

# **Educational Technology Plan**

**2005 through 2008**



## **La Cañada Unified School District**



### Superintendent

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# La Cañada Unified Technology Plan

## Component 1: Executive Summary/Introduction

### Executive Summary

La Cañada Unified School District has a long history of commitment towards academic excellence. An important component of its strategic plan for academic excellence is ensuring that students and staff have pervasive access to appropriate, up-to-date technology resources to improve instruction and learning. This District Technology Master Plan maps out the goals, benchmarks, and implementation steps that will guide curriculum development, professional development, and procurement of resources for the next three years, through June 2008 to achieve those goals.

The cornerstone of this technology plan is a renewed focus on developing technology-infused anchor lessons and assignments throughout the curriculum. Specific lessons with assignment grading rubrics that are aligned to state curriculum standards will be identified, developed and used by teachers and students in every grade level and course. This technology plan details the planning, training, infrastructure, and support programs necessary to implement a district wide curriculum that incorporates technology to enhance teaching and learning.

This plan was developed with input from all stakeholders including students, parents, teachers, staff, and administrators, and was based on documented educational research. It incorporates a continual monitoring and evaluation process through a variety of formal and informal means and has flexibility to change and grow in response to ongoing needs, shortcomings, or new realities that are identified over time.

### Plan Introduction

All educators work towards the goal of improving student achievement and preparing students for life and the workplace. This education technology plan outlines how technology can assist in achieving this goal at La Cañada Unified School District.

La Cañada Unified School District, located in La Cañada, California, consists of three elementary schools grades K through 6, and one high school grades 7 through 12. An incorporated city of approximately 24,000 citizens, La Cañada is a residential community located in the greater Los Angeles area. NASA's Jet Propulsion Laboratory, Descanso Gardens, and Mount Wilson Observatory are all located within the school district boundaries. Most residents have occupations of a professional, scientific, or business nature. Many of these individuals have become directly involved in school/community partnerships like the Institutes for the 21st Century program. Parents of La Cañada students are interested and involved in their children's

education. La Cañada Unified School District is supported by a wide range of parent and community organizations including: Site Councils, Boosters, PTA/PTSA, Music Parents, Friends of Drama, Art and Choral support groups.

The La Cañada Unified School District takes great pride in its vision of what students should know and be able to do. In accordance with the Western Association of Schools and Colleges Accreditation (WASC) planning document, upon graduation, students will:

- 1) Be productive, responsible citizens in their school, community, nation and world.
- 2) Have the ability to think critically.
- 3) Have the ability to communicate effectively.
- 4) Use technology as a tool to facilitate and enhance learning, to solve problems, to perform life skills and to adapt to a constantly changing world.
- 5) Become life-long learners who can explore and develop knowledge and skills that lead to a fulfilling life.

Curricula are aligned to the state or national standards in all academic areas. According to the State of California's Academic Performance Index, the district's API is among the top 10 of public school districts in the state. In addition to the exams required by the state, the district takes great pride in our students' achievements on the California Standardized Tests, SATs, and ACT college entrance exams; including quite a few National Merit finalists each year, and a large enrollment in AP courses with a high degree of achievement on the AP exams. Paradise Canyon Elementary school was awarded the California Distinguished School award in April 2004. The district's grades 7-12 secondary school, La Cañada High School, was recognized in 2003 as a California Distinguished School, and was further recognized as a National Blue Ribbon school in September, 2004.

La Cañada Unified School District is a place where student's academic performance is of utmost importance. However, we are also a comprehensive district, with strong and extensive programs in technology, athletics, and performing arts. This complements the district's belief that emphasis should be placed on the development of the whole child.

This District Technology Master Plan was developed over the course of an entire year. Preliminary planning meetings including one with the District Management Team and another one with the District Curriculum Council were held in the spring of 2003. Several half-day research and writing workshops were conducted by the Technology Plan Writing Team during the summer break. Once the school year began in September, the Technology Writing Team met once a month after school hours. The District Management Team and the District Curriculum Council reviewed and approved the draft of the Technology Plan in January and February of 2005. The draft was sent to the Los Angeles County Office of Education for a preliminary review in mid February, and after minor revisions, was submitted for formal CTAP review in April. Once it passes County Office of Education review, the District Technology Plan will be brought before the local board of education for final approval and adoption. Lastly, the District Technology Plan will be submitted to the State

This comprehensive technology plan will help La Cañada Unified School District to fulfill its mission to enhance personal growth and promote academic excellence.

### **1a. Plan Duration**

07/01/2004 - 06/30/2008

This technology plan is a 4-year plan, which began July 1, 2004 and will end June 30, 2008. The first year of the plan was spent gathering the data for review, bringing the stakeholders to the table, developing, and writing the plan. The individual benchmarks begin in the spring of 2005, with the first benchmark evaluation of the plan occurring in June 2006.

## **Component 2: Stakeholders**

### **2a. Planning Team**

Bob Palermini, Parent, LCHS site council  
Bridget Samuels, Student, LCHS  
Dave Clausen, Teacher, LCHS  
Diane Jimenez, Teacher, PCY  
Don Schaafsma, Teacher, LCHS  
Enoch Kwok, Director of Technology, District Administrator  
Gabrielle Leko, Teacher, LCHS  
Grant Paules, Student, LCHS  
Ivette Ellis, Principal, LCE  
Jackie Castro, Teacher, LCE Teacher  
Julie Clark, Teacher, PCY  
Kevin Buchanan, Assistant Principal, LCHS Administrator  
Linda Kimball, Parent, PCY - LCHS  
Lindsay Bozzani, Librarian, LCHS  
Mary Freeman, Parent, LCHS  
Paige Salardino, Teacher, LCHS  
Ron Connelly, Parent, PCR  
Steve Zimmerman, Teacher, LCHS  
Tom Traeger, Teacher, LCHS  
Vicki Brown, Lab Aide, LCE

## 2a. Stakeholders Narrative

Many stakeholders were involved to create the new district technology master plan which will advance the use of technology throughout the district. The Director of Technology met with the Superintendent, Governing Board, Curriculum Council, and the District Technology Committee on various occasions to plan for and oversee the writing process for the new the technology plan. The stakeholders included elementary, junior high, and high school teachers and administrators as well as parents, students, and staff. Elementary and secondary school personnel were represented at every planning meeting and writing workshop. The community, including parents and students, were represented in every aspect of the planning and writing process through membership and participation in the Technology Plan Writing Team. Team members have been involved in planning for and the use of technology for a number of years. There were meaningful discussions focusing on the different aspects of the plan.

All day planning sessions and writing workshops were held during the summer of 2004 and after school writing workshops continued monthly throughout the 2004/2005 school year. The District Tech Coordinator presented an agenda at each meeting and tasks were divided up among the members, based on their knowledge of the specific topic or area of interest.

