



District
Education
Technology
Master Plan

*Hacienda La Puente Unified School District
July 1, 2009 through June 30, 2012*

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1. Plan Duration

The HLPUSD Technology Use Plan will guide the district's use of technology from July 1, 2009 to June 30, 2012.

2. Stakeholders

2a. Description of how a variety of stakeholders from within the school district and the community-at-large participated in the planning process.

The Technology Services Committee was formed to assist the school district in the development, integration, testing, deployment, support of and use of new concepts and technologies as they affect the learning enterprise. The committee is comprised of members from both Network and Communication Services (NCS) and the Educational Technology and Media Center (ETMC). The committee has provided input and advice at their weekly meetings on many issues in the original development of this plan and its current revision including:

Identification of technology and support needs

- Development and assessment of new technologies
- Review and assessments of existing practices and technologies
- Development of deployment and testing plans
- Review and development of related policies and administrative directives
- Review and development of technology plans
- Identification and development of technology-based resources.

Additionally, the Technology Services Department provides monthly updates and important information to the District Leadership Team. The members of the District Leadership Team share this information with the members of their school site community.

Each school site identifies 1-3 Technology Resource Teachers (TRTs). The number of TRTs per site is determined by the school student population, with each site having at least 1 TRT. Through meetings with both NCS and ETMC, the TRTs provide an important means of communication between the Technology Services Department and the teachers at the school site.

Another forum for communication to the sites is the Chief Technology Officer's Principal Advisory Committee. This committee meets with the Chief Technology Officer (CTO) to go over technology plans laid out for the district and to provide input. The administrators in this group also carry information back to their staff and to the other schools in their quadrants.

The groups mentioned above are part of the planning process for the activities, goals and objectives in the Technology Use Plan. Draft copies of the plan were made available on the district's Blackboard page by the Technology Services Committee to the stakeholder groups above and the Technology Teachers on Special Assignment (Tech TOSAs). Stakeholder groups were invited to read the draft copy and make comments regarding the document using a group wiki. These stakeholder groups did provide relevant comments and suggestions on the Technology Use Plan.

The Technology Advisory Committee, made up of administrators, teachers, clerical staff, parents, community representatives, students, adult education, and employee organizations from across the district will have the direct responsibility for overseeing and implementing this tech plan.

Various community agencies, non profit groups and businesses have participated in partnership with the district. These groups include:

- Dell Computers
- California Polytechnic University, Pomona
- The Los Angeles County Office of Education
- Verizon
- Cisco

3. Curriculum

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

Through discussion with stakeholder groups and through planning sessions, the technology goal of the district remains to provide an “*Anytime, Anywhere – Online Learning Community*” for staff, students and parents. Technology resources are available to all students and teachers district wide. Parents are also connected to the school and teachers via the Parent Portal.

- All classrooms throughout the district have access to the district network and Internet, with a minimum of eight network drops in each classroom. Many schools are also equipped with wireless connections to the Internet.
- All high schools have media centers and computer labs.
- Most middle schools also have computer labs and/or portable laptop carts with wireless connections, which can be moved from classroom to classroom.
- All teachers have access to a computer in their classroom for attendance, grades, email, personal productivity, and classroom use.
- The district also provides two Internet connections at each of the two public libraries.
- Although the student to computer ratio varies by site, the District average is approximately 8:1. The district is working to improve the student to computer ratio through the 1:1 laptop program for students.
- The district learning portal, inSTiLE/Blackboard provides access to all the critical software for both staff and students, and is available *Anytime, Anywhere* on the Internet at the district's website. inSTiLE is the district's implementation of the commercial Content Management System - Blackboard. inSTiLE allows for delivery of online instruction for both students and professional development for teachers; online communication and collaboration using email, discussion boards, and chat; and document storage through the Digital Locker. Another feature of inSTiLE is the ePortfolio. This ePortfolio allows both teachers and students to create an online portfolio of work samples, reflections, resume and any other digital items the teacher or student wishes to include. inSTiLE is a main feature in creating an “*Anytime, Anywhere – Online Learning Community*” for teachers and students.

In student data gathered from the EdTechProfile student online assessment, as of February 2009, of 6,674 student respondents, only 12% indicated that they did not have a computer at home. Of the remaining 88%: 10% indicated that they had a computer at home, but didn't use it; 15% indicated that they had a computer at home to use, but it was not connected to the Internet; and 64% indicated that they had a computer at home to use which was connected to the Internet. This is an increase of 5% of homes with Internet connected computers.

3b. Description of the district's current use of hardware and software to support teaching and learning.

Information gathered from the EdTechProfile teacher survey indicates that HLP teachers are using technology for personal productivity at higher rates than previously reported. Of the approximately 935 respondents:

- 90% indicated that they use technology tools to create instructional materials from once a month to daily
- 80% indicated that they use technology to deliver classroom instruction from once a month to daily
- 91% indicated that they use technology to manage student grades and attendance from once a month to daily (73% indicated daily)
- 97% indicated that they use technology to communicate with colleagues from once a month to daily (77% indicated daily)
- 80% indicated that they use technology to communicate with parents or students from once a month to daily
- 89% indicated that they use technology to gather information for planning lessons from once a month to daily.

When using technology with students, the numbers drop somewhat. Of the approximately 935 respondents:

- 58% indicated that they assign students word processing tasks from once a month to daily
- 65% indicated that they assign students reinforcement and practice tasks from once a month to daily

- 51% indicated that they assign students research using the Internet and/or CD-ROMS from once a month to daily
- 44% indicated that they assign students reports or projects using technology from once a month to daily
- 35% indicated that they assign students tasks involving demonstrations or simulations using technology from once a month to daily
- 19% indicated that students correspond with experts, authors or students from other schools via email or Internet from once a month to daily
- 35% indicated that students have tasks involving solving problems and analyzing data using technology from once a month to daily
- 32% indicated that students have tasks involving graphically presenting information using technology from once a month to daily.

Student data gathered from EdTechProfile provides a similar perspective. Of the approximately 4,585 student respondents in EdTechProfile, 78% indicated that in the class where they use technology the most, they use it from about once a month to more than once a week. That number is 2% higher than data gathered in July of 2006.

Further, students indicated that in the subjects where they use technology the most, the largest increase in the use of technology more than once a week was in:

- English Language Arts from 14% to 22%
- Foreign Language from 7% to 19%
- Health from 9% -to 18%

These would indicate that there is an increase in the amount and frequency of technology use, but additional training for teachers in integrating technology is indicated. As schools enter into the 1:1 Student Laptop program, the participating teachers receive training in technology integration. As more and more students enter the laptop program, it becomes increasingly important for the teacher to feel comfortable with both the laptop in the classroom and with their ability to construct standards-based, technology-integrated lessons.

In addition to basic software of Microsoft Office, the district currently provides a variety of tools for teachers, students, librarians and administrators.

The chart below lists several of these pieces of software being used throughout the district. Some of these are district purchased and supported and some are site purchases.

Hardware and Software to support teaching and learning			
Software Title	Description	Grade Level/Subject - Usage	Hardware and Access
Accelerated Reader – Site Purchase	<ul style="list-style-type: none"> • Reading management software that provides teachers with an easy and effective way to monitor all forms of guided reading practice • Teachers get detailed, objective data to target instruction • Students read A/R designated books - take tests on computer for books read - point system set up for rewards • Allows for monitoring of student reading level based on STAR Reading test 	Reading/Language Arts – Grades 2-12 Usage dependent on site	<ul style="list-style-type: none"> • Student information managed at each site • Data hosted on district server • Classroom computer or media center for student access.
Follett/Destiny	<ul style="list-style-type: none"> • Library automation software that manages items (books), patrons (students) and school staff/faculty • Easy check-out, check-in, circulation and inventory system. 	All subjects – grades K-12 Used daily at site libraries and some textbook centers	<ul style="list-style-type: none"> • Hosted on the district server • Computer for checkout/check in
inSTiLe (Blackboard) Anytime/Anywhere Learning Community	<p><i>Communication</i></p> <ul style="list-style-type: none"> • Announcements, Email, Discussion Board, Messaging, Online Gradebook <p><i>Content</i></p> <ul style="list-style-type: none"> • Digital Locker, Document Sharing, ePortfolio <p><i>Portal</i></p> <ul style="list-style-type: none"> • Links to district resources for staff, students and parents • District streamed media • Links to school webpages <p><i>Courses and Organizations</i></p> <ul style="list-style-type: none"> • Classroom courses for online learning • Professional development • District organizations 	All subjects – all grades Used daily at varying levels across the district	<ul style="list-style-type: none"> • District servers • The inSTiLE portal can be accessed at any Internet connected computer by going to the district website
Compass Learning/Odyssey	<ul style="list-style-type: none"> • Assessment, curriculum, data management, and state standards correlation engine • Browser-based solution allows administrators and teachers to track student, class, school, and district data, aggregate and disaggregate the data, and produce detailed reports in compliance with NCLB requirements • Provides PreK-12 curriculum with engaging, hands-on 	Language Arts, Math, Science and Social Science – grades 3-12 Used up to four times a week at participating schools and at high schools for credit recovery	<ul style="list-style-type: none"> • Wireless laptop carts at schools using Odyssey 3-8 • District wireless network • Accessed through the inSTiLE portal

	activities in a stimulating learning environment.		
District Created Streamed Video	<ul style="list-style-type: none"> • <i>Virtual Academy</i> – activities captured on video using the live video broadcast and conferencing software Media Site Live • <i>Virtual Media Center</i> – archive of video captured at trainings, events, and for the Local Cable Access Channel 	All Accessed as needed	<ul style="list-style-type: none"> • District network • District server for streaming video • Available online for staff • Available to community through broadcast on local cable access channel
Inspiration	<i>Visual learning</i> <ul style="list-style-type: none"> • Students strengthen critical thinking, comprehension and writing skills across the curriculum • Students build graphic organizers to represent concepts and relationships; use the integrated outlining capability to further organize ideas for reports 	All subjects – grades 6-12 Usage at teacher's discretion	<ul style="list-style-type: none"> • Student computers or teacher computer projected for class to view • District wide installation as part of a district license
Kidspiration	<i>Visual learning</i> <ul style="list-style-type: none"> • Students build graphic organizers by combining pictures, text and spoken words to represent thoughts and information. 	All subjects – grades K-5 Usage at teacher's discretion	<ul style="list-style-type: none"> • Student computers or teacher computer projected for class to view • District wide installation as part of a district license
KidPix – Site Purchase	<ul style="list-style-type: none"> • Personal productivity and creative tool • Combines realistic art tools and graphic handling capability • Multimedia slideshow - incorporate text, graphics, photos, sound, digital video or other multimedia elements; photo-editing possibilities. 	All subjects – grades K-5 Usage at teacher's discretion	<ul style="list-style-type: none"> • Student computers or teacher computer projected for class to view
Microsoft Office Suite	<ul style="list-style-type: none"> • Excel • Word • PowerPoint • Outlook 	Available for both staff and student computers	<ul style="list-style-type: none"> • Available for any district computer
My Access – Vantage Learning	<ul style="list-style-type: none"> • Online writing diagnostic and assessment environment • Provides instant essay scoring and immediate diagnostic feedback about the writing's focus, style, content, conventions and organization. • Allows teachers to conduct early diagnosis, deliver writing assignments more frequently and monitor formative writing performance by student and class • Encourages students to write more frequently and to improve their writing skills through continued writing and revisions. 	English Language Arts, Social Science and Science – grades 5-12 Usage at teachers' discretion and as the district online writing assessment	<ul style="list-style-type: none"> • District network • Middle School wireless laptop carts • High School computer labs and classroom computers • 1:1 laptops • Also available at any Internet connected computer outside of the district • Accessed through the inSTiLE portal

OARS – Red Schoolhouse	<ul style="list-style-type: none"> • Online Assessment Reporting System • Web-based software tool that facilitates the collection, reporting, and analysis of periodic assessments • Makes assessment results readily available • Teachers are able to modify instruction based on assessment results, and school and district administrators can plan appropriate professional development and support. 	All grades	<ul style="list-style-type: none"> • District network • Also available at any Internet connected computer • Accessed through the inSTILE portal
ProQuest	<ul style="list-style-type: none"> • Online information service provides access to thousands of current periodicals and newspapers, many updated daily and containing full-text articles from 1986 • Online content repository. 	All subjects – grades 9-12 Used on a regular basis by high school students.	<ul style="list-style-type: none"> • Available at any Internet connected computer
Publisher Created Software	<ul style="list-style-type: none"> • Publisher CD ROMs, websites and links • Used in classrooms as resources, supplementary materials for instruction and guided practice. 	All subjects – all grades	<ul style="list-style-type: none"> • Teacher computer
SMART	<ul style="list-style-type: none"> • Student Management and Records Tracker • Online attendance management • Online grades management 	All subjects – all grades Used daily across the district and at all sites	<ul style="list-style-type: none"> • District network • Teacher computer • Any Internet connected computer
Star Reading – Site Purchase	<ul style="list-style-type: none"> • Helps determine the reading level of each student, measure individual and class growth, and forecast results on standardized tests • Effectively integrates with Accelerated Reader program. 	Reading Language Arts – grades 2-12 Usage dependent on site	<ul style="list-style-type: none"> • Student data maintained by the site • Hosted on district servers • Classroom computer or media center for student access.
Textbook Management System - Follett	<ul style="list-style-type: none"> • Management software for textbooks. • Enables school to hold students and parents accountable for lost and damaged textbooks 	All subjects – grades K-12 Used by some textbook centers, usually at the beginning and end of each semester	<ul style="list-style-type: none"> • Hosted on the district server • Computer for checkout/checkin
SafeAssign - Blackboard	<ul style="list-style-type: none"> • Customized Originality Reports, which contain extensive documentation of any potential plagiarism • Promotes originality in student work, improves student writing and research skills, encourages collaborative learning, and saves valuable instructor time. 	All subjects – all grades Available to any teacher using Blackboard	<ul style="list-style-type: none"> • Available at any Internet connected computer
Waterford Early Reading Program – Pearson Digital Learning	<ul style="list-style-type: none"> • Software-based curriculum, provides three levels of full-year instruction: Level One-emergent readers through Level Three-developing fluency • Waterford incorporates skills like letter mastery, reading and listening development, controlled and natural language stories, complex spelling, basic writing skills, and comprehension strategies. 	Reading Language Arts – grades K-3 Used on a regular basis at all district elementary schools.	<ul style="list-style-type: none"> • Classroom student computers and accompanying teacher station

3c. Summary of the district's curricular goals that are supported by this tech plan.

