology or information literacy skills. 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 drive technology use in the district. In addition, they will result in an increased level of standardization throughout the district, so that students at each grade level will have more or less the same skills, regardless of which school they attend or which teachers they have.

A committee composed of a representative from each site, including teacher leaders, a principal, the high school Library Media Teacher, the Director of Technology Services, and district curriculum administrators, will develop a set of standards, benchmarks, and evaluation measures for student acquisition of technology and information literacy skills, with a focus on problem-solving skills. They will consider sets of standards such as ISTE’s National Educational Technology Standards for Students (NETS*S), the American Association of School Librarians’ 21st Century Library Learning Standards, California content standards, and examples from other districts. The technology and information literacy skills plan will be implemented across all grade levels simultaneously. “Power” standards will be identified by Summer 2007, with implementation of plan essentials during 2007-2008. The district will then phase in increased detail, dovetailing with increasingly in-depth development of instructional pacing guides, which will be updated to include technology resources and timing of teaching and assessing technology

and information literacy skills. Full implementation will begin with the 2008-2009 school year. The committee will examine what is working and what skills need to be added or addressed differently and will update the skills plan annually, in June.

Currently, elementary students learn technology skills while doing classroom assignments and using curriculum-oriented software; at all schools, classes are scheduled to use computer labs regularly for assignments and developing technology skills. Teachers, as they are able, provide instruction as they deem necessary or appropriate, sometimes in isolation, sometimes in the context of an assignment. All schools have keyboarding tutorial programs that students can use to develop their skills.

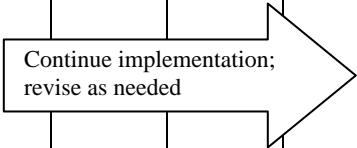
At both middle schools, many students are able to take a technology course as part of the exploratory wheel (Clifton) or as an elective (Santa Fe). These courses include Office applications, keyboarding skills, PhotoShop, conducting research, and career exploration programs. In addition, teachers can 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 in or focused 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.

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 students are taught information literacy skills through adopted textbook materials and classroom instruction in fulfillment of the relevant California content standards. Selected high school students can take AVID, which includes lessons in note taking, study skills, time management, effective textbook reading, and library research skills.

Library staff assist teachers and students one-on-one with instruction in the use of library resources. At Monrovia High School, the Library Media Teacher conducts two workshops with all freshman English classes (accessing the high school and public library catalogs and a 2-day research unit) and works with teachers and other classes during the year as needed/requested.

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

	OBJECTIVES & BENCHMARKS:	2008	2009	2010	2011	2012
1	MUSD will develop and implement a set of standards, benchmarks, and evaluation measures for student acquisition of technology and information literacy skills.	Identify power standards, begin implementation; develop plan detail				
						
2	By June 2012, 70% of teachers will rate their students and themselves at least Intermediate in information literacy skills on Standard 16d, Question 1, on the Technology Assessment Profile.	35%	40%	50%	60%	70%

Action Plan		Timeline
a	Committee will develop a set of standards, benchmarks, and evaluation measures for student acquisition of technology and information literacy skills. Plan will be developed, evaluated, and updated over time.	Power standards by summer 2007. Full scale plan by June 2008. Annual evaluation in June.
b	Administrators and teachers will be informed about the new standards and provided training as needed.	Begin training fall 2007. Extensive training summer and fall 2008.
c	District will consider adding identified technology and information literacy skills standards to the elementary-level standards-based report card.	2009-2010 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.	2009-2010 at the earliest
e	Elementary and middle school students will be taught technology and information literacy 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 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 software/courseware (such as technology components of core text series, reinforcement and practice resources, MY Access!, Tungsten for assessments, Accelerated Reader, Get Ahead Math, NovaNet, 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

Action Plan		Timeline
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
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 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

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
Curriculum & Instruction Coordinators	<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

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Director, Technology Services	<ul style="list-style-type: none"> Advise on technology compatibility issues/logistics and technical feasibility of technology and information literacy skills plan

3f. 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 AlphaSmarts, Inspiration for concept mapping, and Edmark software. The standalone program SESP is used for IEP development.

English Learners at the middle school level use MY Access! for writing instruction and (at Santa Fe) Rosetta Stone. English language arts text series provide audio materials in primary languages. High Point Teacher’s Editions reference Inspiration for lessons in concept mapping.

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.

GOAL 3f.1: The district will maintain ADA compliance in ensuring equal and appropriate access to technology to all students.

OBJECTIVES & BENCHMARKS:		2008	2009	2010	2011	2012
1	By June 2008 and thereafter, all students will have appropriate access to technology.	100%	100%	100%	100%	100%

Action Plan		Timeline
a	Development of “Technology Teaching Spaces” at each school (under investigation by the district) will provide equity of access to cutting edge classroom instructional technology to all classes.	Plan 2007-2008. Begin rollout, 2 schools per year, in 2008-2009
b	Accelerated Reader will be emphasized with a district-wide K-8 implementation/alignment of books and quizzes. AR provides quizzes for all reading and interest levels.	AR use expected to increase in 2007-2008

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Teachers	<ul style="list-style-type: none"> • Ensure equity of access by using Technology Teaching Spaces • Supervise student use of Accelerated Reader and other appropriate software
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
Director, Special Education	<ul style="list-style-type: none"> • Ensure that SESP is properly used • Ensure that appropriate technology is available to students as per their IEPs or 504 Plans

Monrovia USD has a Board-approved Internet Acceptable Use/Safety Policy for both staff and students. Students and parents receive and sign the Acceptable Use Policy each year as part of registration packets. Teachers sign the AUP every year. 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. During spring 2007, the district will re-examine and redesign the AUP/permission procedure and forms to ensure that all students have signed AUPs before being allowed to use district computers.

Students use a generic log-in that gives access to certain resources and limits others. Content filtering is managed by the district using Smart Filter.

GOAL 3f.2: The district will strive to provide a safe environment for on-line activities.

OBJECTIVES & BENCHMARKS:		2008	2009	2010	2011	2012
1	By June 2008, and in every succeeding year, the district's Acceptable Use Policy (AUP) will be reviewed to ensure alignment with the Children's Internet Protection Act and any new legislation and will be implemented with a monitoring process to provide protection for 100% of students.	Annual review; 100% signed AUPs				

Action Plan		Timeline
a	Office staff at each school will create and keep up-to-date a list of students who do not have permission to use computers/the Internet. This list will be distributed to teachers, lab techs, and library staff. A tag in Aeries may be used to provide this information to staff.	Begin 2007-2008

Person Responsible	Monitoring, Evaluation, and Program Modification Process
Teachers	<ul style="list-style-type: none"> • Monitor student use of district electronic information resources • Check to ensure that students without signed AUPs do not use district computers • Collect student AUPs (elementary level)
Site administrators	<ul style="list-style-type: none"> • Assure that 100% of students return signed permission forms • Ensure school compliance with district policies
Senior Director, Pupil Services	<ul style="list-style-type: none"> • Annually evaluate effectiveness of monitoring/tracking procedures and make recommendations to site administrators
Director, Technology Services	<ul style="list-style-type: none"> • Review district policies annually for compliance with new legislation

3g. 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.