We began by discussing the previous tech plan and highlighted the areas that needed to be rewritten. We were presented with the results of the CTAP survey that were gathered from the surveys that the district employees were asked to take. Eighty four percent of the teachers responded to the survey. The survey addressed the knowledge base, type of assignments and classroom activities relating to technology, and the frequency of technology use in the classroom. The use of technology throughout the district was also taken into account.

The West Ed Policy Brief was read and discussed to determine the reason for rewriting the goals for implementing the district's use of technology. Members were shown the State Preliminary Educational Technology Standards for Teachers and a discussion followed based on how the district educators fit with these standards.

Members were asked to describe 5 examples of how technology is working well within the district. The areas where the use of technology was working well could be expanded upon to create new goals. The members were shown videos, from the George Lucas Foundation, of other districts that were using technology in very interesting and innovative ways. A discussion followed to see if we could implement any of the ideas into our tech plan. Members were asked to describe the direction that they would like to see the use of technology move in the next five years.

Further writing sessions consisted of members reviewing the plan draft from the previous session. Discussions resulted in additions and changes to the plan draft. Members were assigned a task to write up goals using the West Ed Tech Plan Builder. Questions were answered with the input from interested members/stakeholders. Each area was fine tuned by the District Technology Coordinator and the updated draft was distributed for further discussion.

## **Component 3: Curriculum**

### **3a. Availability of Appropriate Technology**

All students attending La Cañada schools are fortunate to have access to current educational technology and make use of those electronic resources in a variety of ways.

The three elementary schools have at least three computers in every classroom and a computer lab at each school for student use. An instructional computer specialist oversees the computer lab and assists teachers with delivering technology infused lessons. Elementary schools also have multiple sets of AlphaSmart portable word processors on carts which are checked out by the teachers to enable full class instruction in keyboarding and basic word processing. Digital cameras, scanners, and LCD projectors are also available for checkout by teachers at each school. All elementary school classrooms have TV scan converters to allow a teacher to display the contents of their computer screens on a large screen TV for the entire class to see. The elementary school libraries each have several computers that are available for general use. These computers are available for all students to use including special education, GATE, and English Language Learners. Currently all of these computers are available only during the school day.

Junior high school classrooms have four desktop computers each. The junior high school is located on the same campus as the high school and therefore, the junior high students have access to all of the computer labs and library media center resources that the high school students have. These computers are available for all students to use including special education, GATE, and English Language Learners.

High school classrooms have at least two computers in each classroom with some other classrooms having more. There is an unscheduled computer lab consisting of 36 computers which is available for teachers to bring their students to and work on class projects. There are also 53 computers and assorted digital cameras, scanners, and LCD projectors in the Information Resource Center (IRC) for student, teacher, and class usage. The technology in the IRC is available before school, during school and after school. These computers are available for all students to use including special education, GATE, and English Language Learners. Two additional computer labs are used for computer applications and programming classes. The science department has several mini labs of computers in their lab classrooms available to both junior high and high school students. Additionally, several classroom sets of graphing calculators with projectors are available in the math department.

All student groups have equal access to the available technology as a tool to promote learning. All elementary students use computers in the classroom and in the computer lab to work on projects that integrate technology with the curriculum. Junior high and high school students use the computer labs and the Information Resource Center to perform research, word processing, spread sheets, and multimedia presentations for their classes.

Students have ample access to technology in their homes, in community libraries, and community centers. The majority of our students have computers available for their use at home. The La Cañada public library has computers wired to the internet available for community use.

Furthermore, the La Cañada High School's Information Resource Center is open three evenings a week with approximately 60 computer stations available for use by students and community members. Lastly, computer classes are offered to community members at the Roger Barkley Community Center.

Technology access does not differ for the various subpopulations of students in La Cañada schools. GATE students, Special Education students, and English Language Learners all use the school and community technology resources. The use of technology is often integrated into their class work.

All students have access to appropriate technology to support learning. Assistive and adaptive technology is provided to each special needs student according to their IEP. Students have received laptops, tablet computers, Alpha Smarts word processors, assistive devices, and specialized software to facilitate their learning. The district works closely with the local SELPA to ensure that any needs identified by the SELPA with a technology component are addressed and provided for in a timely fashion.



**3b. District's Current Use of Hardware and Software**

In the La Cañada Unified School District, technology is being used in the classrooms to create instructional materials, deliver classroom instruction, manage student grades and attendance, communicate with colleagues, parents, and students, gather information for lesson plans, and access the student information system.

The available technologies include computers, printers, scanners, video based creation tools (video and digital cameras), video based presentation tools (VCR/DVD, TV Scan Converters, LCD projectors), Internet, and Email.

In a recent Technology Use Survey (CTAP iAssessment 2003), LCUSD teachers grades K-12 were asked to report their use of technology tools . The results are below:

**Teacher use of technology for classroom management:**

<b>Classroom Management Tools</b>	<b>Daily</b>	<b>2-4 Days per week</b>	<b>Weekly to Monthly</b>
Computer/printer/scanner, etc	47%	21%	13%
Video based presentation tools	8%	11%	30%
Internet	27%	23%	20%
Email	62%	15%	7%

**Teacher use of technology to deliver instruction**

<b>Classroom Instruction Tools</b>	<b>Daily</b>	<b>2-4 Days per week</b>	<b>Weekly to Monthly</b>
Computer/printer/scanner, etc	36%	20%	22% %
Video based presentation tools	4%	10%	38%
Internet	17%	21%	25%
Email	33%	12%	11%

**Teacher use of Technology by subject area**

<b>Content Area</b>	<b>At least monthly</b>	<b>Less Frequently or never</b>
Reading and Language Arts	73%	27%
Mathematics	52%	21%
Science	51%	49%
History/Social Science	51%	49%
PE/Health	18%	72%
Fine Arts	29%	71%
Business/Computer Science	16%	84%
Foreign Language	20%	80%

**Location where technology was used**

Library Medic Center	27%
Computer Lab	32%
Classroom	40%

**Student use of technology tools for classroom assignments**

<b>Students Using Technology</b>	<b>Daily</b>	<b>2-4 Days per week</b>	<b>Weekly to Monthly</b>	<b>Less than Monthly</b>
Computer/printer/scanner, etc	5%	18%	42%	32%
Video based presentation tools	1%	7%	15%	49%
Internet	5%	7%	33%	48%
Email	4%	5%	18%	62%

**Types of assignments utilizing technology**

<b>Technology Assignments</b>	<b>Daily</b>	<b>2-4 Days per week</b>	<b>Weekly to Monthly</b>	<b>Less than Monthly</b>	<b>Never</b>
Word Processing	4%	21%	39%	18%	18%
Reinforcement and Practice	5%	13%	33%	20%	30%
Research	1%	7%	35%	32%	25%
Create Reports or projects	2%	5%	38%	31%	24%
Demonstrations	2%	5%	16%	29%	47%
Solving problems, analyze data	2%	6%	13%	25%	53%
Graphically presenting data	4%	4%	15%	28%	49%

Technology at the 7-12 grade level is used by a few of the teachers for presenting material with PowerPoint software. About the same number of teachers use the Internet for showing diagrams, animations, and online video clips. There is an increasing demand for the everyday use of computer data projectors in the classroom. Garmin GPS receivers are used by the science department to take coordinates in the field and then to put those coordinates into the ArcView GIS software. Some teachers use the ArcView GIS software to show spatial patterns and maps to students through the data projector.