The HLPUSD Board of Education has adopted the following mission statement for the district, *“The Hacienda La Puente Unified School District is a community committed to developing lifelong learners who value themselves and the diversity of all people; apply decision-making skills leading to responsible actions; and use creativity, critical thinking, and problem solving in meeting the challenges of a changing society.”*

All students in the HLPUSD are provided with access to a standards based instructional program. Instructional materials are chosen based on adopted state frameworks and standards. Adoption committees are formed to examine available content materials and accompanying technology components and make recommendations for district adoption. Each instructional division, Elementary (preK-5) and Secondary (6-12) have identified specific curriculum goals.

Elementary goals address ELA, Math, ELL/ELD, Special Education, and student classroom behavior in the following areas:

- Accountability and reporting
- Curriculum fidelity
- Instructional practices (direct, explicit, and systematic)
- Data driven conferencing
- Assessments (Common and Interim)
- School Leadership Expectations
- Parent involvement

Secondary instructional goals also address all curricular areas including:

- Common Assessments – at least 4 common assessments in ELA and math
- Data Driven Collaboration – at least 30 minutes of data driven collaboration per week
- Academic Interventions – both ELA and mathematics
- Professional Learning Communities and Curriculum Study Committees
- Increased rigor in ELA, mathematics instruction (Algebra), and science
- Foreign language at the middle schools
- Research based instructional practices
- Technology
 - All 1:1 teachers trained in CTAP level 2

- All 1:1 teachers implement technology driven lessons at least 30% of the time
- Use of My Access to reinforce writing
- Career Technology

The ETMC will provide support in the implementation of technology components of new state adoptions and in addressing the goals for both the elementary and secondary instructional divisions. All classroom support by ETMC staff will coordinate with the state standards for the teaching profession.

In addition to the goals of the elementary and secondary divisions, the goal of the ETMC is to work with all departments in the Instructional Division to help teachers develop lessons that integrate technology across the curriculum. As grade levels are added to the 1to1 program, the teachers in those grade levels and schools go through technology integration training in advance of the deployment to the students. This allows teachers the opportunity to begin planning activities for the beginning of the year which take advantage of the laptops in the classroom. The instructional goals of the ETMC include:

<i>Technology Integration Training</i>	
	Train teachers on the use of the laptops in advance of the student deployment.
	Work with teachers on the tools and resources available within the Blackboard Learning Management System
	Assist teachers in the creation of standards based-technology integrated lessons for use in their 1to1 classrooms.
<i>Curriculum Adoptions</i>	
	Member of ETMC included on adoption committees to provide input on technology elements of proposed curriculum adoptions
	Member of NCS included on adoption committees to provide input on hardware requirements on proposed curriculum adoptions
	Work with the adoption committee in choice of curricular material that provides effective software along with hardware requirements that meet the district guidelines.
<i>Anytime/Anywhere Learning</i>	
	Professional development provided in hybrid format where possible
	Classroom online learning opportunities using Blackboard
	Video conferencing

3d. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to improve teaching and learning by supporting the district curricular goals.

Goal 3d: To increase the regular use of technology as a vital tool to improve student achievement and mastery of grade level content standards in support of the curricular goals of the Elementary and Secondary Instructional Divisions

Objective 3d: By June 2012, the number of students in grades 5-12, reporting through Ed Tech Profile that in the class where they use technology most, their use of technology from “About Once a Week” to “More than Once a Week” will increase from 59% to 65%.
<i>Year 1 Benchmark:</i> By June 2010, the number of students in grades 5-12, reporting through Ed Tech Profile that in the class where they use technology most, their use of technology from “About Once a Week” to “More than Once a Week” will increase from 59% to 61%.
<i>Year 2 Benchmark:</i> By June 2011, the number of students in grades 5-12, reporting through Ed Tech Profile that in the class where they use technology most, their use of technology from “About Once a Week” to “More than Once a Week” will increase from 61% to 63%
<i>Year 3 Benchmark:</i> By June 2012, the number of students in grades 5-12, reporting through Ed Tech Profile that in the class where they use technology most, their use of technology from “About Once a Week” to “More than Once a Week” will increase from 63% to 65%

Implementation Plan:			
Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Train teachers in grades 5-12 in technology integration strategies	2009 -2012	DPS, Technology; Director ETMC	Tech Services Committee; Technology Advisory Committee
Tech TOSAs and Tech DPS visit classrooms and assist teachers and students	2009 -2012	DPS, Technology; Director ETMC	Tech Services Committee; Technology Advisory Committee
Work with site Technology Resource Teachers to administer Ed Tech Profile to students in grades 5-12 on an annual basis.	2009 -2012	DPS, Technology; Director ETMC	Tech Services Committee; Technology Advisory Committee
Evaluation Instrument(s) — Data To Be Collected: Student progress will be using an annual administration of Ed Tech Profile and usage data gathered from Blackboard statistics.			

3e. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire the technology skills and information literacy skills needed to succeed in the classroom and the workplace.

Goal 3e: All students, when at the appropriate grade level based on CA state content standards, will complete lessons and activities covering technology skills and information literacy skills needed to succeed in the classroom and the workplace.

Objective 3e: By June 2012, all 6-8 grade students will complete lessons and activities covering technology and information literacy skills as part of their 3 year career path project.
Year 1 Benchmark: By June 2010, 6 th grade students will complete lessons and activities covering technology and information literacy skills as part of their 3 year career path project.
Year 2 Benchmark: By June 2011, 6 th and 7 th grade students will complete lessons and activities covering technology and information literacy skills as part of their 3 year career path project
Year 3 Benchmark: By June 2012, 6 th , 7 th and 8 th grade students will complete lessons and activities covering technology and information literacy skills as part of their 3 year career path project

Implementation Plan:			
Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Work with the 6-year career path committee	2009 – 2010	ETMC Staff	Tech Services Committee; Technology advisory committee
Work with middle school teachers to train students in use of Blackboard as a tool.	2010 – 2012	ETMC Staff, middle school counselors and middle school teachers	Technology advisory committee and 6 year career path committee
Work with middle school teachers and counselors to create standards based lessons and activities for students which address information and media literacy	2010 – 2012	ETMC Staff	Tech Services Committee; Technology advisory committee; and 6 year career path committee
Evaluation Instrument(s) — Data To Be Collected: Blackboard Usage reports for College and Career path activities; Anecdotal data from teachers and counselors on student portfolio creation, District created teacher and student surveys, Teacher and student EdTechProfile.			

3f. List of goals and an implementation plan that describe how the district will address the appropriate and ethical use of information technology in the classroom so that students can distinguish lawful from unlawful uses of copyrighted works, including the following topics: the concept and purpose of both copyright and fair use; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; and avoiding plagiarism. (AB 307)

Goal 3f: All students, when at the appropriate grade level based on CA state content standards, will complete lessons and activities covering appropriate and ethical use of information technology, so that they can distinguish lawful from unlawful uses of copyrighted works.

Objective 3f: By June 2012, all 9th – 12th grade students will complete Blackboard lessons and activities covering lawful and unlawful uses of copyrighted works, peer to peer file sharing and avoiding plagiarism as part of their English Language Arts class.
Year 1 Benchmark: By June 2010, 9 th and 10 th grade students will complete lessons and activities covering lawful and unlawful uses of copyrighted works, peer to peer file sharing and avoiding plagiarism as part of their 6 year career path project.
Year 2 Benchmark: By June 2011, 9 th 10 th , and 11 th grade students will complete lessons and activities covering lawful and unlawful uses of copyrighted works, peer to peer file sharing and avoiding plagiarism as part of their 6 year career path project.
Year 3 Benchmark: By June 2012, 9 th – 12 th grade students will complete lessons and activities covering lawful and unlawful uses of copyrighted works, peer to peer file sharing and avoiding plagiarism as part of their 6 year career path project.

Implementation Plan:			
Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Work with the high school English teachers to create standards based lessons and activities for students which address copyright, peer to peer file sharing and avoiding plagiarism.	2009 – 2010	ETMC Staff	Tech Services Committee; Technology advisory committee
Introduce high school English teachers to SafeAssign as part of Blackboard	2009 – 2010	ETMC Staff	Tech Services Committee; Technology advisory committee
Work with high school English teachers to train students in use of Blackboard as a tool.	2010 – 2012	ETMC Staff and high school ELA teachers	Technology advisory committee and 6 year career path committee
Evaluation Instrument(s) — Data To Be Collected: Blackboard Usage reports SafeAssign, District created teacher and student surveys, Teacher and student EdTechProfile.			

3g. List of goals and an implementation plan that describe how the district will address Internet safety, including how to protect online privacy and avoid online predators. (AB 307)

Goal 3g: All students, when at the appropriate grade level based on CA state content standards, will complete lessons and activities covering Internet safety, including how to protect online privacy and avoid online predators.

Objective 3g: By June 2012, all 4th and 5th grade students will complete Blackboard lessons and activities covering Internet safety, including how to protect online privacy and avoid online predators, as part of their classroom activities.
Year 1 Benchmark: By June 2010, 4th grade students will complete Blackboard lessons and activities covering Internet safety, including how to protect online privacy and avoid online predators, as part of their classroom activities.
Year 2 Benchmark: By June 2011, 5 th grade students will complete Blackboard lessons and activities covering Internet safety, including how to protect online privacy and avoid online predators, as part of their classroom activities.
Year 3 Benchmark: By June 2012, 4 th and 5 th grade students will complete Blackboard lessons and activities covering Internet safety, including how to protect online privacy and avoid online predators, as part of their classroom activities.

Implementation Plan:			
Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Train the teachers in the use of iSafe curriculum	2009-2010	ETMC Staff	Tech Services Committee; Technology advisory committee
Work with 4 th and 5 th grade teachers to create lessons and activities covering Internet safety, including how to protect online privacy and avoid online predators. using materials from iSafe	2009-2010	ETMC Staff	Tech Services Committee; Technology advisory committee
Work with 4 th and 5 th grade teachers to train students to use Blackboard as a tool.	2010-2012	ETMC Staff, grade level teachers	Technology advisory committee and 6 year career path committee
Evaluation Instrument(s) — Data To Be Collected: Blackboard usage reports, anecdotal data gathered from student portfolios, District created teacher and student surveys, Teacher and student EdTechProfile.			

3h Description of the district policy or practices that ensure equitable technology access for all students.

Goal 3h: All students have access to Blackboard for use as a tool in accessing the resources of the district, their courses, the Digital Locker or their ePortfolio to improve student learning and student achievement.

Objective 3h: By June 2012, 50% of students in grades 5-12 will be trained in Blackboard and the use of the online gradebook to monitor student progress.
Year 1 Benchmark: By June 2010, 20% of students in grades 5-12 will be trained in Blackboard for use as a tool in accessing the resources of the district, their courses, the Digital Locker or their ePortfolio to improve student learning and student achievement.
Year 2 Benchmark: By June 2011, 35% of students in grades 5-12 will be trained in Blackboard for use as a tool in accessing the resources of the district, their courses, the Digital Locker or their ePortfolio to improve student learning and student achievement.
Year 3 Benchmark: By June 2012, 50% of students in grades 5-12 will be trained in Blackboard for use as a tool in accessing the resources of the district, their courses, the Digital Locker or their ePortfolio to improve student learning and student achievement.

Implementation Plan:			
Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Work with teachers through technology integration training to assist teachers in training students to use Blackboard tools to improve student learning and student achievement.	2009 – 2012	ETMC Staff	Tech Services Committee; Technology advisory committee
Work with teachers through site trainings and grade level meetings to assist teachers in training students to use Blackboard tools to improve student learning and student achievement	2009-2012	ETMC Staff	Tech Services Committee; Technology advisory committee
Evaluation Instrument(s) — Data To Be Collected: Bb usage reports, reports of parents signing up for the Parent Portal, Teacher training sign in sheets and evaluations, District created teacher and student surveys, Teacher and student EdTechProfile.			

3i. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs.

Goal 3i: Students will be able to view grades online using the Blackboard Grade Center gradebook feature, allowing the students and parents to more effectively support the teachers' efforts to meet individual student academic needs.

Objective 3i: By June 2012, 50% of students in grades 5-12 will be trained to use the Blackboard Grade Center, allowing them and their parents to more effectively support the teacher's efforts to meet individual student academic needs.
Year 1 Benchmark: By June 2010, 20% of students in grades 5-12 will be trained to use the Blackboard Grade Center, allowing them and their parents to more effectively support the teacher's efforts to meet individual student academic needs.
Year 2 Benchmark: By June 2011, 35% of students in grades 5-12 will be trained to use the Blackboard Grade Center, allowing them and their parents to more effectively support the teacher's efforts to meet individual student academic needs...
Year 3 Benchmark: By June 2012, 50% of students in grades 5-12 will be trained to use the Blackboard Grade Center, allowing them and their parents to more effectively support the teacher's efforts to meet individual student academic needs.