Teachers have their choice of electronic or manual methods of keeping gradebooks. All teachers at Clifton Middle School use GradePro. Some staff at Sante Fe Middle School use GradeKeeper; some use the ABI online gradebook. About half of Monrovia High School teachers use the ABI gradebook. All teachers can use the ABI gradebook if they desire.

During spring 2007, Plymouth Elementary will pilot the use of security tokens (which cost \$100 per teacher) to enable Internet-based access to ABI for teachers. Additional Remote Access for sites is planned for Spring 2007.

Tungsten Learning Systems is used at all elementary and middle schools to administer, record, and report monthly benchmark assessments in English language arts and mathematics for grades 2-8. Staff use reports from Tungsten in order to identify student needs and plan instruction. The online writing program MY Access! is used for the district sixth and eight grade writing assessments. In addition, the district will acquire the Action Learning Systems program for periodic benchmark assessments in middle school (social studies and science) and high school (all four core areas plus physical education and health). Pre-made tests will be used in 2007-2008; these will then be evaluated and adapted to make them more relevant to the district. These tests will be taken and recorded via scannable sheets.

During the spring of 2007, the district will introduce the data warehouse and standards-based test-bank program Data Director. Student data from Aeries, Tungsten, and Action Learning Systems will be available via Data Director. Whereas currently teachers are given print-outs of student information, with Data Director they will be expected to access reports themselves. Once teachers have experience using Data Director, they will be taught and encouraged to develop

their own standards-based classroom exams using the test bank part of the program.

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

OBJECTIVES & BENCHMARKS:		2008	2009	2010	2011	2012
1	By June 2008, and each year thereafter, 95% of teachers will use Tungsten Learning, Aeries, and/or Data Director to inform instruction and monitor student progress.	95%	95%	95%	95%	95%

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 with Action Learning Systems and Data Director assessments.	All teachers have a dedicated computer. Scanners to be provided at each site and/or one super-scanner at DO by fall 2007.
b	All teachers will take attendance online using ABI/Aeries. (May exclude physical education teachers)	By fall 2007
c	Sites will pilot and if desired expand use of teacher secure access to ABI from home.	Plymouth pilots spring 2007; expand to schools that desire it in 2007-2008
d	All teachers will have web-based access to Data Director for student assessment data and developing standards-based tests. Data Director will include information from Aeries, Tungsten, and Action Learning Systems.	Available by June 2007; training for administrators and key teachers by June 2007, training for other teachers fall 2007; use for classroom standards-based tests by 2008-2009
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	Action Learning Systems will be used for benchmark assessments at the secondary level.	Begin 07-08; adapt packaged tests for 08-09 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)

Person Responsible	Monitoring, Evaluation, and Program Modification Process
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 Data Director; determine if additional training or encouragement is required • Ensure that teachers receive adequate training
Curriculum & Instruction Coordinators	<ul style="list-style-type: none"> • Evaluate pre-packaged ALS assessments after first use in 07-08; adapt to district needs • Analyze and report results of relevant questions on Technology Assessment Profile
Asst. Supt., Curriculum & Instruction	<ul style="list-style-type: none"> • Conduct periodic site visits, meetings with principals, and monthly administrator meetings • Evaluate pre-packaged ALS assessments after first use in 07-08; adapt to district needs

3h. 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 PhoneMaster for Web) for attendance calling and event announcements. (Site principals call in their announcements on a fixed schedule.) This system could be used for emergency messages.

The district website is maintained by the district with consultant assistance; specified/authorized staff can add information to the site. All schools but one have their own website (on the district web server); these are 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 3h.1: Technology will be used to enhance home-school communication.

	OBJECTIVES & BENCHMARKS:	2008	2009	2010	2011	2012
1	By June 2011, 100% of teachers will check their district email daily (as reported on the Technology Assessment Profile).	70%	80%	90%	100%	100%
2	By June 2008, and each year thereafter, all schools will have websites with teacher contact information (voicemail extension and district email address).	100%	100%	100%	100%	100%

OBJECTIVES & BENCHMARKS:		2008	2009	2010	2011	2012
3	Monrovia Unified School District will maintain high speed voice and data networks including phone systems at each school.	100%	100%	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 2007
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 2007; elementary schools by June 2008
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, 07-08 Investigate & make purchase decision; 08-09 Pilot, evaluate implementation, make adjustments; 09-10 Begin rollout with training
e	The district will investigate allowing parent online access to their children's records in Aeries.	Capability in 2007-2008; access decision by June 2008
f	All teachers will have and use voicemail.	Current and ongoing
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 2008
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

Person Responsible	Monitoring, Evaluation, and Program Modification Process
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.
Curriculum & Instruction Coordinators	<ul style="list-style-type: none"> • Analyze and report results of relevant questions on Technology Assessment Profile

3i. Benchmarks and Implementation Timeline: addressed for each goal within sections 3d-3h.

3j. Monitoring of Curriculum Component: addressed for each goal within sections 3d-3h.

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.

	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%).

	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%

	Not applicable (Non-User)	Beginning	Intermediate	Proficient
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

9a, 9f, 9g concern knowledge and use of resources in lessons

9d and 9e concern communication

9h and 9i concern information literacy skills

9f and 9i concern policy and law

In order to be "Proficient" in each sub-standard, teachers must have taught students how to accomplish each skill.

		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%

		Not applic. (Non-User)	Beginning	Inter- mediate	Proficient
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

16a and 16b concern communication using technology
 16d and 16e concern student information literacy skills
 16f and 16g concern assessment

In order to be "Proficient" in each sub-standard, teachers must have taught students how to accomplish each skill.

		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%
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(1)	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, c. 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 Curriculum and Instructional Services, the Associate Superintendent of Human Resources, and the district Professional Development Committee 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).

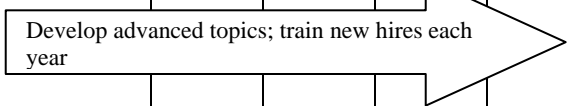
Technology-related training in 2006-2007 has included Excel and Power Point summer workshops (60 participants); Tungsten Learning, PhoneMaster, and the district Intranet for administrators; BTSA Standard 16 for new teachers; technology topics on buy-back days; and quick site-based in-services on topics of immediate interest such as GradePro and ABI.