In order to address students with special needs, teachers are increasingly making use of interactive teaching methods in the classroom using computer data projectors. Power Point presentations engage special education students by giving them the content in a visual fashion. There are also numerous diagrams and animations that are accessible over the Internet. Some textbook publishers are making interactive Internet Investigation and visualization animations available to their subscribers. Application programs such as Microsoft Word, Excel, and Power Point enable the special needs student to edit and revise his work. Most importantly, technology allows the special needs student to interact with the content. In some cases, the use of technology provides instant feedback to the student regarding assignments.

The District has developed technology proficiency standards for high school graduation in the past, but they are currently not being implemented nor enforced. Teachers are pretty much free to use or not use the computers in their classrooms. Computer access is very different from utilization. The three elementary schools use grade level appropriate technology proficiency standards to guide lessons in the computer labs, where the computer instructional specialist plays

a large role in helping to teach computer skills. A chart of the Technology Skills Scope and Sequence by grade level can be found in Appendix A. While the computer labs at the elementary school are guided more strongly by the technology scope and sequence, the use of those standards is more varied in the classrooms. Certain elementary school teachers have incorporated technology infused lessons throughout their academic curriculum, but it is not a universal practice, and in fact, there is great disparity in the utilization of technology from one classroom to the next. One of the major goals of this technology plan is to bring some standardization across the district for the use of technology in each classroom and to raise the level of integration of computer technology into content areas.

New junior high school students are introduced to information literacy skills through the social studies class via a required research project overseen by the school library media specialist.

All students district wide must sign a Technology and Internet Use Agreement and undergo information literacy skills training by the library media specialist or instructional computer specialist before they are granted access to district computing resources.

The Information Resource Center at La Cañada High School is used mostly for research activities using the Internet and online subscription services. Application programs such as Microsoft Word, Excel, and PowerPoint are also used by students in the lab to produce computer generated assignments. Scanners and digital cameras are available for checkout to produce photos and graphics for input into computer generated assignments. The ArcView Geographic Information System is used by students to analyze spatial relationships and patterns in the sciences. Statistical software is used to analyze datasets in statistics classes. Students make use of scanners to scan work into achievement portfolios.

Attendance data is collected online district wide each morning or at the beginning of each class. The student information system does allow student records to be transferred between the District Office and any school within the district. Teachers at the high school have begun piloting the use of a school wide electronic grade book and quarterly grades are being submitted on-line electronically.

Teachers make use of email on a regular basis to improve two-way communication between home and school and between staff members. A few of the more tech-savvy teachers post web pages where students can check their assignments or access worksheets. One of the district's goals is to implement on-line grade access so that students and parents may access their current assignment and grade status from home.

Adult knowledge on how to best use technology is an issue that is faced when attempting to use computer technology as a way to communicate with parents and the community. Most parents and community members in La Cañada seem to be pretty tech-savvy. A high percentage of the community has access to computers and the Internet, although there is turnout at occasional training classes offered by the ROP or IRC staff.

While there are a few bright spots where technology is being used effectively, particularly in the labs and certain individual teacher's classrooms, there is room for much improvement.

### **3c. District's Curricular Goals**

The curricular goals of La Cañada Unified School District are encapsulated within the Expected School wide Learning Results (ESLRs) which are focused on providing cohesive and rigorous curriculum, instruction, and assessment to enable students to communicate clearly and effectively, to access and apply information, to practice problem solving and inquiry both individually and collaboratively, to think critically, to demonstrate creativity, to utilize technology, to become productive citizens, and to become lifelong learners.

The District has implemented (and continues to fine tune) a comprehensive K-12 curriculum that matches or exceeds state standards in all subjects, required multiple instructional strategies designed to meet the needs of a diverse student population with a variety of learning styles, promoted development of multiple assessments that include student mastery benchmarks tied to standards, and consistently gathered evidence of student mastery with regular analysis by staff, students, and parents as part of an ongoing program review and curriculum revision.

Most of the high school students pass the CAHSEE, and those who do not have access to extra support in order to help them pass. Intervention services include weekly after school sessions in math and homework assistance workshops for students in grades 7-12.

Targets for improving student achievement are continuously being met. API scores for the last several years have steadily gone up; for example, for this past year the High School has gone up 10 points to a new high of 890, thereby helping La Cañada High School to earn a National Blue Ribbon award. The elementary schools have also demonstrated superior achievement garnering API scores ranging from 923 through 953.

Technology is a major component of the District's Strategic Educational Goals. It is seen as a tool and resource to facilitate the development of lifelong learners who are equipped for the present and future world of higher education, work, and personal pursuits in the Information-Communication Age. Technology provides the connections for a new century in the linking of classrooms and communities, education and careers, and people and information. Each school site incorporates technology accordingly into its site goals with specific plans, lessons, staff development, and procurement of hardware and software. School Improvement Site Councils update and implement the District's Master Plan which includes a strong technology component. The high school's WASC review included a strong technology component and the high school received significant resources in new computers and personnel to facilitate technology through its Digital High School plan.

Each school has on site staff that are specifically dedicated to helping teachers implement technology into the student's learning experience. At the elementary schools, an instructional technology specialist manages the school's computer lab and works with the school's teachers to develop lessons that allow students to learn about and to learn with computers. The high school has a full time library/media specialist who is not only the school's librarian, but a key trainer for both students and teachers on how to use technology in significant and meaningful ways while promoting information literacy.

The last district technology plan was written in 1997 and updated in 2002 and focused on acquiring technology to provide access to students and teachers to begin using technology for personal productivity, communication, and basic lesson planning and delivery. This technology plan builds on top of the foundation of technology access by focusing on technology integration and infusing technology into the curriculum. Instead of technology being used in an ad hoc fashion, this plan coordinates a district wide approach to planning lessons that are aligned to state curricular standards and which utilize technology in meaningful and powerful ways. With careful planning and strategic thinking, lessons can be developed in such a fashion that the technology skills learned in one grade level or class will be the springboard for more advanced skills in the next while reinforcing the student's content area knowledge in powerful new ways.