Implementation Plan:			
Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Create training videos for students in use of the Blackboard Grade Center	2009-2010	ETMC Staff	Tech Services Committee; Technology advisory committee
Provide training for parents in the use of Blackboard and the Parent Portal. The Parent Portal gives parents access to grades in the Grade Center	2009 - 2012	ETMC Staff; Adult School Staff	Tech Services Committee; Technology advisory committee
Provide training for teachers, both face to face and using video conferencing, in the use of the Blackboard Grade Center	2010 - 2011	ETMC Staff	Tech Services Committee; Technology advisory committee
Evaluation Instrument(s) — Data To Be Collected: Blackboard usage reports, reports of parents signing up for the Parent Portal, Teacher training sign in sheets and evaluations.			

3j. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to improve two-way communication between home and school.

Goal 3j: Students, teachers and parents will be trained in the use of Blackboard communication tools and the Parent Portal to improve two-way communication between home and school

Objective 3j: By June 2012, 50% of students in grades 5-12 will be trained in Blackboard communication tools to improve two-way communication between home and school
Year 1 Benchmark: By June 2010, 20% of students in grades 5-12 will be trained in Blackboard communication tools to improve two-way communication between home and school
Year 2 Benchmark: By June 2011, 35% of students in grades 5-12 will be trained in Blackboard communication tools to improve two-way communication between home and school
Year 3 Benchmark: By June 2012, 50% of students in grades 5-12 will be trained in Blackboard communication tools to improve two-way communication between home and school

Implementation Plan:			
Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Create training videos for students in use of the Blackboard communication tools	2009-2010	ETMC Staff	Tech Services Committee; Technology advisory committee
Provide training for parents in the use of Bb and the Parent Portal	2009 - 2012	ETMC Staff; Adult School Staff	Tech Services Committee; Technology advisory committee
Provide training for teachers in the use of the Bb communication tools	2010 - 2011	ETMC Staff	Tech Services Committee; Technology advisory committee
Evaluation Instrument(s) — Data To Be Collected: Blackboard usage reports, reports of parents signing up for the Parent Portal, Teacher training sign in sheets and evaluations.			

3k. Describe the process that will be used to monitor the Curricular Component (Section 3d-3j) goals, objectives, benchmarks and planned implementation activities including roles and responsibilities.

Monitoring and Evaluation will take place through a combination of the Technology Services Committee and the Technology Advisory Committee.

The Technology Advisory Committee will, at their regularly scheduled meetings, monitor the use of technology to improve teaching and learning, the teaching of technology and information literacy skills, equitable access to technology for all students, the use of technology to improve student recordkeeping, and the use of technology to make teachers and administrators more accessible to parents.

The status of the implementation of the Curriculum component will be reported to the superintendent semi-annually and to the school board annually.

If parts of the plan are not being implemented on schedule, the Technology TOSAs will bring this to the attention of the Technology Advisory Committee for recommendations and adjustments will be made to the timeline.

Success will be measured by:

- Success of students on grade level technology benchmark assessments
- Increased number of students passing the high school computer literacy graduation requirement
- Increased achievement on CST and district standards based interim assessments
- Increased number of students passing the high school exit exam
- Increased use of software tools, as monitored by usage reports
- Increased use of *inSTiLE*/Blackboard

4. Professional Development

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

Our district has been working with teacher proficiencies for several years through our CTAP region. In the last 2 years, with support and training from region 11, we have provided Level 1 Proficiency Training and Level 2 Integration Training within our school district. To date, over 350 teachers and administrators have gone through one of both of these levels of training. Every teacher has been mandated to attend a minimum of 40 hours of technology integration training in advance of the students' entry into the 1:1 laptop program. The goal of this training has been to equip teachers with the skills necessary to create standards based – technology integrated lessons for use immediately in the classroom.

In examining the data provided by teachers and administrators through EdTechProfile, several items appear.

Administrators responded:

Technology Reporting Area	Percent Identifying at either the Intermediate or Proficient Level
General computer knowledge and Skills	100%
Internet Skills	86%
Email Skills	96%
Word Processing Skills	98%
Presentation Software Skills	84%
Spreadsheet Skills	82%
Database Skills	70%

Teachers responded:

Technology Reporting Area	Percent Identifying at either the Intermediate or Proficient Level
General computer knowledge and Skills	87%
Internet Skills	79%
Email Skills	79%

Word Processing Skills	88%
Presentation Software Skills	64%
Spreadsheet Skills	59%
Database Skills	49%

The remaining teachers, for the most part, identified themselves as in the Beginning User area. A much smaller number of teachers identified themselves as not having the skills listed in the corresponding technology area.

This would indicate that while we need to continue to provide personal proficiency training for teachers in order to move them up into the Intermediate Level, we also need to address that particular area of concern within the spreadsheet and database technology skills.

In examining teacher responses to EdTechProfile, based on CCTC Standards 9 and 16, several sub-categories align with areas identified as curricular needs. In each of these aligned areas, teachers identified their proficiency level as Intermediate. With this information, we can provide training to increase their skills while also calling on them to transfer information to the students.

Subcategory	Proficiency Level
Standard 9	
9d – Uses computer applications to manage records and to communicate through printed media	2.0/3.0 Intermediate
9e – interacts with others using email and is familiar with a variety of computer-based collaborative tools	2.0/3.0 Intermediate
9g – chooses software for its relevance, effectiveness, alignment with content standards, and value added to student learning	1.25/3.0 Intermediate
9h – demonstrates competence in the use of electronics research tools and the ability to assess the authenticity, reliability, and bias of the data gathered	1.25/3.0 Intermediate
9i – demonstrates knowledge of copyright issues and of privacy, security, safety issues and Acceptable Use Policies	1.50/3.0 Intermediate
Standard 16	
16a – communicates through a variety of electronic media	1.5/3.0 Intermediate
16g – demonstrates competence in evaluating the authenticity, reliability and bias of the data gathered, determines outcomes, and evaluates the success or effectiveness of the process used. He/she frequently monitors and reflects upon the results of using technology in instruction and adapts lessons accordingly.	1.25/3.0 Intermediate

When examining their Professional Development needs, 78% of teachers indicated that they were interested in technology training aimed at integrating technology into the curriculum. When asked which training format they prefer, 60% preferred small group technology training. When indicating their preference for a training time, just 7% responded that they prefer “In the

evening” or “On the weekend”, the remaining 93% prefer training “During the school day” (36%), “After school” (31%), or “During the summer” (26%).

Identified teacher technology needs and training preferences will be taken into consideration in planning, preparing and presenting Professional Development opportunities.

4b. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing professional development opportunities based on your district needs assessment data (4a) and the Curriculum Component objectives (sections 3d through 3j) of the plan.

The goals mentioned in the curriculum section address a variety of issues, but they fall into a few specific training areas, which, along with a variety of other topics, are covered in our district technology training courses (CTAP Level 2 Technology Integration Training):

- Blackboard
 - tools for student participation in online coursework
 - tools for content management (Digital Locker)
 - tools for student presentation (ePortfolio)
 - tools for school/home communication
 - tools for student record keeping (Grade Center)
- Copyright and plagiarism (SafeAssign in Blackboard)
- Online privacy and predators (iSafe)
- Technology and Information/media literacy

Also, based on teacher needs as identified in the EdTechProfile, professional development will continue to address technology integration, while providing opportunities for teachers to increase their personal technology productivity skills. Because of the needs of our staff for professional development offered at a variety of times and situations, as indicated in the responses to the question in EdTechProfile, we will continue to explore the *Anytime, Anywhere – Online Distributed Learning* using video, streaming video, and video conferencing, along with online learning with Blackboard tools using both synchronous and asynchronous formats. Technology Teachers on Special Assignment (Tech TOSAs) will continue to provide support to school sites

through classroom visits and after school training. Site Technology Resource Teachers (TRTs) will continue to provide immediate assistance to teachers on both hardware and software issues.

Goal 4b:

Teachers who attend the CTAP level 2 Technology Integration training will receive training in technology literacy, information/media literacy, copyright, plagiarism, file sharing, Internet safety and online predators.

Objective 4b.1: By June 2012, 40% of teachers in grades 5-12 will have participated in CTAP level 2 Technology Integration training and will receive training in technology literacy, information/media literacy, copyright, plagiarism, file sharing, Internet safety and online predators.
Year 1 Benchmark: By June 2010, 20% of teachers in grades 5-12 will have participated in CTAP level 2 Technology Integration training and will receive training in technology literacy, information/media literacy, copyright, plagiarism, file sharing, Internet safety and online predators.
Year 2 Benchmark: By June 2011, 30% of teachers in grades 5-12 will have participated in CTAP level 2 Technology Integration training and will receive training in technology literacy, information/media literacy, copyright, plagiarism, file sharing, Internet safety and online predators.
Year 3 Benchmark: By June 2012, 40% of teachers in grades 5-12 will have participated in CTAP level 2 Technology Integration training and will receive training in technology literacy, information/media literacy, copyright, plagiarism, file sharing, Internet safety and online predators.

Objective 4b.2: By June 2012, 40% of teachers in grades 5-12 will have participated in CTAP level 2 Technology Integration training and will receive training in Blackboard tools for student participation, presentation and communication with school and home.
Year 1 Benchmark: By June 2010, 20% of teachers in grades 5-12 will have participated in CTAP level 2 Technology Integration training and will receive training in Blackboard tools for student participation, presentation and communication with school and home.
Year 2 Benchmark: By June 2011, 30% of teachers in grades 5-12 will have participated in CTAP level 2 Technology Integration training and will receive training in Blackboard tools for student participation, presentation and communication with school and home.
Year 3 Benchmark: By June 2012, 50% of teachers in grades 5-12 will have participated in CTAP level 2 Technology Integration training and will receive training in Blackboard tools for student participation, presentation and communication with school and home.

Implementation Plan:			
Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
ETMC staff trained in iSafe curriculum (Copyright, Plagiarism, file sharing, Internet Safety, and online predators)	2009	DPS, Technology; Ed Tech TOSAs	Technology Services Committee, Technology Advisory Committee
In addition to existing Integration Training Model, ETMC staff creates training models and ways to implement training in online synchronous and asynchronous modes.	2009	DPS, Technology; Ed Tech TOSAs	Technology Services Committee, Technology Advisory Committee
ETMC staff continues teacher training and online support of Technology Integration training models.	2010 - 2012	DPS, Technology; Ed Tech TOSAs	Technology Services Committee, Technology Advisory Committee
Evaluation Instrument(s) — Data To Be Collected: Bb usage data, teacher sign in sheets, teacher anecdotal data collected via evaluations, District created surveys, Specifically identified teacher and administrator responses on EdTechProfile.			

4c. Describe the process that will be used to monitor the Professional Development (Section 4b) goals, objectives, benchmarks, and planned activities including roles and responsibilities.

Progress towards meeting the goals will be monitored through a combination of the Technology Services Committee and the Technology Advisory Committee. The Technology Services Committee will monitor the completion by the staff of the EdTechProfile online teacher survey, the district technology survey, and the completion of the professional development videos and will report this information to the Technology Advisory Committee.

The Technology Advisory Committee will assure that all aspects of the professional development program have been implemented. If some aspects have not been implemented, the responsible party will report this to the Technology Advisory Committee.

The status of the implementation of the Curriculum component will be reported to the superintendent semi-annually and to the school board annually.

If parts of the plan are not being implemented on schedule, all parties will be notified and adjustments made to the timeline.

5. Infrastructure, Hardware, Technical Support, and Software

5a. Describe the existing hardware, Internet access, electronic learning resources, and technical support already in the district that will be used to support the Curriculum and Professional Development Components of the plan.

The Hacienda La Puente Learning Network (HLPnet) is a high-speed multimedia communications network and support service infrastructure serving the content management, collaboration and learning needs of pre-school, K-12, adult education, correctional education and staff development learning communities within those city and county areas served the Hacienda La Puente Unified School District. These areas include Hacienda Heights, La Puente, Valinda and the City of Industry, in addition to ten Los Angeles County Sheriff jail facilities located throughout Los Angeles County. The purpose of this network is to encourage, develop, and facilitate a community-based learning environment that incorporates the curricular elements of formal school-based education with the cultural, social and supporting elements of parents and parent organizations, community organizations, community services, local businesses, and municipal and regional governments. By enabling access to and incorporating core information technologies for the transport of converged real-time voice, video and computer data from various points within the community, including schools, libraries, and homes, the resources traditionally available in the school setting are enhanced, easier to manipulate and made available outside of school boundaries. Through the access to and use of these HLPnet resources, an environment is created that truly facilitates student learning *Anytime, Anywhere*, improves communication, encourages collaboration and cooperation, and enhances information management.

Hardware-Recognizing the need to support just-in-time, data driven decisions to accommodate the *Anytime, Anywhere* learning needs of the students and professional development needs of the staff and the classroom management demands of teachers while managing data within a complex

accountability model as defined by No Child Left Behind (NCLB), it is evident that complex data management and learning systems are needed within an enterprise computing environment. A migration plan was initiated in April of 2002 to phase-out the Macintosh/MacOS systems towards a homogenous networked computing environment based upon Microsoft Windows enterprise operating systems, data management tools and fully-integrated systems. This migration was completed for all servers and workstations for both employees and students in 2006.