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

and Human Resources, Curriculum, and Technology leaders will conduct a needs assessment, identify power standards for teachers for both personal and instructional technology proficiencies, and determine the best way to approach each standard. Training in the first year will focus on these power standards. Meanwhile, detail on additional standards will be filled out. Teacher standards as a whole will provide a framework for staff development planning; in addition, individual teachers' technology 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 staff technology leaders who are willing to help out when asked. At Monrovia High School, a part time (2 periods a day) Tech Coordinator and a full time Data Clerk provide assistance. Some teachers who are weaker in technology skills may have "tech buddies" who are stronger in these skills. 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:	2008	2009	2010	2011	2012
1	By June 2012, 95% of teachers and administrators will have been trained to access and use data from district online standards-based assessment tools (such as Tungsten, Action Learning Systems, and Data Director).	95%	95%	95%	95%	95%
						
2	MUSD will develop a set of technology standards for teachers, including both personal and instructional proficiency.	Identify power standards, begin implementation	Full implementation	Revise if needed	Revise if needed	Revise if needed
3	By June 2012, 80% of teachers will rate themselves at least Intermediate in overall Computer Knowledge and Skills on the Technology Assessment Profile.	60%	65%	70%	75%	80%
4	By June 2012, 75% of teachers will rate themselves at least Intermediate in Standard 16, Using Technology to Support Student Learning, on the Technology Assessment Profile.	35%	45%	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.	Power standards by summer 2007. Full scale plan by June 2008. Implement power standards beginning 2007-2008.

Action Plan		Timeline
b	Administrators (at Instructional Leaders meetings) and teachers (at Wednesday meetings) will be informed about the new teacher standards.	After standards are determined
c	Professional development plans for each year will be developed by Curriculum and Instruction, Human Resources, and Technology Depts. 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 2007
e	Administrators and teachers will be trained on the updated student standards, benchmarks, and assessment measures for technology and information literacy skills. Teachers will be taught how to teach the standards to students. Asst. Supt. of Curriculum & Instruction will supervise; train-the-trainers model will be used.	Begin fall 2007 with power standards; continue as detail of standards is developed
f	All teachers will be trained on using the technology components of new textbook adoptions (vendor training provided at the site level at beginning of implementation; peer sharing and modeling of best practices as teachers develop experience with the text series).	New adoption implementation: Science 07/08; Math 08/09; ELA/ELD 09/10
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
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 2007, 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 2007
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.	08-09 for pilot; full rollout in 09-10

Action Plan		Timeline
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 NovaNet. Initial formal training for the group provided by the vendor.	Spring 2007 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 2007; 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
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 Data Director: 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 2007. Training for rest of staff 2007-2008
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. 2007
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, including Tungsten and Action Learning Systems. Tungsten as needed for new users. ALS training provided by vendor for administrators and instructional leaders (who will then serve as trainers). District content/grade teams meet after each benchmark assessment to analyze data.	ALS beginning spring and summer 2007, continuing throughout year
v	Staff will be provided training on using district email. Technology Dept. has prepared a handout on how to use district webmail.	For new teachers in the summer, otherwise on-demand as needed

Action Plan		Timeline
w	New teachers will attend a week-long 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
y	Site administrators will receive training on how to analyze and use Technology Assessment Profile reports and data.	By Sept. 2007 (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. Benchmarks and Timeline: included in Section 4b, above.

4d. Monitoring Process for Professional Development Component

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 Curriculum & Instruction • 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., Curriculum & Instruction 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. Hardware, software, network and telecommunications infrastructure, physical plant, and technical support needs to support Curriculum and Professional Development Components.

5b. Available hardware, software, 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 district-wide student to up-to-date (48 months old or less) computer ratio of 5:1 by June 2012
- A dedicated teacher computer in each classroom
- Computer labs at each school for assessments and instructional use
- 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)
- Equipment for Technology Teaching Space room at each school
- Adaptive devices for students needing them
- Scanners (per school or centrally located) for Action Learning Systems and other standards-based assessments
- Up-to-date phone systems for two-way communication between home and school, including voicemail and centralized auto dialer (currently PhoneMaster Web)

Computers:

Need: A district-wide student to up-to-date (48 months old or less) computer ratio of 5:1

Have: The following chart shows per-school ratios of students to instructional computers and students to “up-to-date” computers (those 48 months old or less) in March 2007, as per 2006 CBEDS and the 2007 State Technology Survey. It also shows numbers of computers in libraries and labs.

School	Stdnt Enrollment	Total Computers	Stdnt: Comp. Ratio	Up-to-date Comp. <4 yrs	Stdnt: up-to-date Comp. Ratio	# of comp. in libraries	# of comp in labs
Bradoaks Elementary	582	145	4.0:1	37	15.7:1	2	32
Mayflower Elementary	606	137	4.4:1	16	37.9:1	4	30
Monroe Elementary	504	143	3.5:1	36	14.0:1	2	33
Plymouth Elementary	486	169	2.9:1	74	6.6:1	2	32
Wild Rose Elementary	514	142	3.6:1	13	39.5:1	2	21
Elem. Totals	2692	736	3.7:1	176	15.3:1	12	148
Clifton	747	264	2.8:1	79	9.5:1	25	71
Santa Fe Middle	727	286	2.5:1	144	5.0:1	11	91
MS Totals	1474	550	2.7:1	223	6.6:1	36	162
Monrovia HS	1871	479	3.9:1	119	15.7:1	54	75
Canyon Oaks	136	50	2.7:1	1	136.0:1	0	0
HS Totals	2007	529	3.8:1	120	16.7:1	54	75
Mountain Park	84	8	10.5:1	0	none	0	0
K-12 Totals	6257	1823	3.4:1	519	12.1:1	102	385

The following chart shows the age of instructional computers at each school as reported on the 2007 State Technology Survey.

School	# of comp	<1 yr old	>1 and <2	>2 and <3	>3 and <4	>4 years old	# to be added by 6/07	# to be retired by 6/07
Bradoaks Elementary	145	20	0	17	0	108	0	0
Mayflower Elementary	137	13	0	2	1	121	0	0
Monroe Elementary	143	2	0	34	0	107	0	0
Plymouth Elementary	169	0	0	70	4	95	0	0
Wild Rose Elementary	142	4	1	0	8	129	40	0
Elem. Totals	736	39	1	123	13	560	40	0
Clifton	264	0	42	37	0	185	0	0
Santa Fe Middle	286	14	42	72	16	142	0	0
MS Totals	550	14	84	109	16	327	0	0
Monrovia HS	479	55	22	20	22	360	0	0
Canyon Oaks	50	0	0	0	1	49	17	0
HS Totals	529	55	22	20	23	409	17	0
Mountain Park	8	0	0	0	0	8	0	0
K-12 Totals	1823	108	107	252	52	1304	57	0

To be acquired: The following chart shows the numbers of new computers that will need to be purchased or leased in each year in order to meet the district objectives in reducing the student to up-to-date computer ratio. District enrollment is projected to remain stable. If computers are leased, the leases will be for four years.

	07/08	08/09	09/10	10/11	11/12
Carryover number of computers	549	801	856	1077	1225
Less computers becoming >48 mos.	52	252	83	162	304
New computers to be acquired	304	307	304	310	318
Total of up-to-date computers	801	856	1077	1225	1239
Projected Enrollment	6247	6247	6247	6247	6247
Student : up-to-date computer ratio	7.8:1	7.3:1	5.8:1	5.1:1	5.1

Need: A dedicated teacher computer in each classroom

Have: All classrooms currently have dedicated teacher computers.

To be Acquired: The status quo will be maintained through computer purchases shown in the chart above. When the new science building at Monrovia High School is built, laptops will be provided to 13 teachers.