### **3d. Using Technology to Improve Teaching and Learning**

**Goal:** By June 2008, 85% of all teachers will use technology infused lessons K-12 that are aligned to state curriculum standards and the district's scope and sequence of technology skills (See Appendix A). Each grade level or course will develop anchor lessons and/or assignments that utilize technology in the teaching and learning process. Teachers at that grade level or course will use at least one of the anchor lessons developed for that grade level or course. Rubrics will be created for assessing these lessons, and teachers will be trained in how to use these anchor lessons. Teachers will be encouraged to expand their use of technology beyond the technology anchor assignments, but the anchor assignments will form a uniform foundation of technology use across the district. In subsequent years, additional anchor lessons will be added to each grade level, subject area, or course for each grading period.

#### **Benchmarks**

##### **Year 1**

By June 2006, 50% of all teachers will utilize at least one technology infused anchor lesson during the school year.

##### **Year 2**

By June 2007, 65% of all teachers will utilize at least one technology infused anchor lesson during the school year.

##### **Year 3**

By June 2008, 85% of all teachers will utilize at least one technology infused anchor lesson during the school year.

**Goal:** By June 2008, 90% of all students will utilize technology as part of their learning experience through use of computers in classroom projects for electronic research, presentation design and delivery, content creation, exploration, data analysis, diagnostics, skill building, and/or problem solving.

### **Benchmarks**

#### **Year 1**

By June 2006, 60% of all students will utilize technology as part of their learning experience through use of computers in classroom projects for electronic research, presentation design and delivery, content creation, exploration, data analysis, diagnostics, skill building, and/or problem solving.

#### **Year 2**

By June 2007, 75% of all students will utilize technology as part of their learning experience through use of computers in classroom projects for electronic research, presentation design and delivery, content creation, exploration, data analysis, diagnostics, skill building, and/or problem solving.

#### **Year 3**

By June 2008, 90% of all students will utilize technology as part of their learning experience through use of computers in classroom projects for electronic research, presentation design and delivery, content creation, exploration, data analysis, diagnostics, skill building, and/or problem solving.

**Goal:** By June 2008, all teachers will have electronic access to 100% of the standardized testing data and 100% of the multiple measurement data for their students to help guide and provide instruction to their students.

### **Benchmarks**

#### **Year 1**

By June 2006, teachers will have access to 75% of the available standardized testing data for their students via an online component of the district student information system to help guide and provide instruction to their students.

#### **Year 2**

By June 2007, teachers will have access to 100% of the available standardized testing data and 50% of the multiple measures data for their students to help guide and provide instruction to their students.

#### **Year 3**

By June 2008, teachers will have access to 100% of the available standardized testing data and 100% of the multiple measures data for their students to help guide and provide instruction to their students.

### **3e. Students Acquiring Technology and Information Literacy Skills**

**Goal:** By June 2008, 100% of all students will be taught information literacy skills through targeted instruction via projects completed at the library media center as well as through English Language Arts and History-Social Science instruction across all grades.

#### **Benchmarks**

##### **Year 1**

By June 2006, 50% of all students will be taught information literacy skills through targeted instruction via projects completed at the library media center as well as through English Language Arts and History-Social Science instruction across all grades.

##### **Year 2**

By June 2007, 75% of all students will be taught information literacy skills through targeted instruction via projects completed at the library media center as well as through English Language Arts and History-Social Science instruction across all grades.

##### **Year 3**

By June 2008, 100% of all students will be taught information literacy skills through targeted instruction via projects completed at the library media center as well as through English Language Arts and History-Social Science instruction across all grades.



**Goal:** By June 2008 90% of all students will participate in at least one technology infused lesson that is correlated to the district Technology Scope and Sequence Matrix in each of their classes. Students will become proficient users of technology as they learn via technology infused anchor lessons and assignments that will be developed for each grade level or course. Those technology anchor lessons will be based on the district Technology Scope and Sequence matrix and aligned to state curriculum standards. As the technology anchor lessons are being developed, care will be taken to make sure that as each new lesson is created, it covers technology scope and sequence skills that are not covered by existing anchor lessons appropriate for that grade level. As more and more lessons are created over time, there will be fewer and fewer gaps in the Technology Scope and Sequence matrix that is not covered by an anchor lesson.

## **Benchmarks**

### **Year 1**

By June 2006, 30% of all students will participate in at least one technology infused lesson that is correlated to the district Technology Scope and Sequence Matrix in each of their elementary level classes or secondary (7-12) course.

### **Year 2**

By June 2007, 60% of all students will participate in at least one technology infused lesson that is correlated to the district Technology Scope and Sequence Matrix in each of their elementary level classes or secondary (7-12) course.

### **Year 3**

By June 2008, 90% of all students will participate in at least one technology infused lesson that is correlated to the district Technology Scope and Sequence Matrix in each of their elementary level classes or secondary (7-12) course.

### **3f. Ensuring Appropriate Technology Access to All Students**

**Goal:** 100% of all special needs populations (including low incidence disabilities, learning disabled students, other special needs students) will have access to appropriate technology that helps them meet their learning needs.

#### **Benchmarks**

##### **Year 1**

Through June 2006, 100% of all special needs students will have access to the appropriate technology resources (including assistive or adaptive technology) as identified in their IEPs to support their learning.

##### **Year 2**

Through June 2007, 100% of all special needs students will have access to the appropriate technology resources (including assistive or adaptive technology) as identified in their IEPs to support their learning.

##### **Year 3**

Through June 2008, 100% of all special needs students will have access to the appropriate technology resources (including assistive or adaptive technology) as identified in their IEPs to support their learning.

**Goal:** All students will have access to up-to-date computers and technology resources in every classroom and learning environment.

#### **Benchmarks**

##### **Year 1**

At the end of June 2006, the district will maintain less than a 5.5 to 1 student to computer ratio district wide with no student computer being older than 6 years old.

##### **Year 2**

At the end of June 2007, the district will maintain less than a 5 to 1 student to computer ratio district wide with no student computer being older than 6 years old.

##### **Year 3**

At the end of June 2008, the district will maintain less than a 4.5 to 1 student to computer ratio district wide with no student computer being older than 6 years old.

**Goal:** By June 2008, 100% of students and teachers will have access to high speed network resources which will enable multimedia rich learning environments including streaming video, distance learning and tutorials, video conferencing, and multimedia content creation and publishing.

**Benchmarks**

**Year 1**

By the end of June 2006, 40% of the students and teachers district wide will have access to high speed network resources that enable multimedia rich learning environments including streaming video, distance learning and tutorials, video conferencing, and multimedia content creation and publishing.

**Year 2**

By the end of June 2007, 60% of the students and teachers district wide will have access to high speed network resources that enable multimedia rich learning environments including streaming video, distance learning and tutorials, video conferencing, and multimedia content creation and publishing.

**Year 3**

By the end of June 2008, 100% of the students and teachers district wide will have access to high speed network resources that enable multimedia rich learning environments including streaming video, distance learning and tutorials, video conferencing, and multimedia content creation and publishing.

**Goal:** Through June 2006, 100% of all students will utilize technology appropriately in a safe environment

**Benchmarks**

**Year 1**

Through June 2006, 100% of all students will operate under a safe computing environment.