In March, 2007, an innovative One-to-One Student Laptop Program was initiated to provide dedicated (1:1) computing and Internet access to all students in grades five through 12. Through the end of the 2008-09 school year, this program has provided dedicated laptop computing appliances to approximately 5,500 students for use at school and away from school. The implementation schedule calls for full deployment by the beginning of the 2012-2013 school year and will include approximately 17,000 students. Although the student-computer ratio varies somewhat by site, the District average is approximately 4:1 (currently) including the One-to-One Student Laptop Program and 6:1 excluding this program.

Taking advantage of new development in virtual and high-density computing to consolidate computing hardware, lower environmental costs, minimize maintenance costs and increase manageability while maximizing uptime and availability, a re-engineering of the server and storage resources was completed in 2008. As part of this re-engineering, approximately 120 site-based and central support servers were consolidated into 40 Dell 2950 quad-core, dual-socket blade servers running VMware ESX in front of a fault-tolerant, redundant EMC storage area network (SAN) utilizing Fiber Channel interconnects running at 4GB/s.

Networking and Telecommunications Infrastructure – Representing the infrastructure and information transport components of HLPnet are information technologies that provide isochronous, time-sensitive, and high bandwidth communication between two or more points across the network regardless of location. Providing the information highway, or backbone, services between network switching points within each school or site local-area network (LANs), multi-Gigabit Ethernet technology is deployed. In addition to its fast transport speeds (1,000+

Mb/s), its switching technology combined with standard quality-of-service (QoS) standards, maintains efficiency and effectiveness of this communication from desktop to desktop. In combination with other technologies such as virtual LANs, Layer 3 switching and quality of service, this facilitates the transport of such resource-intensive sources, such as video, audio and telephony services between different desktops, classrooms and offices within a site.

To maintain this effectiveness and service transparency between schools and sites, a multi-Gigabit Metropolitan Ethernet Network (MAN), based upon Verizon's Transparent LAN Services (or "TLS"), supporting standard VLAN (IEEE 802.1p) and QoS (IEEE 802.1q) protocols interconnects all locations through a minimum 100Mb/s service, although all instructional locations operate at a minimum of 1Gb/s. Providing core services and Internet access, a 10-Gb/s service interconnects these locations to the District Office and central support services. By incorporating the traffic prioritization and quality-of-service controls, the isochronous delivery of voice, video and data services is equally effective between locations as it is within a single location. Ultimately, this facilitates a simplification of the network while maintaining continuity and maximizing robustness.

Deploying systems that accommodate video is a critical part of the goals for students and teachers. For video applications, or multimedia applications incorporating video, digital video compression and encoding techniques based upon the Motion Picture Encoding Group (MPEG), Windows Media, and QuickTime standards are used. Such streaming media enabled applications can be found in professional development archives, video on-demand services, stand-alone MPEG transmission systems and video-conferencing applications, among others, simultaneously communicating across the network. Using MPEG technology transported over the HLPnet network extending into the local cable provider's head-end transmission location, these channels provide both playback and live broadcast feeder signals that are in turn made available to homes and business in the community over the cable television network. The net result is an integration of the community antenna television (CATV) into the community and HLPnet infrastructure creating a community wide broadband information access and distribution system. The real benefit of this technology is that it provides access to any information type, *Anytime and Anywhere* via live and on-demand modes.

To further facilitate *Anytime, Anywhere* access to learning, administrative and operational resources, a campus-wide wireless network based upon a Cisco Systems architecture is

maintained at all locations utilizing current IEEE 802.11b/g standards for wireless Ethernet communications. Although specific quality of service controls do not exist for these networks, multiple wireless networks are advertised or used at each access point that associates with unique virtual LAN's each with different queuing prioritization. The serves to provide some quality of service to support isochronous applications like voice-over-IP (VoIP) telephony via 802.11 wireless and enhance not only the mobile computing environment but the mobile communication environment as well. While the original installations regarding each access point (AP) as a separate management point, a transition to lightweight wireless access point (LWAP) technology was initiated in 2007 to consolidate the management domains and security policies into a single integrated context through multiple redundant controllers. This migration is expected to complete in 2009.

As a means to address the safety concerns of the stakeholders with respect to notifications and emergency communications while containing costs by leveraging the investment already made in developing and maintaining the broadband communications network, a network-based telephony system based upon analog-Asynchronous Transfer Mode (ATM) integration was originally deployed in 1998. With the development of Voice-over-Internet-Protocol (VoIP) technologies, a district-wide migration was completed in 2002 using Alcatel VoIP technologies and later in 2008 to second generation VoIP based upon an integrated architecture from Cisco Systems. Because of this, voice communications are seamlessly enabled across both the wired and wireless networks. The extensibility of this architecture also enables integration of enhanced 911 services, IP-based public address systems, intercom systems, emergency notifications systems, messaging systems and call center services. This system is interconnected to the public switched telephone network (PSTN) via distributed primary-rate ISDN trunks at multiple locations to support the call volume and provide fault-tolerant redundancy.

Although the District's IP-telephony system can be accessed via the wired or wireless networks, a critical need remains for independent wireless telephony services beyond district boundaries for administrators, educational leaders and critical support personnel. To address this, intelligent "smartphones" and personal digital assistant cell phones enabled with data transports and applications are utilized. These phones provide emergency and operational communications while also providing data integration with central services for accessing student information, electronic messaging, scheduling and teacher assessments.

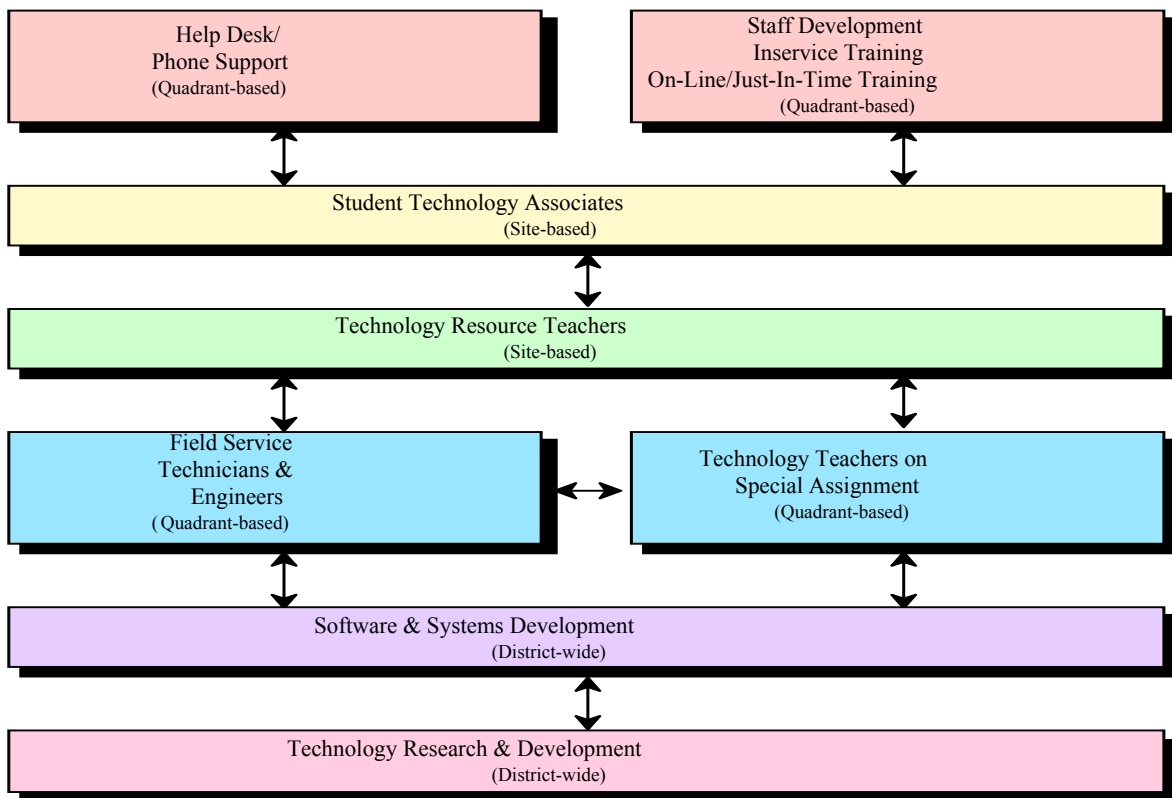
Internet Access – Acknowledging the access to external information and communication resources via the Internet is critical to daily learning and operating activities, two Internet Service Providers (ISP's) are utilized to accommodate high bandwidth demands while also providing redundancy and fault-tolerance. To both Time Warner and the K12HSN (via the Los Angeles County Office of Education) , one (1) 100 Mb/s fast Ethernet connection is maintained separately from the District Office to each ISP and coordinated through Border Gateway Protocol (BGP) peering sessions with the district's assigned autonomous system (AS). Average utilization during instructional times is 80%.

Electronic Learning Resources-Key Electronic Learning Resources to support curricular activities and professional development include Blackboard, MyAccess Online Writing and Scoring, and the Online Assessment and Reporting System (OARS). In addition, in order to access the video resources, HLPnet users have access to a multimedia archive of resources in a Virtual Media Center. These include on-line digital media sources stored on a digital server, off-line stored analog media sources such as video tape and laser disk, on-line analog media sources such as cable television of satellite downlinks, and live real-time video conferencing resources. Extending the success of the Virtual Media Center, the Virtual Academy was established to organize webcasts conducted using the district Media Site Live tool for professional development activities, meetings, parent information activities and presentations. Like the Virtual Media Center, the Virtual Academy is completely web-based and leverages the Media Site Live tool to produce an integrated presentation of static content (i.e., PowerPoint slides and graphics), streaming video based upon Windows Media and participant communications. These webcasts are scheduled through the Virtual Academy for live, real-time interaction but can also be replayed in its entirety to deliver the same original experience.

Physical Plant Modifications-Beginning with the initial demand for technological resources, including network components, computers, and peripheral devices, early engineering and capacity planning work in meeting these demands included a specific focus on the state of the physical plant necessary to support the required deployment complexities and depth. In addition to the individual workstation space and operating environment, attention was given to electrical

capacity, security, related building codes, wiring standards, safety, and environmental conditioning.

Technical Support- To support and encourage the integration of technology within the administrative, instructional and operational frameworks of the learning community, it is necessary to provide a responsive and effective support structure providing different levels of service from basic use questions to hardware repair to research & software development. To facilitate and organize the support process, the following support structure has been implemented



5b. 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.

Area	Needs
Hardware	Increased access with ultimate goal of 1:1 computing for students in grades 5 through 12.
Hardware	Expansion of Storage Area Network to accommodate growth in Digital Lockers, portfolios and assessment objects.

Hardware	Expand installation of VMware ESX across all blade servers.
Physical Plant	Establish "hot" back-up data center with real-time data mirroring for core services (electronic mail, OARS, SMART, BOSS, Blackboard)
Internet Access	Provide redundant 100 Mb/s (minimum) broadband network service to back-up data center.
Internet Access	Increase total broadband Internet access capacity to 1Gb/sec with quality-of-service controls.
Electronic Learning Resources	Further deployment of MPEG broadcast quality video and standards based H.323/H.264 video conferencing capabilities to all of the school district elementary, middle school, high school, support and administrative office locations.
Electronic Learning Resources	A set of software standards are needed to define the format for various document types and software products for specific applications.
Electronic Learning Resources	Develop regional technology access centers to be co-located within easily accessed community locations, such as schools and libraries
Electronic Learning Resources	An integrated data management architecture, or data warehouse, must be developed to provide a common information architecture and transport for a centralized archive of organizational and individual performance data.
Networking/ Telecommunications	Upgrade campus backbone capacity to minimum of 2Gb/s at each location.
Networking/ Telecommunications	Maintain and explore the use of 802.16/wireless DSL so as not to minimize service response or negatively alter the user experience due to a change in network. Wireless technologies should be deployed throughout the community to allow all learners access to necessary information technologies and resources without regard for their specific locations.
Networking/ Telecommunications	Implement network admission control (NAC) architecture for device and user authentication based upon 802.1x standards.
Networking/ Telecommunications	Expand content filtering presence to student laptop appliances operating externally.
Technical Support	Expand the technical support to include: <ul style="list-style-type: none"> • one (1) additional help desk position; • four (4) additional tech TOSA positions; • one (1) site-based technician per every 1,200 students;
Technical Support	Reorganize the Technology Advisory Committee such that there exists one member on a District Technology Advisory Committee (DTAC) from each school or program with a defined school site council (SSC). This member would be appointed by their peers on the SSC and provide be-directional communication between the school and the district regarding technology planning, implementation, and accountability.

5c. List of clear annual benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components as identified in Section 5b.