Need: Computer labs for assessment and instruction

Have: All schools except Canyon Oaks High School currently have at least one lab that can be used for assessment and instruction. As of March 2007, Wild Rose Elementary School's lab does not contain sufficient computers for use by an entire upper grade class; however, before June, it will be upgraded to 35 computers. A lab with sufficient computers for the use of NovaNet will be opened at Canyon Oaks during spring 2007.

To be Acquired: At minimum, the status quo will be maintained. Schools may choose to update their labs per available funding. At Monrovia High School, the new science building being built during the course of this Plan will include a computer lab and two class sets (36 each) of laptops. The computers in the MHS library lab will be replaced by June 2010.

Printers:

Need: Sufficient printing capacity for students and teachers

Have: 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.

To be Acquired: The status quo will be maintained. It is projected that replacements for older printers will be purchased at the rate of 20 to 25 a year, each year of the Plan.

Equipment for Technology Teaching Spaces:

Need: At each school, a tech-ready 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.

Have: This is a new concept for the district.

To be Acquired: After planning in 2007-2008, it is planned that two schools a year will equip

and begin use of Technology Teaching Spaces.

LCD/DLP Projectors:

Need: Each elementary school should have at least five LCD/DLP projectors (one each for the lab and the library and three for sharing). Each middle school should have about 18 (for labs, libraries, and sharing). Monrovia High School should have two or three projectors for sharing in each section of the campus. Canyon Oaks should have four. The new history/social studies and science adoptions include technology resources which are best used with projectors.

Have: Santa Fe Middle School currently has about 15 projectors; Clifton has 10 laptop/projector combos which are all checked out. Monrovia High School has at least two projectors available for checkout. By September 2007, Canyon Oaks will have two projectors.

To be Acquired: LCD/DLP projectors will be purchased as follows: one each year for each elementary school (5, 25 total over the course of the Plan); two each year for the middle schools (2, 10 total); 15 for Monrovia High School (3 a year, plus 13 for the new science building when it opens, as part of modernization); 2 for Canyon Oaks High School.

Other Presentation Equipment:

Need: Other presentation devices available for teachers to use in delivering instruction (such as interactive whiteboards, handheld whiteboards, and document cameras).

Have: School purchases of these devices have varied widely.

To be Acquired: Acquisition of presentation equipment will be a site decision.

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.

Mark-sense Scanners:

Need: Scanners (per school or centrally located) for Action Learning Systems and other standards-based assessments

Have: Currently, the elementary and middle schools each have one such scanner dedicated to assessment; the District Office has two for centralized scanning. Monrovia and Canyon Oaks High Schools have none.

To be Acquired: The district is purchasing one plain-paper scanner for each school and one high-speed scanner for the District Office for centralized scanning.

Policies and procedures:

The district maintains standards for classroom computers (Windows) and printers (HP). These standards are updated about every six months. All hardware requisitions are routed to the Director of Technology Services; hardware is then ordered centrally. If a school has special

needs not covered by standard configurations, the Director will evaluate those needs on a school by school 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.

Have: The district already owns or uses most of the resources listed (items in regular typeface). See Section 3b for additional detail.

To be Acquired: The items in boldface (not yet owned or used by the district) 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.

- Productivity suite: Microsoft Office is standard on all computers purchased
- 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 (Accelerated Reader, Waterford, Starfall, Reading A to Z, Rosetta Stone, Get Ahead Math, Accelerated Math, Geometer's Sketchpad, etc.)
- Vantage Learning MY Access! writing practice and assessment online program
- **NovaNet online courseware**
- Inspiration, Kidspiration, and/or **Thinking Maps** software
- **Online course management system** (currently using TeacherWeb and Quia)
- **Software and online resources to use in all-day kindergarten program**
- Keyboarding tutorial/practice programs
- Administrative software and services (Aeries/ABI **with parent portal capability**, Tungsten Learning Systems, Data Director, **Action Learning Systems benchmark assessments**, grade book programs, library automation)
- Email for all appropriate staff

Policies and procedures:

At many schools, if teachers wish to order software, site administrators or Program Advisors request information on how the teacher proposes to use the software and, later, request a report on the way the software was in fact used.

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.

Have: Monrovia Unified School District operates a multi-media network capable of video transmission and videoconferencing. The district data network currently includes 13 virtual locations:

Locations on the District Network	
Bradoaks Elementary	Monrovia High
Mayflower Elementary	Mountain Park School
Monroe Elementary	Canyon Oaks High
Plymouth Elementary	Monrovia Community Adult School
Wild Rose Elementary	Canyon Early Learning Center
Clifton Middle	Monrovia USD District Office
Santa Fe Middle	

The district has two network hubs: one on the campus of Canyon Oaks High School and one at the District Office. The Canyon Oaks hub has a one Gigabit connection to the Internet service provider; each other network location has a one Gigabit connection to the hub. The District Office hub connects to the Internet via Canyon Oaks; district sites connect to the District Office via point-to-point T-1 lines. School sites have fiber optic backbones, Cat-6 wiring, and a mix of 100Mbps and Gigabit to the desktop. Wireless access is currently limited. 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 separate voice network is a centralized, Nortel Meridian system. 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.

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

- The district is investigating adding wireless capability (moving to a wireless WAN and wireless backbone, but no plans have been made as of March 2007).
- The district will acquire server upgrades and replacements (many servers are aging) and UPS (Uninterrupted Power Supplies) as needed. An extra server may be needed for Accelerated Reader.
- Additional switches to get network access at more desktops to higher speeds will be purchased as needed.
- The district is considering developing a connection between the TV/coaxial network and the data network. Canyon Oaks would be the head end for all sites.
- The district is considering the feasibility of a district-wide Voice over IP solution.

Physical Plant:

All school sites and district offices have sufficient electrical capacity for the current and expected technology. Due to passage of a local bond measure in spring 2006, there will be changes at Monrovia High School: a new science building, some other new classrooms, a gym, internal connections upgrades, and other things still to be determined. Groundbreaking will occur during summer 2008. The timeline for the project has otherwise not yet been determined.

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 Director of Technology Services will regularly assess technical support to ensure maximum efficiency; the district will make adjustments as needed per available funding.

Current: Two Technical Support Specialists (one for elementary schools and one for secondary schools) and a Technical Support Assistant (who deals mainly with voice and data network issues) provide 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 Data Support Specialist deals with the student information system and district websites. A secretary in the Technology Department also provides assistance.

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 perform technology troubleshooting. The troubleshooter attempts to resolve the problem; if unable to do so, s/he informs the office manager, who creates a work order electronically. The district uses the web-based MyTechDesk work ticket management system from Imperial County Office of Education. The Director of Technology Services prioritizes work for the technicians, with the goal that all tickets are completed in at most a week.

On the Technology Assessment Profile, teachers were asked to indicate the typical response time when they report a technical problem (hardware, software, network connection); as reported in March 2007, their answers were as follows: two hours or less, 7%; more than two hours but by the end of the day, 12%; within two to five weekdays, 48%; more than a week but less than a month, 22%; a month or more, 12%.