**Year 2**

Through June 2007, 100% of all students will operate under a safe computing environment

**Year 3**

Through June 2008, 100% of all students will operate under a safe computing environment

### **3g. Making Student Record Keeping and Assessment More Efficient**

**Goal:** By June 2008, 100% of all teachers will utilize an on-line tool for taking and reporting attendance.

#### **Benchmarks**

##### **Year 1**

By June 2006, 100% of all district teachers will utilize the Aeries Browser Interface (ABI) on-line tools to take attendance.

##### **Year 2**

By June 2007, 100% of all district teachers will utilize the Aeries Browser Interface (ABI) on-line tools to take attendance.

##### **Year 3**

Through June 2008, 100% of all district teachers will utilize the Aeries Browser Interface (ABI) on-line tools to take attendance.

**Goal:** By June 2008, 90% of all teachers at the high school (grades 7-12) will use a school standard electronic grade book program to keep track student assignments and grades.

#### **Benchmarks**

##### **Year 1**

By June 2006, 30% of the high school and junior high school staff will use a standard electronic grade book program to keep track of student assignments and grades.

##### **Year 2**

By June 2007, 60% of the high school and junior high school staff will use a standard electronic grade book program to keep track of student assignments and grades.

##### **Year 3**

By June 2008, 90% of the high school and junior high school staff will use a standard electronic grade book program to keep track of student assignments and grades.

### **3h. Making Teachers and Administrators More Accessible to Parents**

**Goal:** By June 2008, 75% of all teachers at the high school and junior high school will have grades posted on-line for parents and students to access from home.

#### **Benchmarks**

##### **Year 1**

By June 2006, 25% of the high school and junior high school teachers will participate in a pilot program to make assignments scores and grades accessible to parents on-line using a school standard grade book software.

##### **Year 2**

By June 2007, 50% of the high school and junior high school teachers will participate in a pilot program to make assignments scores and grades accessible to parents on-line using a school standard grade book software.

##### **Year 3**

By June 2008, 75% of the high school and junior high school teachers will make assignments scores and grades accessible to parents on-line using a school standard grade book software.

**Goal:** By June 2008, Parents will be able to contact 100% of teachers and administrators through a variety of means including in person, by telephone, voice mail, email, and staff web pages.

#### **Benchmarks**

##### **Year 1**

By June 2006, All teachers will be able to be reached by telephone and email, and administrators will be able to be reached by telephone, voicemail, and email. Additionally, 20% of the teachers and administrators will have their own web page on the school's web site.

##### **Year 2**

By June 2007, All teachers will be able to be reached by telephone and email, and administrators will be able to be reached by telephone, voicemail, and email. Additionally, 40% of the teachers and administrators will have their own web page on the school's web site.

##### **Year 3**

By June 2008, All teachers will be able to be reached by telephone and email, and administrators will be able to be reached by telephone, voicemail, and email. Additionally, 80% of the teachers and administrators will have their own web page on the school's web site.

### 3i. Summary of Implementation Steps and Timelines

**Section 3d:**

**Goal:** By June 2008, 85% of all teachers will use technology infused lessons K-12 that are aligned to state curriculum standards. Each grade level or course will develop anchor lessons and/or assignments that utilize technology in the teaching and learning process. Teachers at that grade level or course will use at least one of the anchor lessons developed for that grade level or course. Rubrics will be created for assessing these lessons, and teachers will be trained in how to use these anchor lessons. Teachers will be encouraged to expand their use of technology beyond the technology anchor assignments, but the anchor assignments will form a uniform foundation of technology use across the district. In subsequent years, additional anchor lessons will be added to each grade level, subject area, or course for each grading period.

Start Date- End Date	Implementation Step	Target Audience	Person/Team Responsible
07/01/2005- 06/30/2008	Teachers will create technology infused lesson plans during personal preparation time, grade level meetings, and/or departmental meetings, that are aligned to state curriculum standards. The ISTE-NETS resource book, and the web-based lesson plan builder tool( <a href="http://www.lessonplanbuilder.org">http://www.lessonplanbuilder.org</a> ) will be used as a guides to developing the anchor lessons with the initial goal of providing at least one technology infused lesson per course or grade level per semester.	Teachers	District Teachers
07/01/2006- 09/01/2007	Week long summer curriculum writing workshops will be conducted each July and/or August to help teachers create lessons that utilize technology to enhance learning. Teachers will be encouraged to write lesson plans that use technology in a variety of ways to enhance student learning including lessons that use technology for research, investigation, problem solving, reporting, analysis, diagnosis, design, presentation, and skill building, among others.	Teachers	Director of Technology

**Goal:** By June 2008, 90% of all students will utilize technology as part of their learning experience through use of computers in classroom projects for electronic research, presentation design and delivery, content creation, exploration, data analysis, diagnostics, skill building, and/or problem solving.

Start Date- End Date	Implementation Step	Target Audience	Person/Team Responsible
03/01/2006- 06/01/2008	Each March, the principal will select representative students from each school to take the technology use portion of the CTAP2 iAssessment on line survey to determine the areas of technology usage they have encountered within the course of their schoolwork for the past school year. Results from the student surveys will be used to target areas of focus for increasing the use of technology in the classroom. Changes over time will be tracked to measure progress in technology infusion into the curriculum.	Students	Principal

**Goal:** By June 2008, all teachers will have electronic access to 100% of the standardized testing data and 100% of the multiple measurement data for their students to help guide and provide instruction to their students.

<b>Start Date- End Date</b>	<b>Implementation Step</b>	<b>Target Audience</b>	<b>Person/Team Responsible</b>
07/01/2005-	Determine the scope and breadth of assessment data and multiple measurement components that are kept by the district and determine which of those can be provided to the teachers for the new year. Make plans to convert/import/download new types or forms of assessment data and multiple measurement data that have not already been loaded into the system. Repeat the process each spring and adjust for any changes to the choice of multiple measures indicators.	Teachers, Administrators/Staff	Technology Department Staff

**Section 3e:**

**Goal:** By June 2008, 100% of all students will be taught information literacy skills through targeted instruction via projects completed at the library media center as well as through English Language Arts and History-Social Science instruction across all grades.