<i>Component</i>	<i>Timeline</i>	<i>Description</i>	<i>Benchmarks</i>
Hardware	6/30/2010	Dedicated Student Appliance (1:1) Deployment - Phase IV	Orientations completed & students designated in "Normal Use".
	6/30/2011	Dedicated Student Appliance (1:1)	Orientations

<i>Component</i>	<i>Timeline</i>	<i>Description</i>	<i>Benchmarks</i>
		Deployment - Phase V	completed & students designated in "Normal Use".
	6/30/2012	Dedicated Student Appliance (1:1) Deployment - Phase VI	Orientations completed & students designated in "Normal Use".
	9/1/2012	Expand Storage Area Network (SAN)	Additional LUNs available to controllers & hosts.
	10/1/2012	Expand VMware to all blade servers.	VMware installed and configured into VMC.
	12/31/2010	Staff Technology Refresh - Year 1	Computers replaced and files transferred.
	12/31/2011	Staff Technology Refresh - Year 2	Computers replaced and files transferred.
	12/31/2012	Staff Technology Refresh - Year 3	Computers replaced and files transferred.
Physical Plant	4/15/2012	Establish backup data center	Data for core services replicated in real-time.
Internet Access	3/1/2012	Establish 100 Mb/s broadband service to backup data center	Internet access configured with BGP peers and available.
	9/1/2012	Increase total Internet capacity to 1Gb/s	Total available egress capacity at 1Gb/s.
Electronic Learning Resources	6/30/2010	Establish Regional Technology Access Centers	RTAC's open and staffed for students, parents & community after-hours.
	9/1/2009	Deploy H.323/H.324	Video

<i>Component</i>	<i>Timeline</i>	<i>Description</i>	<i>Benchmarks</i>
		videoconference & streaming video channels	conferencing services available; select TWC channels available via Windows Media and/or MPEG2/4 from multicast networks.
	6/30/2012	Establish data warehouse	Data warehouse defined, integrated with existing data sources and interface available; professional development completed.
Networking & Infrastructure	2/1/2012	Deployment plan for community wireless network.	Acquisition and deployment plan with heat maps, AP placements and costs.
	9/1/2011	Upgrade campus backbone capacity	All instructional campus backbones operating at 2Gb/s or higher.
	9/1/2009	Implement Network Admission Control	Users and devices authenticating via 802.1x with platform validation.
	9/1/2009	Expand content filtering	1:1 Student Laptops filtering based upon existing (8e6) filtering policies.
Technical Support	3/1/2010	Technology Advisory Committee Reorganization	Meeting agendas and minutes of site-based TAC's and District TAC.
	7/1/2011	Increase Technology TOSA resources	TOSA's hired.

<i>Component</i>	<i>Timeline</i>	<i>Description</i>	<i>Benchmarks</i>
	7/1/2011	Increase field service resources	Technology Service Technicians hired.
	7/1/2011	Increase help desk resources	Help Desk Operator hired.

5d. Describe the process that will be used to monitor Section 5b & the annual benchmarks and timeline of activities including roles and responsibilities.

Ongoing analysis of qualitative and quantitative data will support the effective implementation of the district's plan to positively impact teaching and learning through technology. In brief, the expected outcomes per year of implementation are as follows:

Year 1: During the first year of this plan, access to technology will increase; access will become more mobile, personal and wireless; more content will be available on-line; staff will improve their technical skills through on-line professional development activities; and one-quarter of district-wide staff will begin using computers based upon a four-year refresh cycle.

Year 2: By year two of this plan, infrastructure management systems, assessment tools and accountability components will be deployed or in development; data warehouse model will be implemented; one-quarter of district-wide staff will begin using computers based upon a four-year refresh cycle.

Year 3: During year three, it is expected that significant increases will continue to be made in student achievement while allowing students to continue their learning process at home or at community work centers; network infrastructure will expand and extend into homes and locations within the community where after-hours and weekend access to technology tools and content will be readily available; and one-quarter of district-wide staff will begin using computers based upon a four-year refresh cycle.

The following evaluation strategies will provide feedback to ensure successful implementation.

OUTCOME	MEASURES OF OUTCOME
Students and teachers will have increased access to technology hardware.	Desktop and network management system reports of total users and devices; access logs.
Staff will improve their level of technology skill.	Self-report - skill inventory and participation in staff development activities; supervisor evaluations. Record the number of participants in district-provided technology workshops and evaluate effectiveness of training.
Teachers will increase the use of technology for instruction and classroom management.	Self-report and review of computer-use logs.
Students and staff will use a wireless network to communicate and to access world-wide information resources.	Establish redundant and wireless infrastructure and technical support system. Create library/media information hubs at each site. Record the level of use for the network.

Based on the collection and analysis of this data, staff at each site will review, revise and realign their existing technology plan. This revised technology plan will then become an integral part of a unified school improvement plan.

With the increased use of technology throughout the instructional program in all years of the master plan, the reorganized District Technology Advisory Committee will develop measurable student outcomes to assess the continued success of plan implementation.

6. Funding and Budget

6a. List of established and potential funding sources.

Funding sources include a combination in varying amounts of the following:

Funding Source	Used For
Other General Fund expenditures for NCS that service the entire District	
	<ul style="list-style-type: none"> • Salaries
	<ul style="list-style-type: none"> • District licensed software
	<ul style="list-style-type: none"> • Network upgrades
	<ul style="list-style-type: none"> • District cellular telephone services
	<ul style="list-style-type: none"> • Network hardware
	<ul style="list-style-type: none"> • Fire System Monitoring
	<ul style="list-style-type: none"> • Intrusion Alarm Monitoring
	<ul style="list-style-type: none"> • Professional Development (Blackboard, KnowledgeNet, Online Training)
	<ul style="list-style-type: none"> • Transparent LAN Service (TLS) Gigabit MAN
	<ul style="list-style-type: none"> • Basic Phone Service
	<ul style="list-style-type: none"> • Long Distance Service
EETT Formula Grant	
	<ul style="list-style-type: none"> • Salaries for professional development
	<ul style="list-style-type: none"> • Software
Ed Tech Supplemental (AB 825)	
	<ul style="list-style-type: none"> • District licensed software
	<ul style="list-style-type: none"> • Network upgrades
Ready to Teach	
	<ul style="list-style-type: none"> • Video production
	<ul style="list-style-type: none"> • Salaries
E-Rate presents a cost savings for the following areas:	
Discounts on eligible:	
	<ul style="list-style-type: none"> • Basic telecommunications services
	<ul style="list-style-type: none"> • Transparent LAN Service (TLS)
	<ul style="list-style-type: none"> • Long Distance Service
	<ul style="list-style-type: none"> • Internet Access
	<ul style="list-style-type: none"> • Network equipment/network upgrades
	<ul style="list-style-type: none"> • Basic maintenance on network equipment
Title II	
	<ul style="list-style-type: none"> • Professional development - technology
Title I Part A	
	<ul style="list-style-type: none"> • Professional development - technology

6b. Estimate annual implementation costs for the term of the plan.
See Chart Below

HACIENDA LA PUENTE UNIFIED SCHOOL DISTRICT
2009-12 District Technology Master Plan

BUDGET PROJECTION
 (Infrastructure, Hardware, Technical Support, and Software Components)

Element	Completion Timeline	Description	Budget						Total	Notes
			Year 1 (2009-10)		Year 2 (2010-11)		Year 3 (2011-12)			
			Non-Recurring	Annual (Non-Recurring)	Non-Recurring	Annual (Non-Recurring)	Non-Recurring	Annual (Non-Recurring)		
Hardware	6/ 30/ 2010	Dedicated Student Appliance (1:1) Deployment - Phase IV	0	800,000	0	800,000	0	800,000	2,400,000	Integrated with Technology Refresh Initiative
	6/ 30/ 2011	Dedicated Student Appliance (1:1) Deployment - Phase V	n/a	n/a	0	800,000	0	800,000	1,600,000	Integrated with Technology Refresh Initiative
	6/ 30/ 2012	Dedicated Student Appliance (1:1) Deployment - Phase VI	n/a	n/a	n/a	n/a	0	800,000	800,000	Integrated with Technology Refresh Initiative
	9/ 1/ 2012	Expand Storage Area Network (SAN)	0	0	0	0	180,000	8,000	188,000	
	10/ 1/ 2012	Expand VMware to all blade					80,000	4,000	84,000	
	12/ 31/ 2010	Staff Technology Refresh - Year 1		141,750		141,750		141,750	141,750	
	12/ 31/ 2011	Staff Technology Refresh - Year 2				141,750		141,750	283,500	
	12/ 31/ 2012	Staff Technology Refresh - Year 3						141,750	141,750	
Physical plant	4/ 15/ 2012	Establish backup data center					300,000	10,000	310,000	
Internet Access	3/ 1/ 2012	Establish 100 Mb/ s broadband service to backup data center					25,000	21,600	46,600	
	9/ 1/ 2012	Increase total Internet capacity to 1Gb/ s						32,400	32,400	
Networking & Infrastructure	2/ 1/ 2012	Deployment plan for community wireless network.	0	0	0	0	120,000	0	120,000	
	9/ 1/ 2011	Upgrade campus backbone	0	0	300,000	0	300,000	0	600,000	
	9/ 1/ 2009	Implement Network Admission Control	10,000	0	10,000	0	10,000		30,000	
	9/ 1/ 2009	Expand content filtering		16,000		32,000		48,000	96,000	
Electronic Learning Resources	6/ 30/ 2010	Establish Regional Technology Access Centers	0	200,000	0	300,000	0	400,000	900,000	Ten (10) Locations replacing 1:1 Home Internet component.
	9/ 1/ 2009	Deploy H.323/ H.324 videoconference & streaming video channels	20,000	0	0	5,000	0	5,000	30,000	Internal multicast deployment
	6/ 30/ 2012	Establish data warehouse	0	0	0	0	0	250,000	250,000	
Technical Support	3/ 1/ 2010	Technology Advisory Committee Reorganization	300	0	1,000	2,700	1,000	2,700	7,700	Materials & refreshments
	7/ 1/ 2011	Increase Technology TOSA resources	0	0	0	0	0	300,000	300,000	Four (4) TOSAs
	7/ 1/ 2011	Increase field service resources	0	0	0	0	0	1,140,000	1,140,000	Additional 19 field service technician & 4 TOSA positions
	7/ 1/ 2011	Increase help desk resources	0	0	0	0	0	60,000	60,000	One (1) Help Desk Operator
TOTAL			30,300	1,157,750	311,000	2,223,200	1,016,000	5,106,950	9,561,700	

Professional Development

In addition to Infrastructure, Hardware, Technical Support and Software estimate outlined above, the estimates below reflect 40 hours of CTAP2 professional development for approximately 345 teachers in grades 6-12 over 3 years. The estimate also includes the cost of trainers for the CTAP2 trainings.

Budget Category	Item Descriptions	Est. Year 1 Cost	Est. Year 2 Cost	Est. Year 3 Cost	E-rate Eligible Amount
1000-1999 Certificated Salaries	Teacher and trainer salaries for 40 hours of CTAP 2 training.	\$177,920	\$145,920	\$126,720	
2000-2999 Classified Salaries					
3000-3999 Employee Benefits	Statutory benefits for CTAP 2 teacher participants and trainers.	\$23,130	\$18,970	\$16,474	
4000-4999 Materials & Supplies					
5000-5999 Other Services & Operating Expenses					
6000-6999 Equipment					
Totals		\$201,050	\$164,890	\$143,194	\$

6c. Describe the district's replacement policy for obsolete equipment.

Without a viable technology refresh initiative, the age of the technology and the non-coordinated acquisition of new technology not only impacts support and maintenance functions, but more importantly creates a negative impact on daily classroom operations and student instruction while subsequently deteriorating employee trust in new tools and technologies. As efficiencies in daily classroom management functions incorporate critical data gathering and analysis tools as a means to drive instructional decisions, the classroom computer is central to the success of these functions. Without current, functional and reliable classroom technology that can be trusted, these efficiencies cannot be realized. Furthermore, a high level of trust in the technology is needed for technology to progress and to pioneer new applications. An institutionalized technology refresh initiative minimizes failures attributed to technology depreciation while building trust and maximizing functionality in support of the Board of Education's goals.

While some school sites are able to maintain higher levels of technology readiness due to supplementary funding (Title I, II/USP, HP, etc.), other schools without such funding are typically lagging behind these former schools by 3-4 years. This creates a severe implementation and support problem when attempting to standardize applications, such as OARS and K-5 grades across the organization. In addition to this technology divide between those schools with funding and those without, support and maintenance costs are not aligned with acquisition funding so that while the installed base of computer has risen sharply over the last five years as funded by individual program/site decisions, the maintenance and support requirement has not.

There are several references and interpretations of computer "life-cycle" with termination limits defined by technology currency (or obsolescence with respect to other technologies), usability and component failure. Given Moore's Law which traditionally holds that computer processor power doubles every 18 months while the cost is halved during this period, technology currency is generally defined as 24-36 months and is marked by new releases of the technology that supersede the current. Alternatively, life-cycles may be limited by component failure in which the Meantime Between Failures (or MTBF) generally establishes the life-cycle and rate of refresh with average computer MTBF for typical use between 3-5 years. The threshold of

usability as a limiting factor is more subjective and incorporates both failure rates and obsolescence with respect to the critical applications and requirements of the organization. Taking these into consideration and noting the complexity of information applications currently in use and planned, a four (4) year technology refresh cycle would be appropriate for this District to address ongoing technology readiness.

In addition to readiness, a four-year refresh cycle would serve to minimize support and maintenance costs on older computers that extend beyond the 3-5 year average MTBF. These costs are further increased by the additional demand to support newer software on older hardware. This would allow existing technical support resources to focus more appropriately on software and network support to classrooms and schools.

Acknowledging that computing resources are a necessary daily utility for both students and employees to perform their work, collaborate, achieve and meet demanding expectations, a subsequent philosophical change was adopted in 2006 to adequately maintain these resources and establish a standard four-year refresh cycle. This was institutionalized during the district-wide budget development process for the 2008-09 school year using a multi-variable refresh funding formula and accommodates the computing refresh needs of employees and students in both instructional and non-instructional settings including servers, workstations and one-to-one computing.