To do: The district will investigate adding a new Technical Support Specialist in approximately 2011 as numbers of computers increase. Beginning in 2007-2008, ROP at Canyon Oaks will begin a Computer Repair/A+C+ Certification program; student interns from this program will assist with computer troubleshooting and repair in the district.

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:	2008	2009	2010	2011	2012
5.1	By June 2012, the ratio of students to up-to-date computers will be 5:1 district-wide.	7.8 : 1 Acquire 304 computers	7.3 : 1 Acquire 307 com- puters	5.8 : 1 Acquire 304 com- puters	5.1 : 1 Acquire 310 com- puters	5 : 1 Acquire 318 com- puters

	OBJECTIVES & BENCHMARKS:	2008	2009	2010	2011	2012
5.2	In each year, there will be a computer in each classroom dedicated to teacher use.	100%	100%	100%	100%	100%
		Replacements included in Obj. 5.1				
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	Buy 20 to 25	Buy 20 to 25
5.4	Equipment will be purchased and Technology Teaching Spaces will be set up in schools.	Plan	Add 2 schools	Add 2 schools	Add 2 schools	Add 2 schools
5.5	Schools will have sufficient LCD/DLP projectors for instructional use.	Buy 10	Buy 13	Buy 10	Buy 11	Buy 10
5.6	Schools will purchase other presentation equipment as desired.	TBD	TBD	TBD	TBD	TBD
5.7	Schools will purchase recording equipment as desired.	TBD	TBD	TBD	TBD	TBD
5.8	District will have sufficient scanners for use with assessments.	Buy 9 for schools plus 1 high speed for D.O.	TBD	TBD	TBD	TBD
5.9	Adaptive devices will be acquired for Special Education students as per IEPs.	As needed	As needed	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	Director, Technology Services 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	Director, Technology Services 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:	2008	2009	2010	2011	2012
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%	100%	100%
5.11	NovaNet courseware will be used at the high schools and the Adult School.	Expand use	Use	Use	Use	Use
5.12	District will investigate and, if desired, acquire an online content management system.	Invest. & pilot	Pilot	Roll-out	Use district-wide	Use district-wide
5.13	Action Learning Systems Benchmark Assessments will be used in middle and high schools.	Use purchased tests	Adapt purchased tests	Revise as needed	Revise as needed	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	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 investigate enabling the Aeries parent portal.	Capability; decision by June	TBD	TBD	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. Director, Technology Services supervises licensing. Site and district Curriculum administrators monitor and evaluate software and services.	5.10-5.16

Telecommunications and Networking Infrastructure:

	OBJECTIVES & BENCHMARKS:	2008	2009	2010	2011	2012
5.17	The district will investigate adding wireless capability (moving to a wireless WAN and wireless backbone).	TBD	TBD	TBD	TBD	TBD
5.18	The district will upgrade and replace servers and UPSs as needed.	Upgrade /replace 2	Upgrade /replace 2	Upgrade /replace 2	Upgrade /replace 2	Upgrade /replace 2
5.19	Network hardware will be updated as needed.	As needed	As needed	As needed	As needed	As needed
5.20	The district will provide a connection between the TV/coaxial network and the data network.	Deploy	Main-tain	Main-tain	Main-tain	Main-tain
5.21	The district will consider the feasibility of a district-wide Voice over IP solution.	TBD	TBD	TBD	TBD	TBD

Physical Plant:

	OBJECTIVES & BENCHMARKS:	2008	2009	2010	2011	2012
5.22	The district will carry out modernization and new construction at Monrovia High School.	Plan	Break ground	Carry out	Carry out	Carry out

Technical Support:

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

	OBJECTIVES & BENCHMARKS:	2008	2009	2010	2011	2012
5.23	Student interns will be available to provide technical support.	Begin program	Main-tain	Main-tain	Main-tain	Main-tain
5.24	The district will consider hiring an additional Technical Support Specialist as needed.	----	----	----	Hire if needed	Main-tain

5d. Monitoring Process

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	Director, Technology Services (inventory and State Tech Survey) Coordinators, Curriculum & Instruction Site administrators	Purchase and inventory throughout the year; State Technology Survey in March
Software/online services investigated, piloted, decided upon, purchased, implemented	Director, Technology Services Coordinators, Curriculum & Instruction Site administrators	Purchase throughout the year; ordering by July of each year
Network and telecommunications upgrades planned and carried out	Director, Technology Services	Ongoing
New building/modernization carried out	Chief Business Officer	As per plan
Technical support performance monitored for consistent and timely response	Director, Technology Services	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 • Instructional Materials/Library Block Grant • Economic Impact Aid • Facilities Budget: <ul style="list-style-type: none"> State construction funds Local G.O. bonds Developer fees Redevelopment Revenue • Education 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 four-year leasing plan for computers. 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.**

	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	Potential Funding Sources
New Building/Modernization Total Costs						
Monrovia High School (including phone systems, computers & network infrastructure)			\$45,000,000			G.O. Bond; State construction funds
Computer Hardware and Peripherals						
Student and teacher computers	\$334,400	\$337,700	\$334,400	\$341,000	\$349,800	EETT; Perkins; Categorical; EdTech Voucher, Gen. Fund
B&W laser printers	\$10,350	\$10,350	\$10,350	\$10,350	\$10,350	" "
Equipment for Technology Teaching Spaces	----	\$16,000	\$16,000	\$16,000	\$16,000	" "
LCD Projectors	\$7,500	\$9,750	\$7,500	\$8,250	\$7,500	Site categoricals; site budgets (Gen. Fund)
Presentation equipment	TBD	TBD	TBD	TBD	TBD	" "
Recording equipment	TBD	TBD	TBD	TBD	TBD	" "
Scanners	\$9,500	TBD	TBD	TBD	TBD	District categorical
Supplies (bulbs, toner)	\$45,000	\$47,250	\$49,625	\$52,100	\$54,700	Site categoricals; site budgets
Network servers*	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	ERate; EETT; Title I; Gen. Fund; EdTech Voucher
Electronic Learning Resources & Administrative Software						
Accelerated Reader	\$68,000	\$17,000	\$17,000	\$17,000	\$17,000	District categorical; site budgets

MY Access!	\$14,750	TBD	TBD	TBD	TBD	Site categoricals; site budgets
NovaNet	\$59,000	\$59,000	\$59,000	\$59,000	\$59,000	CAHSEE Prep
Concept mapping software	TBD	TBD	TBD	TBD	TBD	Site categoricals; site budgets
Resources for kindergarten	TBD	TBD	TBD	TBD	TBD	Site & district categorical; Gen. Fund
Technology components of adopted text series	TBD	TBD	TBD	TBD	TBD	IMF
Other curriculum-oriented software	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	Site & district categoricals
Online content management system	TBD	TBD	TBD	TBD	TBD	Site & district categorical; Gen. Fund
Tungsten Learning	\$66,000	\$66,000	\$66,000	\$66,000	\$66,000	Site & district categoricals
Data Director	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	" "
Action Learning Systems	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	" "
Aeries/ABI	\$7,500	\$15,000	\$15,000	\$15,000	\$15,000	Gen. Fund
Services facilitating home/school communication (web-hosting)*	\$25,000	\$5,000	\$5,000	\$5,000	\$5,000	General Fund; ERate
Library automation	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	Site budgets
Website design, development/maintenance software	\$25,000	\$5,000	\$5,000	\$5,000	\$5,000	General Fund
Microsoft licenses (universal CALs)*	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	Gen. Fund; EdTech Voucher
Security tokens (for offsite ABI access)	\$35,000	\$2,000	\$2,000	\$2,000	\$2,000	Site budgets