<b>Start Date- End Date</b>	<b>Implementation Step</b>	<b>Target Audience</b>	<b>Person/Team Responsible</b>
08/20/2006- 02/20/2007	District wide staff development on developing information literacy skills and identifying information literacy that is embedded within English Language Arts and History Social Science content standards. Staff development will be provided through a variety of venues such as the return from summer staff development day, after school "buy-back" training workshops, Curriculum Council meetings, and departmental meetings.	Teachers	Director of Technology
11/01/2005- 04/01/2005	At the Curriculum Council Meeting, identify which content standards are related to information literacy at each grade level and in each English Language Arts / History - Social Science course. Use Appendix B from Education Technology Planning: A Guide for School Districts as a starting point. Develop the questionnaire to be distributed to all Elementary teachers and secondary ELA/HSS teachers.	Teachers	Department Chair / Grade Level Leader
04/15/2006- 05/15/2006	Teachers will be given the information literacy survey to fill out and return to their department chairs and ultimately the curriculum council. This survey will be given each spring and progress reported to the curriculum council.	Teachers	Department Chair / Grade Level Leader



**Goal:** By June 2008 90% of all students will participate in at least one technology infused lesson that is correlated to the district Technology Scope and Sequence Matrix in each of their classes. Students will become proficient users of technology as they learn via technology infused anchor lessons and assignments that will be developed for each grade level or course. Those technology anchor lessons will be based on the district Technology Scope and Sequence matrix and aligned to state curriculum standards. As the technology anchor lessons are being developed, care will be taken to make sure that as each new lesson is created, it covers technology scope and sequence skills that are not covered by existing anchor lessons appropriate for that grade level. As more and more lessons are created over time, there will be fewer and fewer gaps in the Technology Scope and Sequence matrix that is not covered by an anchor lesson.

Start Date- End Date	Implementation Step	Target Audience	Person/Team Responsible
07/01/2005- 06/30/2006	Teachers will be surveyed to determine what assignments they currently utilize have a technology component imbedded in them and to identify at least one assignment per course and/or grade level that may be a candidate for developing into a technology anchor assignment. Teachers will meet together during their grade level / department meetings to select an assignment for each course or grade level that will be used as the technology anchor lesson for that course.	Teachers	District Teachers
07/01/2005- 06/30/2006	District Technology Leaders will update the Technology Scope and Sequence Matrix at their monthly meetings to bring the existing document (last updated in 1997) up to current technological state of the art by aligning it with the National Educational Technology Standards for Students (ISTE).	Teachers	District Technology Leaders Committee
07/01/2006- 06/30/2008	Summer Curriculum Writing Workshops will be held where teachers come together to create technology infused anchor lessons for their grade level or course. Teachers will ensure that each technology infused lesson is correlated to the district Technology Scope and Sequence and is aligned to state curriculum standards. The ISTE-NETS Connecting Curriculum and Technology resource book will be used as a model for developing the lessons. Technology infused lessons will allow students to use a variety of strategies to engage with the content including the use of multimedia, hypermedia, inquiry based problem solving, skills reinforcement, data analysis, research and investigation among others.	Teachers	District Teachers

**Section 3f:**

**Goal:** 100% of all special needs populations (including low incidence disabilities, learning disabled students, other special needs students) will have access to appropriate technology that helps them meet their learning needs.

**Goal:** All students will have access to up-to-date computers and technology resources in every classroom and learning environment.

Start Date- End Date	Implementation Step	Target Audience	Person/Team Responsible
07/01/2006- 10/30/2006	Every three years starting with the summer of 2006, the district will replace 50% of the computers that have been in service in the district. Computers will be kept for a total of six years after which they will be discarded and replaced with new computers in accordance to district technology standards. At each refresh cycle (every third year), each classroom in the district will receive one brand new computer, and one computer lab at each school will receive all brand new computers. The existing computers will remain at the school site as long as the computers are less than six years old (with old lab computers being moved to the classrooms.) Computers that have reached six years of age will be removed from the classroom and disposed of.	Students, Teachers	Director of Technology
07/01/2005- 06/30/2008	District will constantly monitor the utilization rate of internet connections and make plans to increase access to internet bandwidth whenever utilization rates exceed 70% on a consistent basis. District may need to move to higher capacity networks beyond its current T1 speeds to technologies such as DS3, OC3, or connecting to the fiber optic network of the local cable company. District will apply for Erate funding discounts for data and voice connectivity charges to help lower the cost of bandwidth.	Students, Teachers, Administrators/Staff	Technology Department Staff
07/01/2005- 06/30/2008	District will acquire mobile carts of wireless capable laptops with the goal of providing a minimum of one class set of wireless laptops per school (36 laptops on a cart or cart(s) at each school) that can be brought into a teacher's classroom in order to maximize student hands on experience with computer technology.	Students	Director of Technology
07/01/2005- 06/30/2008	Remove old and obsolete computers that have reached six years of service. Implement a new three year lease-purchase agreement in summer of 2006 to acquire 500 new computers to replace classroom and lab computers which have been retired due to age or obsolescence.	Students, Teachers	Director of Technology

**Goal:** By June 2008, 100% of students and teachers will have access to high speed network resources which will enable multimedia rich learning environments including streaming video, distance learning and tutorials, video conferencing, and multimedia content creation and publishing.

<b>Start Date- End Date</b>	<b>Implementation Step</b>	<b>Target Audience</b>	<b>Person/Team Responsible</b>
07/01/2005- 10/30/2005	Upgrade the District network operations center and core network infrastructure during the planned move of the District Office to its new location on Foothill Blvd. Replace old core routers and switches with current technology with a minimum of Gigabit speeds for the district network backbone, and ensure that new network equipment has the capability to handle potential growth into Voice Over IP applications. Also replace old servers with current state of the art models with enough capacity and redundancy to handle future growth.	Students, Teachers, Administrators/Staff	Technology Department Staff
07/01/2005- 06/30/2008	Upgrade core routers and networks switches at each school to maintain Gigabit speeds throughout the network backbone and a minimum of switched 100Mbps connections to each network port. Ensure new networking gear has the ability to handle Voice Over IP applications. Replace old servers as needed with up to date models with the capacity to handle current and projected needs utilizing the best technology available.	Students, Teachers, Administrators/Staff	Director of Technology

**Goal:** Through June 2006, 100% of all students will utilize technology appropriately in a safe environment

<b>Start Date- End Date</b>	<b>Implementation Step</b>	<b>Target Audience</b>	<b>Person/Team Responsible</b>
07/01/2006- 06/30/2008	Each summer, the Director of Technology will review and update the Student Technology and Internet Acceptable Use Policy and the Staff Technology and Internet Acceptable Use Policy to ensure that the Acceptable Use Policy is appropriate and reflects current safety and security considerations at the time.	Students, Teachers	Director of Technology
07/01/2005- 06/30/2008	Director of Technology will constantly monitor the security infrastructure in place to safeguard the district network resources from intrusion, viruses, access to inappropriate internet content, unsolicited and undesired email (also known as spam) and other threats and acquire the systems and tools needed to minimize the district's exposure to such threats. Examples of such tools include (but are not limited to) anti-virus software, firewalls, internet content filters, email filtering software, network management hardware and software utilities, and secure network operating systems.	Students, Teachers, Administrators/Staff	Director of Technology
07/01/2005- 06/30/2008	Each new incoming student to the Jr. High /High School will undergo specific training on appropriate use of technology resources and be required to sign an up to date Technology Use Agreement before they are granted a user account for accessing computer and network resources.	Students	Lindsay Bozzani

**Section 3g:**

**Goal:** By June 2008, 100% of all teachers will utilize an on-line tool for taking and reporting attendance.

<b>Start Date- End Date</b>	<b>Implementation Step</b>	<b>Target Audience</b>	<b>Person/Team Responsible</b>
09/01/2005- 06/30/2008	Maintain and update the Aeries Browser Interface (ABI) component of the student information system to ensure that it is properly functioning in a reliable state.	Teachers	Director of Technology
07/01/2005- 08/30/2005	Make sure Aeries ABI is installed at each school's server and that all teachers will have access to the system for the purpose of taking attendance.	Administrators/Staff	Technology Department Staff

**Goal:** By June 2008, 90% of all teachers at the high school (grades 7-12) will use a school standard electronic grade book program to keep track student assignments and grades.