Specifically, the plan address the refresh of primary computing technologies over a 48-month cycle that co-terminates with a lease schedule used for each year of refresh. At any one time, then, there will exist four active lease schedules supporting years one, two, three and four of four refresh cycles. This necessitates that one-fourth of the computing technology will be refreshed each year starting with a new 48-month lease schedule.

The refresh formula takes into consideration target ratios of users to services instead of specific numbers. These ratios include the following:

Teachers	1:1
Classified school staff	1:1

Management/Administrators 1:1
 Student (grades 5-12) 1:1
 Students (grades 3-4) 7:1
 Students (grades K-2) 5:1

The components and details of the refresh formula are as follows:

% Cap of school-wide budget on technology refresh cost (u)	5.00%	<i>Annual Technology Refresh Cost (T)</i> $T = ((lx + nx/e + by/f + cz/g) / v)$
Years in technology refresh cycle (v)	4	<i>Percentage of Overall School Budget (P)</i> $P = T / w$
Overall non-salary school budget (unrestricted + restricted) (w)		<i>Technology Equalization Factor (Q)</i> If $P > u$, then $Q = T - uw$
Cost of student computing device (x)	\$1,000	If $P \leq u$, then $Q = 0$
Cost of teacher computing device (y)	\$1,000	
Cost of office computing device (z)	\$1,100	<i>Enrollment Incentive Discount (E)</i> $E = (a - h) * m$, if $a > h$, otherwise $E = 0$
Prior-year API Growth Target (j)		<i>API Growth Incentive Discount (D)</i> $D = (k - j) * p$, if $k > j$, otherwise $D = 0$
Prior-year API (k)		
# Students enrolled in prior year (h)		<i>District Match Grant (M)</i> $M = T * d$
# Students enrolled in school (a)		<i>Total District Grant (G)</i> $G = M + Q$
# Students enrolled in laptop program (l)		<i>School Budget Requirement (B)</i> $B = T - G - E - D$
# Students not enrolled in laptop program (n)		<i>District Budget Requirement (X)</i> $X = T - B$
# Teachers on school staff (b)		
# Office staff with computers (c)		
# Students per student computing device	7	

[non-laptop] (e)	
# Teachers per teacher computing device (f)	1
# Office staff per office computing device (g)	1
Enrollment Incentive Discount (m) *	\$500
API Growth Incentive Discount (p) **	\$1,000
% District technology matching grant (d)	40.00%

With the continual acquisition of computers, the refresh initiative must also address the disposition of the computers upon lifecycle termination. Given that as the age of the computer increases, the maintenance and support demands increase, repurposing aged computers would only serve to establish and maintain lower technology readiness expectations elsewhere in the organization. Alternatively, the disposal of computers must now be treated as hazardous waste and done so with significantly increased cost. Neither option provides a cost advantage to the District.

To address the acquisition and disposal of computers while incorporating a perpetual and consistent management function, it is recommended that the District pursue a 48-month lease of Dell Computers. The open-ended structure of the lease allows hardware to be added and removed under a master agreement with multiple schedules so that 400 computers can be added each year while removing 400 that have completed their lease periods. With the 5% leasing costs incorporated and a 2% buy-out upon lease termination, there is no financial advantage to the District in that the cost of the lease is approximately equal to the purchase price of the computer plus the hazardous waste disposal cost of \$75-\$100. Alternatively, at the end of each computer's lifecycle, the computer can be returned to Dell and the 2% buyout can be applied to the next lease cycle. This creates a net advantage for the lease equal to the disposal cost + 2% or approximately 9% of the original purchase/lease price.

The cost of the refresh initiative is incremental during years one through three of the startup period. Beginning with year four and beyond, the cost remains consistent assuming a 400 unit per year fresh and consistent pricing. An example budget/cost matrix is as follows:

	Computer		Lease Factor	Budget				
	Cost	Quantity		Year 1	Year 2	Year 3	Year 4+	Buyout
Year 1	1,350	400	0.0500	\$141,750	\$141,750	\$141,750	\$141,750	\$10,800
Year 2	1,350	400	0.0500		\$141,750	\$141,750	\$141,750	\$10,800
Year 3	1,350	400	0.0500			\$141,750	\$141,750	\$10,800
Year 4	1,350	400	0.0500				\$141,750	\$10,800
TOTAL				\$141,750	\$283,500	\$425,250	\$567,000	\$43,200

Alternatively, a stronger recommendation would be to purchase the off-lease computer hardware for the \$1 buyout and “provide” these to students and/or staff for minimal cost or as part of an educational/professional development program. Understandably, the technology would be four-years in age, but would still represent an advantage and create a significant impact in further addressing digital divide issues in lower-income households.

6d. Describe the process that will be used to monitor Ed Tech funding, implementation costs and new funding opportunities and to adjust budgets as necessary.

Ongoing analysis of qualitative and quantitative data will support the effective implementation of the district’s plan to positively impact teaching and learning through technology. In brief, the expected outcomes per year of implementation are as follows:

Year 1: During the first year of this plan, access to technology will increase; access will become more mobile, personal and wireless; more content will be available on-line; staff will improve their technical skills through on-line professional development activities; and one-quarter of district-wide staff will begin using computers based upon a four-year refresh cycle.

Year 2: By year two of this plan, infrastructure management systems, assessment tools and accountability components will be deployed or in development; data warehouse model will be implemented; one-quarter of district-wide staff will begin using computers based upon a four-year refresh cycle.

Year 3: During year three, it is expected that significant increases will continue to be made in student achievement while allowing students to continue their learning process at home or at community work centers; network infrastructure will expand and extend into homes and locations within the community where after-hours and weekend access to technology tools and content will be readily available; and one-quarter of district-wide staff will begin using computers based upon a four-year refresh cycle.

The following evaluation strategies will provide feedback to ensure successful implementation.

OUTCOME	MEASURES OF OUTCOME
Students and teachers will have increased access to technology hardware.	Desktop and network management system reports of total users and devices; access logs.
Staff will improve their level of technology skill.	Self-report - skill inventory and participation in staff development activities; supervisor evaluations. Record the number of participants in district-provided technology workshops and evaluate effectiveness of training.
Teachers will increase the use of technology for instruction and classroom management.	Self-report and review of computer-use logs.
Students and staff will use a wireless network to communicate and to access world-wide information resources.	Establish redundant and wireless infrastructure and technical support system. Create library/media information hubs at each site. Record the level of use for the network.

Based on the collection and analysis of this data, staff at each site will review, revise and realign their existing technology plan. This revised technology plan will then become an integral part of a unified school improvement plan.

With the increased use of technology throughout the instructional program in all years of the master plan, the reorganized District Technology Advisory Committee will develop measurable student outcomes to assess the continued success of plan implementation.

7. Monitoring and Evaluation

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

The timelines and benchmarks included in each component of this plan will serve to form the system by which the plan will be evaluated. The Technology Services Committee will review progress as part of their weekly meetings. During the course of their scheduled meetings, the Technology Advisory Committee will conduct an **annual evaluation** of the Technology Master Plan. They will look at each component and evaluate the successful implementation of the plan.

The Educational Technology and Media Center will also conduct an annual evaluation of the Curriculum and Professional Development components of the plan. They will report as needed to the Technology Advisory Committee with regards to these sections of the plan. The Network and Computer Services department will conduct an annual review of the Infrastructure, Hardware, Technical Support, and Software component of the plan and will also report as requested to the Technology Advisory Committee.

A variety of assessment tools will be used to determine the level of technology use over time.

Among these tools are:

- The annual online state technology survey
- The EdTechProfile online teacher proficiency and technology use survey
- The EdTechProfile online student technology proficiency and use survey
- A district created survey that includes hardware purchased and usage. This survey is conducted semi-annually and is completed by the Technology Resource Teacher at the school sites with review by the ETMC Tech TOSAs. The information collected is used to complete the State technology survey and CBEDs.
- A district created teacher technology needs survey

The information will be reviewed by the Educational Technology and Media Center on a semi-annual basis in order to identify the department focus for professional development. This information will also help identify teacher technology proficiencies and how they may be assisted in moving to a higher-level proficiency.

The results of this compilation of information and the findings of the ETMC will be shared with both the Technology Services Committee and the Technology Advisory Committee.

Data and needs information are collected district wide and are analyzed to ensure equity of access for all students, as well as teachers and administrators.

Specific grade level needs will be addressed on a monthly basis at the scheduled grade level administrator meetings.

Success will be measured by:

- Success of students on grade level technology benchmark assessments
- Increased number of students passing the high school computer literacy graduation requirement
- Increased achievement on CST and district standards based interim assessments
- Increased number of students passing the high school exit exam
- Increased use of software tools, as monitored by usage reports
- Increased use of *inSTiLE* / Blackboard

Special needs populations are included in all evaluations. Disaggregated student assessment data will be examined through OARs to see if their state and district test scores are increasing.

As previously mentioned, all schools in the district have the same level of access. Teacher proficiencies will be monitored through EdTechProfile. Student types of use will be taken into account through the technology standards and benchmark assessments.

Teachers will be consulted in determining the evaluation criteria through two formats. Teachers and administrators will both be part of the Technology Advisory Committee and as such will be part of the process. The Technology Resource Teachers will also be consulted regarding the evaluation process. Administrators will also be consulted during their monthly grade level administrator meetings.

Because of the number of projects that currently run between HLPUSD and Cal Poly Pomona, we have been in contact with Cal Poly Pomona many times for assistance in evaluating the impact of technology on student learning. Currently two partnerships exist between HLPUSD and Cal Poly, Pomona; 1) a federally funded Teaching American History grant and 2) a Teacher Quality Enhancement grant, focusing on preparing interns to use technology in their classrooms and assisting Cal Poly, Pomona faculty to integrate technology into their classroom experience.

Monitoring of the goals and objectives in this technology plan will take place through a combination of the Technology Services Committee, the Technology Advisory Committee and the district's office of Learning Standards and Accountability. The office of Learning Standards and Accountability has responsibility for monitoring student achievement throughout the district. They are a resource for examining assessment results on a variety of levels.

The Technology Advisory Committee will, at their regularly scheduled meetings, monitor the use of technology to improve teaching and learning, the teaching of technology and information literacy skills, equitable access to technology for all students, the use of technology to improve student recordkeeping, and the use of technology to make teachers and administrators more accessible to parents.

The status of the implementation of the Curriculum component will be reported to the superintendent semi-annually and to the school board annually.

If parts of the plan are not being implemented on schedule, the Technology Teachers on Special Assignment (Tech TOSAs) will bring this to the attention of the Technology Advisory Committee for recommendations and adjustments will be made to the timeline.

Success will be measured by:

- Success of students on grade level technology benchmark assessments
- Increased number of students passing the high school computer literacy graduation requirement
- Increased achievement on CST and district standards based interim assessments
- Increased number of students passing the high school exit exam
- Increased use of software tools, as monitored by usage reports
- Increased use of *inSTiLE*

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

Responsibilities	Parties Responsible	Frequency
Online State Technology Survey (Ed Tech Profile)	Educational Technology and Media Center	Annually
Check # of students not passing the Computer Literacy Graduation Requirement	Educational Technology and Media Center	Annually
Evaluation of Curriculum and Professional Development components of plan	Educational Technology and Media Center with the K-12 Curriculum specialists	Annually
Evaluation of Infrastructure, Hardware, Technical Support and Software	Network and Computer Services	Annually
Evaluation of assessment data as it relates to technology integration	Technology Advisory Committee	Annually
Evaluation of complete Technology Use Plan	Technology Advisory Committee	Annually
Presentation to the superintendent	Chief Technology Officer	Annually or as requested

7c. Describe the process and frequency of communicating evaluation results to tech plan stakeholders.

The status of the plan implementation will be reported to the district superintendent on a semi-annual basis. The status of the plan implementation will be reported to the school board on an

annual basis. The status of the plan implementation will be reported to the Technology Advisory Committee on an annual basis for their input and discussion.

As ETMC and NCS discover corrections or adjustments that need to be made, these will be reported to the Technology Advisory Committee for their discussion and recommendations.

Strategies that have had a positive effect on teaching and learning will be shared with other teachers at regular training sessions and at TRT trainings and through postings and announcements on the inSTiLE portal.

8. Collaborative Strategies with Adult Literacy Providers

If the district has identified adult literacy providers, describe how the program will be developed in collaboration with them. (If no adult literacy providers are indicated, describe the process used to identify adult literacy providers or potential future outreach efforts.)

According to the October 2001 API data, 40% of the parents of students served by our district have no more than a high school education, 11% have some post secondary education, and 15% have not completed high school. According to the county library system, there are more than 4,000 non-reading adults enrolled in their adult literacy programs. The adult school serves 30,000 students at two main facilities and 32 satellite sites through the Hacienda La Puente USD.

Current adult literacy providers:

The HLPUSD adult school is the main adult literacy provider for the district. The service is provided through English and a Second Language and Adult Basic Education programs at two main sites in the district along with a variety of local school sites. The HLPUSD Adult Education program is involved in literacy in several different ways. The CBET (Community Based English Tutoring) program provides funds for English Language Learners to speak and read English. The students, in turn, must sign a pledge card and agree to tutor others – especially their children – in English. Six elementary school sites provide these services. The EL Civics program addresses adult literacy through a civics program. Three main schools with computer labs are providing this program. The Adult Basic Education (ABE) program supports adults working at the 6th

grade level. The classes meet in computer labs especially for the literacy students. The VAST lab provides computers for vocational students to increase their literacy levels. Finally, the ABLE program provides literacy skills via computer for disabled students.