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	\$10,000	\$10,000	" "
Ethernet switches*	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	" "
Cables and connectors*	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	" "
Wireless components*	TBD	TBD	TBD	TBD	TBD	" "
TV/coaxial network connection*	\$25,000	\$5,000	\$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	\$20,000	\$20,000	Categoricals
Training costs (outside vendors, conferences)	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	Categoricals
Technical Support and Maintenance						
Technology support salaries and benefits	\$505,000	\$520,150	\$535,750	\$652,540	\$672,120	General Fund
Help desk / work order tracker	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	General Fund
Maintenance contracts*	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	Gen. Fund; ERate
Network Management						
Network operating system*	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	Gen. Fund
Mail server software*	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	Gen. Fund; ERate
Firewall*	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	Gen. Fund
Filtering	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	Gen. Fund
Anti-Virus	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	Gen. Fund
Other network management software	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	Gen. Fund

Telecommunications Services & Internet Access						
Telecommunications/ WAN services*	\$1,005,000	\$1,005,000	\$1,005,000	\$1,005,000	\$1,005,000	General Fund; ERate; CTF
Internet Access*	\$48,000	\$48,000	\$48,000	\$48,000	\$48,000	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
07-08	\$2,563,500	Presentation equipment, recording equipment, concept mapping software, resources for kindergarten, technology components of adopted text series, online content management system, wireless components.	-----
08-09	\$2,461,700	Same as above, plus MY Access!	Costs for Monrovia HS modernization/construction (\$45M), including all infrastructure and equipment costs for the project, cannot be split out by year; hence, they are not included in this chart.
09-10	\$2,624,125	Same as above.	Same as above..
10-11	\$2,590,740	Same as above.	Same as above..
11-12	\$2,620,970	Same as above.	Same as above..

6c. Description of ongoing level of technical support

Please see Section 5a/b for details of technical support. The current level of technical support will be maintained, with hiring an additional Technical Support Specialist considered in 2010-2011 if needed. In addition, a student intern program is planned to begin in 2007-2008 via a new ROP course at Canyon Oaks High School.

6d. Obsolete 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 2007-2008, the district plans to retire 505 older computers, and will continue this process until, by June 2012, 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.

6e. Monitoring Process:

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.)
Director of Technology Services	<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., Curric. & Instruction Coordinators, Curric. & Instruction	<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 how technology's impact on student learning and attainment of the curricular goals, including classroom and school management, will be evaluated.

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

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-3h; in Section 4d, monitoring of the Professional Development Component; in Section 5d, monitoring of the Technology Component; and in the Action Plans (including timelines) 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
Administrator Retreat		X										X
Technology Assessment Profile								X	X	X		
Student technology skills (as per new standards)											X	X
Usage/access records of Data Director					X		X		X		X	
Usage/access records of Tungsten Learning			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. Description of how the information obtained through the monitoring and evaluation process will be used.

A standing District Technology Committee, composed of teachers, site and district administrators, and classified staff and led by the Director of Technology Services, 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.

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 CoursesOnline.

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. Description of how education technology strategies and proven methods for student learning, teaching, and technology management are based on relevant research and effective practices.

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.

9b. Description of thorough and thoughtful examination of externally or locally developed education technology models and strategies.

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 socio-economic 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.

9c. Description of development and utilization of innovative strategies for using technology to deliver rigorous academic courses and curricula, including distance-learning technologies.

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 videostreaming, 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.

In addition to using distance learning for core academic subjects, MUSD high school students have competed in online chess tournaments.

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.

California Department of Education

Appendix C – Criteria for EETT Funded Technology Plans

(Extracted from EETT Request for Application, revised 12/06)

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

- *For corresponding EETT Requirements, see the EETT Technology Plan Requirement (Appendix D).*
- *If the technology plan is revised, insert the Education Technology Plan Benchmark Review Form (Appendix I) in the technology plan.*
- *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
a. <i>The plan should guide the district’s use of education technology for the next three to five years. (For new plan, can include technology plan development in the first year).</i>	5	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 2006-09.
2. STAKEHOLDERS CRITERION	Page in District Plan	Example of Adequately Addressed	Not Adequately Addressed
a. <i>Description of how a variety of stakeholders from within the school district and the community-at-large participated in the planning process.</i>	5-6	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	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.	7-8	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.	8-13	The plan describes the typical frequency and type of use (technology skills/information 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 and academic content standards in various district and site comprehensive planning documents.	13-14	The plan references other district documents that guide the curriculum and/or establish goals and standards.	The plan does not reference district curriculum goals.
d. List of clear goals and a specific implementation plan for using technology to improve teaching and learning by supporting the district curricular goals and academic content standards.	14-19	The plan delineates clear, specific, and realistic goals and target groups for using technology to support the district's curriculum goals and academic content standards to improve learning. The implementation plan clearly supports accomplishing the goals.	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 and a specific implementation plan detailing how and when students will acquire technology and information literacy skills needed to succeed in the classroom and the workplace.	19-23	For the focus areas, the plan delineates clear, specific and realistic goals for using technology to help students acquire technology and information literacy skills. The implementation plan clearly supports accomplishing the goals.	The plan suggests how technology will be used, but is not specific enough to determine what action needs to be taken to accomplish the goals.

f. List of clear goals and a specific implementation plan for programs and methods of utilizing technology that ensure appropriate access to all students.	23-25	For the focus areas, the plan delineates clear, specific and realistic goals for using technology to support the progress of all students. The implementation plan clearly supports accomplishing the goals.	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.
g. List of clear goals and a specific implementation plan to utilize technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs.	25-27	The plan delineates clear, specific and realistic goals for using technology to support the district's student record-keeping and assessment efforts. The implementation plan clearly supports accomplishing the goals.	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.
h. List of clear goals and a specific implementation plan to utilize technology to make teachers and administrators more accessible to parents.	27-29	The plan delineates clear, specific and realistic goals for using technology to facilitate improved two-way communication between home and school. The implementation plan clearly supports accomplishing the goals.	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.
i. List of benchmarks and a timeline for implementing planned strategies and activities.	14-29	The benchmarks and timeline are specific and realistic. Teachers, administrators and students implementing the plan can easily discern what steps will be taken, by whom, and when.	The benchmarks and timeline are either absent or so vague that it would be difficult to determine what should occur at any particular time.
j. Description of the process that will be used to monitor whether the strategies and methodologies utilizing technology are being implemented according to the benchmarks and timeline.	14-29	The monitoring process is described in sufficient detail so that who is responsible, and what is expected is clear.	The monitoring process is either absent, or lacks detail regarding who is responsible and what is expected.

4. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. Summary of the teachers' and administrators' current technology skills and needs for professional development.	30-33	The plan provides a clear summary of the teachers' and administrators' current technology skills and needs for professional development. The findings are summarized in the plan by discrete skills to facilitate providing professional development that meets the identified needs and plan goals.	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.
b. List of clear goals and a specific implementation plan for providing professional development opportunities based on the needs assessment and the Curriculum Component goals, benchmarks, and timeline.	33-37	The plan delineates clear, specific and realistic goals for providing teachers and administrators with sustained, ongoing professional development necessary to implement the Curriculum Component of the plan. The implementation plan clearly supports accomplishing the goals.	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.
c. List of benchmarks and a timeline for implementing planned strategies and activities.	33-37	The benchmarks and timeline are specific and realistic. Teachers and administrators implementing the plan can easily discern what steps will be taken, by whom, and when.	The benchmarks and timeline are either absent or so vague that it would be difficult to determine what steps will be taken, by whom, and when.
d. Description of the process that will be used to monitor whether the professional development goals are being met and whether the planned professional development activities are being implemented in accordance with the benchmarks and timeline.	37-38	The monitoring process is described in sufficient detail so that who is responsible and what is expected is clear.	The monitoring process is either absent, or lacks detail regarding who is responsible and what is expected.

5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT CRITERIA	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. 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.	39-45	The plan clearly summarizes the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support proposed to support the implementation of the district's Curriculum and Professional Development Components. The plan also includes the list of items to be acquired, which may be included as an appendix.	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.
b. Describe the existing hardware, Internet access, electronic learning resources, and technical support already in the district that could be used to support the Curriculum and Professional Development Components of the plan.	39-45	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. The current level of technical support is clearly explained.	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.
c. List of clear benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components.	45-48	The 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.	The 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.
d. Description of the process that will be used to monitor whether the goals and benchmarks are being reached within the specified time frame.	49	The monitoring process is described in sufficient detail so that who is responsible and what is expected is clear.	The monitoring process is either absent, or lacks detail regarding who is responsible and what is expected.

6. FUNDING AND BUDGET COMPONENT CRITERIA	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. List of established and potential funding sources and cost savings, present and future.	50	The plan clearly describes resources* that are available or could be obtained to implement the plan. The process for identifying future funding sources is described.	Resources to implement the plan are not identified or are so general as to be useless.
b. Estimate annual implementation costs for the term of the plan (three to five years).	50-54	Cost estimates are reasonable and address the total cost of ownership.	Cost estimates are unrealistic, lacking, or are not sufficiently detailed to determine if the total cost of ownership is addressed.
c. Description of the level of ongoing technical support the district will provide.	54	The plan describes the level of technical support that will be provided for implementation given current resources and describes goals for additional technical support should new resources become available. The level of technical support is based on some logical unit of measure.	The description of the ongoing level of technical support is either vague or not included, is so inadequate that successful implementation of the plan is unlikely, or is so unrealistic as to raise questions of the viability of sustaining that level of support.
d. Description of the district's replacement policy for obsolete equipment.	54-55	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.
e. Description of the feedback loop used to monitor progress and update funding and budget decisions.	55	The monitoring process is described in sufficient detail so that who is responsible, and what is expected is clear.	The monitoring process is either absent, or lacks detail regarding who is responsible and what is expected.

* In this document, the term "resources" means funding, in-kind services, donations, or other items of value.

7. MONITORING AND EVALUATION COMPONENT CRITERIA	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. Description of how technology's impact on student learning and attainment of the district's curricular goals, as well as classroom and school management, will be evaluated.	56	The plan describes the process for evaluation utilizing 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.	56	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. Description of how the information obtained through the monitoring and evaluation will be used.	57	The plan describes a process to report the monitoring and evaluation results to persons responsible for implementing and modifying the plan, as well as to the 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	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. If the district has identified adult literacy providers, there is a description of how the program will be developed in collaboration with those providers.	58	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.	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.

9. EFFECTIVE, RESEARCHED-BASED METHODS, STRATEGIES, AND CRITERIA	Page in District Plan	Example of Adequately Addressed	Not Adequately Addressed
a. Description of how education technology strategies and proven methods for student learning, teaching, and technology management are based on relevant research and effective practices.	59	The plan describes the relevant research behind the plan's design for strategies and/or methods selected.	The description of the research behind the plan's design for strategies and/or methods selected is unclear or missing.
b. Description of thorough and thoughtful examination of externally or locally developed education technology models and strategies.	59-62	The plan describes references to research literature that supports why or how the model improves student achievement.	No research is cited.
c. Description of development and utilization of innovative strategies for using technology to deliver rigorous academic courses and curricula, including distance-learning technologies (particularly in areas that would not otherwise have access to such courses or curricula due to geographical distances or insufficient resources).	62	The plan describes the process for development and utilization of strategies to use technology to deliver specialized or rigorous academic courses and curricula, including distance learning.	There is no plan to utilize technology to extend or supplement the district's curriculum offerings

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Appendix I – Education Technology Plan Benchmark Review

(Extracted from EETT Request for Application, revised 11/06)

For the grant period ending June 30, 2007

CDS #: **19 64790**

District Name: **Monrovia Unified School District**

The No Child Left Behind Act requires each EETT grant recipient to measure the performance of their educational technology implementation plan. To adhere to these requirements, describe the progress towards the goals and benchmarks in your technology plan as specified below. The information provided will enable the technology plan reviewer better to evaluate the revised technology plan and will serve as a basis should the district be selected for a random EETT review. Include this completed document in your revised technology plan and send the signed hard copy to your regional California Technology Assistance Project (CTAP) office or the California Department of Education (CDE).

1. Describe your district's progress in meeting the goals and specific implementation plan for using technology to improve teaching and learning as described in Section 3.d., Curriculum Component Criteria, of the EETT technology plan criteria described in Appendix C (Provide descriptive narrative in 1-3 paragraphs).

Table 2.3 Goal 1 of the 2002-2007 Technology Plan stated that K-8 students will develop the ability to use and select appropriate tools and technologies to solve different kinds of problems and meet the requirements of curricular-specific assignments and projects. Objective 1 called for (by June 2007) 90% of students to use a variety of productivity software and Internet search tools to enrich their academic program, access information, and produce presentations. Student work has not been collected to measure success on any objectives; however, student work is discussed at Instructional Leadership meetings. On the EdTechProfile Technology Assessment Profile as reported in March 2007, percentages of elementary and middle school teachers reporting that they give their students assignments using the targeted technology tools at least once a week to monthly were as follows: 56% computers and peripherals, 44% Internet, 37% word processing, 31% creating reports or projects, 32% research (using the Internet and/or CD-ROMs), and 15% graphically presenting information.