<b>Start Date- End Date</b>	<b>Implementation Step</b>	<b>Target Audience</b>	<b>Person/Team Responsible</b>
07/01/2005- 06/30/2008	The high school will acquire and maintain the Excelsior Pinnacle electronic grade book program and provide on site staff to maintain and upgrade the system. Assistant principal of curriculum and instruction will oversee the deployment and use of the program and will be mainly responsible for designating the staff to manage, train, and implement the system.	Teachers, Administrators/Staff	Kevin Buchanan
09/01/2005- 12/10/2005	After school training workshops offered to train teachers on how to use the electronic grade book program.	Teachers	Don Schaafsma
06/21/2005- 06/23/2005	Send Assistant Principal, HS Tech Coordinator (Don Schaafsma) and two lead teachers to Pinnacle Administrator's training conference in Fort Collins, Colorado.	Administrators/Staff	Don Schaafsma

**Section 3h:**

**Goal:** By June 2008, 75% of all teachers at the high school and junior high school will have grades posted on-line for parents and students to access from home.

<b>Start Date- End Date</b>	<b>Implementation Step</b>	<b>Target Audience</b>	<b>Person/Team Responsible</b>
02/01/2005- 03/01/2005	The Pinnacle Grade book program will be set up and configured to allow parents to access their students assignments and grades from the web.	Parents	Don Schaafsma
03/16/2005- 06/30/2005	A pilot program will be set up to test the Pinnacle On Line access system and to develop protocols for how parents will obtain their user accounts and receive the appropriate training to use the system.	Teachers, Parents	Assistant Principal of Curriculum and Instruction
07/01/2005- 10/01/2005	Training handouts and other resources will be created and distributed to parents on how to obtain a user account and how to access their child's information on line using the Pinnacle grade book system. All training materials and resources will be made available on line at the district's website.	Parents	Assistant Principal of Curriculum and Instruction

**Goal:** By June 2008, Parents will be able to contact 100% of teachers and administrators through a variety of means including in person, by telephone, voice mail, email, and staff web pages.

<b>Start Date- End Date</b>	<b>Implementation Step</b>	<b>Target Audience</b>	<b>Person/Team Responsible</b>
05/01/2005- 10/30/2005	District will research, select, acquire, and install a new voice mail system for use by district personnel, replacing the existing outdated and unreliable voice mail system that is limited to office staff only. The voice mail may be integrated with the digital telephony system being installed at the new district office and it will eventually be configured in such a way that teachers as well as office staff will have access to voice mail.	Teachers, Administrators/Staff	Technology Department Staff
02/01/2005- 07/01/2005	A web content management system (Ektron CMS) will be installed and configured so that each school will have its own series of web page templates that have been designed for specifically for that school so that teachers can create web pages with the school's logo and colors.	Teachers	Web Programmer / Consultant
08/01/2005- 10/30/2005	District Office will be moved from its remote location (at the top of Palm Drive) to one that is more centrally located (on Foothill Blvd.), fostering easier access for parents to district office services. As part of the move, district voice and data network infrastructure (core and edge routers, switching gear, telephony equipment) will be upgraded providing a benefit to all users district wide.	Administrators/Staff	Technology Department Staff
05/01/2005- 10/30/2005	A new phone system based on digital technology (PBX or Voice Over IP) will be selected, acquired, and installed in the new District Office. This new telephony system will allow greater flexibility and added features to streamline the phone call / messaging process and allow full integration with the voice mail system for all district employees. The new phone system may entail adding to or upgrading the existing SBC Centrex telephone trunk lines to PRI-ISDN or other digital technologies.	Teachers, Administrators/Staff, Parents	Director of Technology

**3j1. Monitoring Plan Implementation**

<b>Implementation Step</b>	<b>Method of Monitoring</b>	<b>Person/Team Responsible</b>
<p>Teachers will create technology infused lesson plans during personal preparation time, grade level meetings, and/or departmental meetings, that are aligned to state curriculum standards. The ISTE-NETS resource book, and the web-based lesson plan builder tool(<a href="http://www.lessonplanbuilder.org">http://www.lessonplanbuilder.org</a>) will be used as a guides to developing the anchor lessons with the initial goal of providing at least one technology infused lesson per course or grade level per semester.</p>	<p>Each year, the Curriculum Council (composed of representatives from each grade and department) will convene to hear a report from the representatives of grade level and department on their progress towards developing at least one technology infused lesson per grade level or course and the level of use of those assignments in the classroom. Based on those reports, plans will be made for the following year on where new lessons need to be created for the next year. Minutes of the Curriculum Council will record the progress from year to year.</p>	<p>Curriculum Council</p>
<p>Teachers will be surveyed to determine what assignments they currently utilize have a technology component imbedded in them and to identify at least one assignment per course and/or grade level that may be a candidate for developing into a technology anchor assignment. Teachers will meet together during their grade level / department meetings to select an assignment for each course or grade level that will be used as the technology anchor lesson for that course.</p>	<p>Department Chairs / Grade Level Leaders will report to the Curriculum Council in the Spring 2006 meeting the results of their survey and to identify which assignments will be targeted for conversion into technology anchor lessons.</p>	<p>Department Chair / Grade Level Leader</p>
<p>District Technology Leaders will update the Technology Scope and Sequence Matrix at their monthly meetings to bring the existing document (last updated in 1997) up to current technological state of the art by aligning it with the National Educational Technology Standards for Students (ISTE).</p>	<p>Director of Technology will make the updating of the District Technology Scope and Sequence Matrix an agenda item for each month's meeting until the update is completed.</p>	<p>Director of Technology</p>

Summer Curriculum Writing Workshops will be held where teachers come together to create technology infused anchor lessons for their grade level or course. Teachers will ensure that each technology infused lesson is correlated to the district Technology Scope and Sequence and is aligned to state curriculum standards. The ISTE-NETS Connecting Curriculum and Technology resource book will be used as a model for developing the lessons. Technology infused lessons will allow students to use a variety of strategies to engage with the content including the use of multimedia, hypermedia, inquiry based problem solving, skills reinforcement, data analysis, research and investigation among others.