Collaboration:

The adult school classes utilize both school sites throughout the district, as well as the districts' high-speed broadband network. The HLPUSD is committed to pursuing additional funding opportunities that will enable us to leverage resources and expand our ability to serve the adults in our community.

Additional collaboration in the form of discussion and training between the Educational Technology and Media Center and the Director of Career and Technology Education for the HLPUSD Adult Education program continue as provided for in the both the district Technology Master Plan and the Adult School Technology Master Plan. For example, the adult school has worked with the Educational Technology and Media Center in developing adult/parent education classes. These classes, which are provided by Adult Education during the day at the school sites, introduce parents to Blackboard tools, Internet Safety, and features of the 1:1 student laptop program. During mandatory laptop orientation sessions, parents are made aware of these adult school courses and are highly encouraged to attend as a component of the laptop program.

9. Effective, Researched-Based Methods and Strategies

9a Summarize the relevant research and describe how it supports the plan's curricular and professional development goals.

The district is committed to research based school improvement strategies, especially in the area of technology. The following studies represent the result of hours of research in the area of educational technology, school improvement, and distance learning. These reports summarize well the direction for the goals of the Hacienda La Puente USD - District Educational Technology Master Plan.

Hur, Jung Won and Brush, Thomas A. (2009), Teacher Participation in Online Communities: Why Do Teachers Want to Participate in Self-generated Online Communities of K-12 Teachers, *Journal of Research on Technology in Education*, ISTE Spring 2009

This study examined reasons for teacher participation in online communities of K-12 teachers. The findings indicated five reasons for participation: 1) sharing emotions, 2) utilizing the advantages of online environments, 3) combating teacher isolation, 4) exploring ideas, and 5) experiencing a sense of camaraderie.

Many teachers are interested in new ways of communicating and collaborating. This report validates the necessity for providing an online environment for teachers. HLPUSD is actively examining ways to provide these online communication and collaboration tools for teachers. Using Blackboard, the district has a goal of providing an online community of practice for teachers, especially those who are part of the 1:1 Student Laptop program

Bain, Alan and Weston, Mark E. (2009), The Future of Computers and 1:1 Laptop Initiatives, *Independent School*, Winter 2009

In this report, Bain and Weston look at states and school districts that have implemented a 1:1 Laptop initiative. They look at the fundamental reasons why some of these programs succeed and some fail. Through their examination, they identify three main issues to be considered.

1. Bookbag Anchors – laptops must receive full and consistent deployment across classes if there is to be a satisfactory return on investment, especially in the area of student achievement.
2. Silk purse expectations – laptops must have a profound effect on the way teachers teach and students learn. This is only possible when members of the learning community agree on what it means to teach and learn.

3. Scale – the use of technology that improves performance, scales up to become the professional standard of practice. In education, scale is about creating the teaching and learning conditions that result in a developmental experience for all students.

For a school or district to make a 1:1 initiative work:

- There must be a shared vision and schema for defined, research-based, and school level professional practice. The practice should be embedded in the day to day life of the community, collectively constructed, emergent, informed by feedback, and, as a result, dynamic.
- Technology should be essential, deeply embedded in the real time transactions of teaching and learning, and use all of the time to make the school function.
- The school must form a laser-like focus on articulating the connection between mission and practice.

Technology Services staff will continue to work with site administrators and teachers as they refine the vision for technology use at their school and create a mission which reflects the beliefs, values, and practice of the site learning community.

McCombs, Barbara L. (2000), *Assessing the Role of Educational Technology in the Teaching and Learning Process: A Learner Centered Perspective*, University of Denver Research Institute for The Secretary's Conference on Educational Technology 2000

<http://www.ed.gov/technology>

The report examines research done by many individuals in the area of Educational Technology. It examines issues such as the purpose of education, what knowledge base is needed to apply educational technology appropriately, and learner centered principles. It looks at the learning that Bransford, Brown, and Cocking (1999) suggest can be supported by technology.

- To bring exciting curricula into the classroom based on real-world problems and that involves students finding their own solutions, testing ideas, receiving feedback, and working collaboratively with other students or practitioners beyond the classroom

- To provide tools and scaffolds that enhance learning, support thinking and problem solving, model activities and guide practice, represent data in different ways, and are part of a coherent and systemic educational approach
- To give students and teachers more opportunities for feedback, reflection and revision including those where students evaluate the quality of their own thinking and products, have opportunities to interact with working scientists, receive feedback from multiple sources which include their peers, and experience cognitive tutors and coaching in areas where improvement is needed
- To build local and global communities that are inclusive of teachers administrators, parents, students, practicing scientists, and other interested community people, expanding the learning environment beyond the schools walls
- To expand opportunities for teacher learning that include helping teachers to think differently about learners and learning, to reduce the barriers between students and teachers as learners, to create new partnerships among students and parents, and to expand communities of learner that support ongoing communication and professional development of teachers.

These learner-centered principles have provided much of the direction for professional development in the HLPUSD. Through several professional development opportunities, teachers have been given the opportunity to explore many of these key elements. Future professional developments opportunities, as outlined in the Educational Technology Master Plan, will give teachers additional opportunities for learner-centered instruction. These elements will be monitored by the Technology Advisory Committee and will be reported to the superintendent and school board on an annual basis. Teachers from all schools in the district will be given the opportunity to participate, with special attention being paid to teachers in underperforming and high priority schools.

Heath, Marilyn and Ravitz, Jason (2000), *Teaching, Learning, and Computing: What Teachers Say*, Southwest Educational Development

This paper examines the results from the Teaching, Learning, and Computing (TLC) survey (Becker, H.J & Anderson, R.E. 1998) administered to the Applying Technology to Restructuring and Learning (ATRL) project participants. The TLC results were examined to shed light on the benefits of the ATRL professional development intervention and also to help form the three research questions under consideration in this study. The questions under consideration are:

1. What do constructivist learning environments supported by technology look like in practice?
2. How can teachers be assisted in developing constructivist learning environments supported by technology?
3. How does technology facilitate the development of a constructivist-learning environment?

A major activity of the project was the design, development, and delivery of 72 hours of professional development that modeled constructivist learning environments supported by technology. Six schools were chosen from across the five states of the Southwest Educational Development Laboratory region. The results of the professional development were reported in the survey and showed a marked change in teachers' attitudes toward and use of computers after completing the professional development. "Supporting research (Brand 1998; Education Week, 1999) shows that technology curriculum-integration rather than technology skills training should be the primary focus of technology-centered staff development."

This report confirmed to the Hacienda La Puente USD that the direction to take for professional development was in the area of integration. With that in mind, the professional development goals and several of the curriculum goals include the creation of lessons for each grade level that integrate technology and the accompanying professional development to work with teacher to use those lessons in the classroom. Completion of these lessons will be monitored by the Technology Advisory Committee and the reports of the committee will be shared with the superintendent and school board on an annual basis. All the lessons created will be available to all teachers, including teachers of special education, GATE, and English Language Learners.

Ringstaff, Cathy and Kelley, Loretta (June 2002), *The Learning Return On Our Educational Technology Investment: A Review of Findings from Research*, WestED

This extensive report examines many studies and reports related to educational technology and school reform. It looks at the kinds of impact technology has on education. Several key factors are identified as crucial elements for successfully using technology. They include:

- Technology is best used as one component in a broad-based reform effort
- Teachers must be adequately trained to use technology
- Teachers may need to change their beliefs about teaching and learning
- Technological resources must be sufficient and accessible
- Effective technology use requires long-term planning and support
- Technology should be integrated into the curricular and instructional framework.

An important conclusion drawn from this body of research is that there is “no magic formula that educators and policymakers can use to determine if this ‘return’ is actually worth the ‘investment’.” The better question is, “Under what conditions does technology have the most benefits for students?”

These key elements are addressed in several places throughout the HLPUSD Technology Master plan. Specifically, in the area of professional development, by creating benchmark lessons that address standards and incorporate technology, teachers are given tools that integrate technology into the curricular and instructional framework. Professional development opportunities are designed to provide not only training, but tools to help teachers rethink the use of technology in the classroom.

In HLPUSD, technology is the tool used in several other district reform projects, including OARs, SMART, and an “*Anytime, Anywhere – Online Learning Community*”.

As discussed in the technology master plan, all components of the plan will be fully discussed and evaluated by the Technology Advisory Committee. This information will be shared with the superintendent and school board on an annual basis.

The district is fully committed to success for all students. All schools are wired, and most classrooms have 8 drops. There is also wireless Internet in many of the schools. All teachers will be given the technology benchmark assessments. And all students will be given the opportunity to acquire the skills listed on the district technology grade level standards, including special education, GATE, and English Language Learners.

The Pew Internet and American Life Project, (Aug. 14, 2002), *The Digital Disconnect: The Widening Gap Between Internet-Savvy Students and Their Schools*.

www.pewinternet.org

This extensive report examines Internet use by children under the age of 18. It found that more than 78% of children between the ages of 12 and 17 go online. The American Institutes for Research was commissioned by the Pew Internet and American Life Project to conduct a qualitative study of the attitudes and behaviors of Internet-using public middle and high school students from across the country. The students interviewed expressed strong views about Internet use. These views included:

- Better coordination of their out-of-school educational use of the Internet with classroom activities, thus better leveraging the power of the Internet for learning
- Significant increase in the quality of access to the Internet in schools
- Professional development and technical assistance for teachers is crucial for the effective integration of the Internet into the curricula
- Schools should place priority on developing programs to teach keyboarding, computer, and Internet literacy skills
- A continued effort to ensure that high-quality online information to complete school assignments is freely available, easily accessible, and age appropriate-without undue limitation on students' freedoms.
- Policy makers take the "digital divide" seriously and begin to understand the more subtle inequities among teenagers that manifest themselves in differences in the quality of student Internet access and use.

Consistent with this research, the Hacienda La Puente USD has not only made high speed Internet connections available at all schools, but has also provided online research materials to all middle and high school students. In addition, the HLPUSD will continue to provide and support high quality professional development in the areas of technology integration. In order to better coordinate the students' use of the Internet in their out-of-school time, the district will investigate and provide online classes for students and online professional development for staff. Through ongoing analysis and data collection, the HLPUSD will monitor these elements of the Educational Technology Master Plan and will report to the superintendent and the school board annually. In order to ensure access for all students, including special education, GATE, and English Language Learners, all classrooms across the district are wired and access the network, all students will have access to online learning, and all students must pass the computer literacy graduation requirement in order to graduate.

ERIC Clearinghouse on Adult Career and Vocational Education Columbus OH, (1996), Distance Learning, the Internet, and the World Wide Web

<http://www.ed.gov/>

This article explains that the Internet and the Web are increasingly helping to overcome the barriers of time and space in teaching and learning. Through examination of existing online resources such as the University of Wisconsin-Extension's Distance Education Clearinghouse and AT&T's Center for Excellence in Distance Learning, the researchers examine the form that most distance learning takes and the resources available to students in online classes. Advantages for distance learning include the following (Bates 1995; Eastmond 1995; Wulf 1996):

- Time and place flexibility
- Potential to reach a global audience
- No concern about compatibility of computer equipment and operating systems
- Quick development time
- Easy updating of content as well as archival capabilities
- Lower development and operating costs

The article continues by presenting the processes for distance learning, the social nature of distance learning, and the strategies for distance learning.

Information such as that above has prompted the Hacienda La Puente USD to investigate the use of online classes and distance learning as a solution for both students and teachers. Through continued assessment and monitoring these classes and distance learning opportunities will be evaluated and reported to the school board and superintendent on an annual basis. All online classes and distance learning opportunities will be made available to all students including special education, GATE, and English Language Learners.

Tinker, Robert, *Ice Machines, Steamboats, and Education: Structural Change and Educational Technologies*, The Concord Consortium

This report discusses the trends and tools needed to bring technology more effectively into the classroom. Mr. Tinker says that we are “overdue for a surge in education performance driven by the technology, as soon as we are willing to make the necessary structural changes.” These tools include items such as:

- Literacy
- Voice Recognition
- Ubiquitous technology
- Networking
- Quality simulations
- Embedded assessment
- Design
- Web development
- Robot programming
- Music composition
- Architecture
- Art
- Concepts

- Data collection
- Internet databases
- Modelling
- Scaffolding
- Educational content
- Tutorials
- New Textbooks
- Online courses for students
- Online courses for teachers
- Metacourses

Many of the topics here discussed are of interest to the Hacienda La Puente USD. Of particular interest are the areas of online courses for both students and teachers. This report indicates that these will be critical areas in the future. Students need access to a world of information that may not be available at the local school level. In addition, teachers need to have professional development that meets their unique needs of time and distance. The “*Anytime, Anywhere*” program of the HLPUSD as outlined in the District Technology Master Plan will begin to make these available to our students, staff, and parents. Evaluation of these classes will be made through online surveys and discussions. The results of these evaluations will be made to district Technology Advisory Committee, the superintendent of schools and the school board on an annual basis. The commitment of the district is that all of these opportunities will be made available to all students including special education, GATE, and English Language Learners.

MDRC for the Council of the Great City Schools (September 2002), Foundations for Success: Case Studies of How Urban School Systems Improve Student Achievement

<http://www.cgcs.org/reports/Foundations.html>

This report looks at the challenges facing urban school districts. Challenges such as unsatisfactory academic achievement, political conflict, inexperienced teaching staff, low expectations, lack of demanding curriculum, lack of instructional coherence, high student

mobility, and unsatisfactory business operations. The report gives key findings in the endeavor to increase student achievement in urban schools. These key findings included:

A need by the district to establish preconditions for reform – a shared vision between the chief executive and the school board regarding reform, the capacity to diagnose instructional problems that the school could solve, a focus from district operations to serve and support the schools.