Objective 2 called for 90% of K-8 students to use critical and creative thinking strategies to select and apply appropriate tools for a given task, to assess the veracity of Internet information, and to demonstrate responsible technology use. On the Technology Assessment Profile (TAP), percentages of K-8 teachers scoring Proficient on relevant standards (meaning that their students also had proficiency) were as follows: 4% on Standard 9g (evaluation and selection of educational software), 5% on 9h (use of electronic research tools and assessment of data gathered), and 7% on 9i (safe and responsible use of technology).

Table 2.5 Goal 1 and its two objectives cover high school students and match the Table 2.3 goal and objectives. On the EdTechProfile Technology Assessment Profile as reported in March 2007, percentages of high school teachers reporting that they give their students assignments using the targeted technology tools at least once a week to monthly were as follows: 64% computers and peripherals, 51% Internet, 56% word processing, 66% creating reports or projects, 59% research (using the Internet and/or CD-ROMs), and 22% graphically presenting information. Percentages of high school teachers scoring Proficient on relevant standards (meaning that their students also had proficiency) were as follows: 3% on Standard 9g (evaluation and selection of educational software), 4% on 9h (use of electronic research tools and assessment of data gathered), and 15% on 9i (safe and responsible use of technology).

Table 2.4 Goal 1 stated that students (K-8) will use technology to enhance and expand curriculum, to become effective communicators and to demonstrate mastery of literacy skills. Objective 1 called for 80% (2006) of students to show an increase of 5% above their (01-02) baseline STAR test scores in English and math. The percentages for both English and math were below 40%. Objective 2 called for 80% (2006) of students to show an increase of 5% over their baseline scores (curricular standards and objectives) in English language arts and math. It is unclear what data should be used to measure this objective.

Table 2.6 Goal 1 was the matching goal for high school students. The district did not meet the benchmark on Objective 1. Of students with both baseline scores and 2006 scores, 401/1075 (37%) showed an increase of 5% or more above their baseline score in ELA, and 260/1106 (23.5%) showed an increase of 5% or more above their baseline score in math. Objective 2 called for (in 2006) 80% of MHS/COHS students to meet or exceed standards in core subjects. Using 2006 CST test data, 42% of 9th graders, 30% of 10th graders, and 25% of 11th graders scored Proficient or Advanced in ELA. In math/science, 9th graders taking Geometry were 46% Proficient or Advanced, and no other subject area or grade was higher than 39% Proficient/Advanced

Goal 2 stated that high school students will demonstrate the ability to apply a logical research process. Objective 1 called for 90% of MHS/COHS students to successfully complete an independent research project. On the TAP, 83% of high school teachers reported giving their students assignments that required them to use technology tools to create reports or projects. Objective 2 called for high school students to create an exit project; this referred to the Senior Project, which is no longer required.

Technology standards for students, called for in the implementation plan, were not developed to any great degree. Videoconferencing facilities are available, but are not much used at sites. Numbers of peripherals vary by site. Some teachers use computers as a presentation tool for multimedia lessons.

2. Describe your district's progress in meeting the goals and specific implementation plan for providing professional development opportunities based on the needs assessment and the Curriculum Component goals, benchmarks and timeline as described in Section 4.b., Professional Development Component Criteria, of the EETT technology plan criteria described in Appendix C (Provide descriptive narrative in 1-3 paragraphs).

Table 2.7 Goal 1 stated that staff will acquire basic and advanced computer and related technological skills. Objective 1 called for 90% of staff to increase personal proficiency in using word processing and desktop publishing graphics. On the Technology Assessment Profile, 97%

of teachers reported themselves to be Beginning users or above in word processing skills. Objective 2 called for 90% of staff to receive training in using Aeries, spreadsheet, or database applications to maintain class records. Training on Aeries/ABI did take place. All teachers have log-ins for ABI and know how to use it (all use it to post grades). Objective 3 called for 90% of staff to use Power Point and related peripherals to create, edit, and present information. All teachers have access to the required peripherals. On the TAP, 86% of teachers reported using technology tools to create instructional materials at least once a week to monthly. 81% of teachers scored as Beginning or better in presentation software skills. Objective 4 called for 90% of staff to access and use electronic resources including the Internet to locate information relevant to personal and professional needs, and to use email. On the TAP, 92% of teachers reported using technology tools to gather information for planning lessons. 85% reported using the Internet for classroom instruction. 93% reported using email for classroom management (including home/school communication).

Table 2.8 Goal 1 stated that staff will be able to assist students in acquiring computer skills and content knowledge in a technology rich environment. Objective 1 called for 90% of staff to be trained in and implement responsible use policies for all student work and technology related lesson plans. All students and staff sign technology/Internet Acceptable Use Policy agreements. On the TAP, 71% of teachers scored at least Beginning on Standard 9i (knowledge of state and federal laws related to educational use of technology, security and shared resource management, and acceptable use policies and safety issues), meaning that they are at least aware of relevant issues. Objective 2 called for 90% of staff to learn data collection procedures using Aeries. That has been accomplished. Objective 3 called for staff to receive training on “just in time” strategies for teaching students how to use technology required in the curriculum. Formal training for this objective has not occurred. Objective 4 called for 90% of staff to be trained in management and strategies designed for using technology in classroom and/or lab situations. At least 90% of staff have been trained in classroom management techniques.

Table 2.9 Goal 1 stated that staff will integrate technology into the curriculum through learning opportunities that are meaningful and engaging, and that increase student achievement of content standards and performance objectives. Objective 1 called for 90% of staff to implement a minimum of two assignments that require productivity software. Anecdotal evidence suggests that this is true—the vast majority of staff do this. Objective 2 called for 90% of staff to implement at least two projects requiring Internet searches, critical thinking and technology skills in the collection, analysis and presentation of data. Anecdotal evidence suggests that this also is true. According to the TAP, 45% of teachers give their students assignments involving technology tools for solving problems or analyzing data. Objective 3 called for 90% of staff to require oral presentations that use presentation software and multimedia technology. It is believed that this benchmark has not been reached, especially at the elementary level.

Training has been offered during staff development afternoons, district in-service days, after school, and during Summer Institute. A cadre of informal technology leaders has emerged at schools. Training of some type has been provided for each of the items listed in the implementation plan: email; Internet for research; applying instructional principles, research, and assessment practices to technology use; and multimedia and telecommunications to support and enhance classroom instruction.

The applicant certifies that the information described above is accurate as of the date of this document. Should the applicant be selected for a random EETT review, the information stated above will be supported by adequate documentation.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above certifications.

Jim Coombs

PRINTED NAME OF AUTHORIZED REPRESENTATIVE

Assistant Superintendent, Curriculum and Instruction Services

TITLE OF AUTHORIZED REPRESENTATIVE

SIGNATURE

DATE

California Department of Education

Appendix J – Technology Plan Contact Information

(Extracted from EETT Request for Application, revised 11/06)

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: Robert

*Last Name: Geiger

*Job Title: Director of Technology Services

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

*City: Monrovia

*Zip Code: 91016

*Telephone: (626) 471-2015

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Please provide backup contact information.

1st Backup Name: Jim Coombs

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

2nd Backup Name: Dr. Louise Taylor

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

*Required information in the ETPRS