A need by the district for a strategy for success – a focus on student achievement, accountability systems, a focus on low performing schools, district wide curricula and instructional approach, support for these from the district office, data driven decision making as it applied to instruction, elementary school reforms, intensive instruction in reading and math to middle and high school students.

Special attention was paid to the area of data driven decision making for teachers. The report concludes that teachers should use “achievement data as a tool to help improve instructional practice, diagnose students’ specific instructional needs, and increase student learning/achievement. However, teachers and principals need such data given to them at regular intervals from the start of the academic year, along with training in the use of these data to diagnose areas of weakness.”

This information was of interest in finding ways to increase student achievement, but of specific interest to the technology master plan was in the area of data driven decision-making. Teachers in the district have long expressed this need. To that end, the district has implemented OARS which gives teachers and principals access to current achievement data, both state and local, which should distinctly improve their ability to assess student learning and make necessary corrections to the instruction. Teachers from ALL schools will be trained in the use of OARS as a tool for data driven decision-making. The use and success of the OARS system will be evaluated on a regular basis and will be reported to the superintendent and the school board. The district is committed to improvement in student achievement at all schools and for all students including special education, GATE, and English Language Learners.

Process for incorporating research-based methods and models into ongoing program evaluation and modification:

On an annual basis, the Educational Technology and Media Center, along with the Technology Advisory Committee, will review and examine studies and research provided from a variety of sources, including the What Works clearinghouse. The What Works clearinghouse, funded by the US Department of Education, will provide the following easily accessible and searchable online databases:

- An educational interventions registry that identifies potentially replicable programs, products, and practices that are claimed to enhance important student outcomes, and synthesizes the scientific evidence related to their effectiveness.
- An evaluation studies registry, which is linked electronically to the educational interventions registry, and contains information about studies constituting the evidence of the effectiveness of the program, products, and practices reported.
- An approaches and policies registry that contains evidence-based research reviews of broader educational approaches and policies.
- A test instruments registry that contains scientifically rigorous reviews of test instruments used for assessing educational effectiveness.
- An evaluator registry that identifies evaluators and evaluation entities that have indicated their willingness and ability to conduct quality evaluations of education interventions.

The resources of the What Works Clearinghouse, along with research from other educational sources, will be utilized and incorporated into the Educational Technology Master Plan as appropriate to ensure that educational technology plans of the Hacienda La Puente USD are consistent with current scientifically based research regarding technology.

Software evaluation and selection in the area of literacy will be consistent with research from the Early Reading First initiative, which has identified five components essential to a child's learning to read: phonemic awareness, phonics, vocabulary, fluency, and comprehension. All software will be evaluated for its ability to support the five key literacy components, and will follow the "assess, align, instruct, and evaluate" model to target instructional activities based on students' needs.

The Hacienda La Puente USD is committed to increasing course offerings through the use of technology. This is a main focus of the “*Anytime, Anywhere- Online Learning Community*” highlighted prominently throughout the plan. Examples of this include:

- Online courses using *inSTiLE*
- Online Credit Recovery courses
- Streamed video giving students help with Internet search techniques
- Video classes (streamed and broadcast) in middle school algebra
- Online professional development for teachers
- Broadcast support for parents
- Use of the DCP (Digital California Project) Internet 2 to provide online professional development across districts with the Los Angeles County Office of Education

9b. Describe the district’s plans to use technology to extend or supplement the district’s curriculum with rigorous academic courses and curricula, including distance-learning technologies.

Hacienda La Puente USD is committed to providing a rigorous academic curriculum. Among the options for students are:

- Blackboard - this online tool allows teachers to supplement their face to face classes with an online presence. In addition, teachers can use the extensive Blackboard tools to continue the classroom instruction beyond the school day in a meaningful and engaging format.

Blackboard has also allowed teachers from different schools to share online lessons and activities and to begin to create a district repository of online technology integrated resources.

- Credit Recovery courses using Advanced Academics online – Each of the high schools in the district has licenses to Advanced Academics to provide students with the opportunity to recover graduation credits through this online resource. The courses provided in Advanced Academics mirror the high school curriculum and offer a rigorous credit recovery option.

- The district will continue to work with Advanced Academics and the high schools to examine opportunities for students to take Advanced Placement courses, which may not be available at the school site, online through Advanced Academics and /or other online learning opportunities as appropriate and funded through site-based decisions.
- The district will encourage and support teachers who are interested in providing students with virtual field trip opportunities using the California Ports program. The Ports program, sponsored by the California State Parks system, provides teachers with California standards based units of study and videoconferencing opportunities using the California K-12 High Speed Network.

Appendix C – Criteria for EETT Funded Technology Plans

1. PLAN DURATION CRITERION	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
<p>The plan should guide the district’s use of education technology for the next three to five years. (For a new plan, can include technology plan development in the first year)</p>	<p>4</p>	<p>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).</p>	<p>The plan is less than three years or more than five years in length.</p> <p>Plan duration is 2008-11.</p>
2. STAKEHOLDERS CRITERION Corresponding EETT Requirement(s): 7 and 11 (Appendix D).	Page in District Plan	Example of Adequately Addressed	Not Adequately Addressed
<p>Description of how a variety of stakeholders from within the school district and the community-at-large participated in the planning process.</p>	<p>4-5</p>	<p>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.</p>	<p>Little evidence is included that shows that the district actively sought participation from a variety of stakeholders.</p>

3. CURRICULUM COMPONENT CRITERIA Corresponding EETT Requirement(s): 1, 2, 3, 8, 10, and 12 (Appendix D).	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. Description of teachers' and students' current access to technology tools both during the school day and outside of school hours.	6-7	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.	7-12	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 that are supported by this tech plan.	13-14	The plan summarizes the district's curricular goals that are supported by the plan and referenced in district document(s).	The plan does not summarize district curricular goals.
d. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to improve teaching and learning by supporting the district curricular goals.	15	The plan delineates clear goals, measurable objectives, annual benchmarks, and a clear implementation plan for using technology to support the district's curriculum goals and academic content standards to improve learning.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
e. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire the technology skills and information literacy skills needed to	16	The plan delineates clear goal(s), measurable objective(s), annual benchmarks, and an implementation plan detailing how and when students will acquire technology skills and information literacy skills.	The plan suggests how students will acquire technology skills, but is not specific enough to determine what action needs to be taken to accomplish the goals.

succeed in the classroom and the workplace.			
f. List of goals and an implementation plan that describe how the district will address the appropriate and ethical use of information technology in the classroom so that students can distinguish lawful from unlawful uses of copyrighted works, including the following topics: the concept and purpose of both copyright and fair use; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; and avoiding plagiarism (AB 307, optional in 2007-08 tech plan, required in all tech plans 2008-09 and after)	17	The plan describes or delineates clear goals outlining how students will learn about the concept, purpose, and significance of the ethical use of information technology including copyright, fair use, plagiarism and the implications of illegal file sharing and/or downloading (as stated in AB 307).	The plan suggests that students will be educated in the ethical use of the Internet, but is not specific enough to determine what actions will be taken to accomplish the goals.
g. List of goals and an implementation plan that describe how the district will address Internet safety, including how to protect online privacy and avoid online predators. (AB 307, optional in 2007-08 tech plan, required in all tech plans 2008-09 and after)	18	The plan describes or delineates clear goals outlining how students will be educated about Internet safety (as stated in AB 307).	The plan suggests Internet safety education but is not specific enough to determine what actions will be taken to accomplish the goals.
h. Description of or goals about the district policy or practices that ensure equitable technology	19	The plan describes the policy or delineates clear goals and measurable objectives about the policy or practices that ensure equitable technology	The plan does not describe policies or goals that result in equitable technology access for all students. Suggests how technology

	access for all students.		access for all students. The policy or practices clearly support accomplishing the plan's goals.	will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
i.	List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs.	20	The plan delineates clear goal(s), measurable objective(s), annual benchmarks, and an implementation plan for using technology to support the district's student record-keeping and assessment efforts.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
j.	List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to improve two-way communication between home and school.	21	The plan delineates clear goal(s), measurable objective(s), annual benchmarks, and an implementation plan for using technology to improve two-way communication between home and school.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
k.	Describe the process that will be used to monitor the Curricular Component (Section 3d-3j) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.	22	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding procedures, roles, and responsibilities.

4. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA Corresponding EETT Requirement(s): 5 and	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
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12 (Appendix D).			
a. Summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development.	23-25	The plan provides a clear summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development. The findings are summarized in the plan by discrete skills that include CTC Standard 9 and 16 proficiencies.	Description of current level of staff expertise is too general or relates only to a limited segment of the district's teachers and administrators in the focus areas or does not relate to the focus areas, i.e., only the fourth grade teachers when grades four to eight are the focus grade levels.
b. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing professional development opportunities based on your district needs assessment data (4a) and the Curriculum Component objectives (Sections 3d through 3j) of the plan.	25-27	The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing teachers and administrators with sustained, ongoing professional development necessary to reach the Curriculum Component objectives (sections 3d through 3j) of the plan.	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. Describe the process that will be used to monitor the Professional Development (Section 4b) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.	27-28	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.

5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT CRITERIA Corresponding EETT	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
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Requirement(s): 6 and 12 (Appendix D).			
a. Describe the existing hardware, Internet access, electronic learning resources, and technical support already in the district that will be used to support the Curriculum and Professional Development Components (Sections 3 & 4) of the plan.	28-33	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 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.
b. Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed by the district's teachers, students, and administrators to support the activities in the Curriculum and Professional Development Components of the plan.	33-34	The plan provides a clear summary and list of the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support the district will need to support the implementation of the district's Curriculum and Professional Development Components.	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.
c. List of clear annual benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components as identified in Section 5b.	34-37	The annual benchmarks and timeline are specific and realistic. Teachers and administrators implementing the plan can easily discern what needs to be acquired or repurposed, by whom, and when.	The annual benchmarks and timeline are either absent or so vague that it would be difficult to determine what needs to be acquired or repurposed, by whom, and when.
d. Describe the process that will be used to	37-38	The monitoring process, roles, and responsibilities are	The monitoring process either is absent, or lacks

monitor Section 5b & the annual benchmarks and timeline of activities including roles and responsibilities.		described in sufficient detail.	detail regarding who is responsible and what is expected.
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6. FUNDING AND BUDGET COMPONENT CRITERIA Corresponding EETT Requirement(s): 7 & 13, (Appendix D)	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. List established and potential funding sources.	39	The plan clearly describes resources that are available or could be obtained to implement the plan.	Resources to implement the plan are not clearly identified or are so general as to be useless.
b. Estimate annual implementation costs for the term of the plan.	40-42	Cost estimates are reasonable and address the total cost of ownership, including the costs to implement the curricular, professional development, infrastructure, hardware, technical support, and electronic learning resource needs identified in the plan.	Cost estimates are unrealistic, lacking, or are not sufficiently detailed to determine if the total cost of ownership is addressed.
c. Describe the district's replacement policy for obsolete equipment.	43-47	Plan recognizes that equipment will need to be replaced and outlines a realistic replacement plan that will support the Curriculum and Professional Development Components.	Replacement policy is either missing or vague. It is not clear that the replacement policy could be implemented.
d. Describe the process that will be used to monitor Ed Tech funding, implementation costs and new funding opportunities and to adjust budgets as necessary.	47-49	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.

7. MONITORING AND EVALUATION COMPONENT CRITERIA Corresponding EETT Requirement(s): 11 (Appendix D).	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. Describe the process for evaluating the plan's overall progress and impact on teaching and learning.	49-52	The plan describes the process for evaluation using the goals and benchmarks of each component as the indicators of success.	No provision for an evaluation is included in the plan. How success is determined is not defined. The evaluation is defined, but the process to conduct the evaluation is missing.
b. Schedule for evaluating the effect of plan implementation.	52	Evaluation timeline is specific and realistic.	The evaluation timeline is not included or indicates an expectation of unrealistic results that does not support the continued implementation of the plan.
c. Describe the process and frequency of communicating evaluation results to tech plan stakeholders.	52-53	The plan describes the process and frequency of communicating evaluation results to tech plan stakeholders.	The plan does not provide a process for using the monitoring and evaluation results to improve the plan and/or disseminate the findings.

8. EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS TO MAXIMIZE THE USE OF TECHNOLOGY CRITERION Corresponding EETT Requirement(s): 11 (Appendix D).	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
If the district has identified adult literacy providers, describe how the program will be developed in collaboration with them. (If no adult literacy providers are indicated, describe the process used to identify adult literacy providers or	53-54	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	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.

potential future outreach efforts.)		the process used to identify adult literacy providers or potential future outreach efforts.	
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9. EFFECTIVE, RESEARCHED-BASED METHODS, STRATEGIES, AND CRITERIA Corresponding EETT Requirement(s): 4 and 9 (Appendix D).	Page in District Plan	Example of Adequately Addressed	Not Adequately Addressed
a. Summarize the relevant research and describe how it supports the plan’s curricular and professional development goals.	54-66	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. Describe the district’s plans to use technology to extend or supplement the district’s curriculum with rigorous academic courses and curricula, including distance-learning technologies.	66-67	The plan describes the process the district will use to extend or supplement the district’s curriculum with rigorous academic courses and curricula, including distance learning opportunities (particularly in areas that would not otherwise have access to such courses or curricula due to geographical distances or insufficient resources).	There is no plan to use technology to extend or supplement the district’s curriculum offerings.