Department Chairs and Grade Level Leaders will report to the Curriculum Council each spring, which teachers will be participating in the summer curriculum writing workshop to create lessons and assessment rubrics for the technology anchor assignments. Curriculum Council

Every three years starting with the summer of 2006, the district will replace 50% of the computers that have been in service in the district. Computers will be kept for a total of six years after which they will be discarded and replaced with new computers in accordance to district technology standards. At each refresh cycle (every third year), each classroom in the district will receive one brand new computer, and one computer lab at each school will receive all brand new computers. The existing computers will remain at the school site as long as the computers are less than six years old (with old lab computers being moved to the classrooms.) Computers that have reached six years of age will be removed from the classroom and disposed of.

Director of Technology will maintain a database of all computers in the district and provide annual counts of computers for the CBEDS report and the annual California State School Technology Survey. Director of Technology

Each summer, the Director of Technology will review and update the Student Technology and Internet Acceptable Use Policy and the Staff Technology and Internet Acceptable Use Policy to ensure that the Acceptable Use Policy is appropriate and reflects current safety and security considerations at the time.

The Director of Technology will submit an updated Student Technology and Internet Use Agreement to the Superintendent or Designee in charge of Curriculum and Instruction for review and dissemination by August 1 of each year . To Be Determined

Director of Technology will constantly monitor the security infrastructure in place to safeguard the district network resources from intrusion, viruses, access to inappropriate internet content, unsolicited and undesired email (spam) and other threats and acquire the systems and tools needed to minimize the district's exposure to such threats. Examples of such tools include anti-virus software, firewalls, internet content filters, email filtering software, network management hardware and software utilities, and secure network operating systems.

Director of Technology will conduct ongoing monitoring of the current district infrastructure and compare it to the appropriate state of the art technologies available at that time. Director of Technology



District will constantly monitor the utilization rate of internet connections and make plans to increase access to internet bandwidth whenever utilization rates exceed 70% on a consistent basis. District may need to move to higher capacity networks beyond its current T1 speeds to technologies such as DS3, OC3, or connecting to the fiber optic network of the local cable company. District will apply for Erate funding discounts for data and voice connectivity charges to help lower the cost of bandwidth.	Monthly reports of internet usage statistics will be collected by the district network engineer and any trends or indications that bandwidth utilization at any site is approaching 65% will be reported to the Director of Technology.	Director of Technology
District will research, select, acquire, and install a new voice mail system for use by district personnel, replacing the existing outdated and unreliable voice mail system that is limited to office staff only. The voice mail may be integrated with the digital telephony system being installed at the new district office and it will eventually be configured in such a way that teachers as well as office staff will have access to voice mail.	Director of Technology will oversee the evaluation and selection of the new voice mail system and ensure that it is installed and functioning properly.	Director of Technology
The Pinnacle Grade book program will be set up and configured to allow parents to access their students assignments and grades from the web.	Don Schaafsma will provide updates to the Director of Technology whenever significant progress has been made.	Director of Technology
District will acquire mobile carts of wireless capable laptops with the goal of providing a minimum of one class set of wireless laptops per school (36 laptops on a cart or cart(s) at each school) that can be brought into a teacher's classroom in order to maximize student hands on experience with computer technology.	Director of Technology will explore various methods of funding including expanded lease purchase agreements, foundation donations and gifts, in order to fund the purchase of the mobile laptop carts.	Director of Technology
Determine the scope and breadth of assessment data and multiple measurement components that are kept by the district and determine which of those can be provided to the teachers for the new year. Make plans to convert/import/download new types or forms of assessment data and multiple measurement data that have not already been loaded into the system. Repeat the process each spring and adjust for any changes to the choice of multiple measures indicators.	Director of Technology will meet with Director of Assessment before each school year to determine any new requirements or changes in assessment data or multiple measures and make plans to address any additions or changes identified.	Director of Technology

Remove old and obsolete computers that have reached six years of service. Implement a new three year lease-purchase agreement in summer of 2006 to acquire 500 new computers to replace classroom and lab computers which have been retired due to age or obsolescence.

Director of Technology will oversee the drafting of the new three year lease-purchase plan and seek cabinet and school board approval before executing the new contract.

Director of Technology

Upgrade the District network operations center and core network infrastructure during the planned move of the District Office to its new location on Foothill Blvd. Replace old core routers and switches with current technology with a minimum of Gigabit speeds for the district network backbone, and ensure that new network equipment has the capability to handle potential growth into Voice Over IP applications. Also replace old servers with current state of the art models with enough capacity and redundancy to handle future growth.

Director of Technology will oversee the move and upgrade of the District Network Operations Center.

Director of Technology

Upgrade core routers and networks switches at each school to maintain Gigabit speeds throughout the network backbone and a minimum of switched 100Mbps connections to each network port. Ensure new networking gear has the ability to handle Voice Over IP applications. Replace old servers as needed with up to date models with the capacity to handle current and projected needs utilizing the best technology available.

Director of Technology will over see the upgrade of the district network infrastructure.

Director of Technology

Each new incoming student to the Jr. High /High School will undergo specific training on appropriate use of technology resources and be required to sign an up to date Technology Use Agreement before they are granted a user account for accessing computer and network resources.

The High School Librarian will provide training and orientation to alls new students at the beginning of the year prior to assigning them user accounts. S/he will also keep track of signed Technology Use Agreements.

Lindsay Bozzani

Maintain and update the Aeries Browser Interface (ABI) component of the student information system to ensure that it is properly functioning in a reliable state.

Director of Technology will constantly oversee the activities of the Information Systems Supervisor to ensure that ABI electronic attendance tool is kept up-to-date and reliable.

Director of Technology

<p>The high school will acquire and maintain the Excelsior Pinnacle electronic grade book program and provide on site staff to maintain and upgrade the system. Assistant principal of curriculum and instruction will oversee the deployment and use of the program and will be mainly responsible for designating the staff to manage, train, and implement the system.</p>	<p>Assistant principal of curriculum and instruction will provide regular reports to the director of technology on the progress of implementing the electronic grade book program at the high school.</p>	<p>Director of Technology</p>
<p>Week long summer curriculum writing workshops will be conducted each July and/or August to help teachers create lessons that utilize technology to enhance learning. Teachers will be encouraged to write lesson plans that use technology in a variety of ways to enhance student learning including lessons that use technology for research, investigation, problem solving, reporting, analysis, diagnosis, design, presentation, and skill building, among others.</p>	<p>Director of technology will report to the management team each fall on the participation in and the results of the summer curriculum writing workshops.</p>	<p>Management Team</p>
<p>Each March, the principal will select representative students from each school to take the technology use portion of the CTAP2 iAssessment on line survey to determine the areas of technology usage they have encountered within the course of their schoolwork for the past school year. Results from the student surveys will be used to target areas of focus for increasing the use of technology in the classroom. Changes over time will be tracked to measure progress in technology infusion into the curriculum.</p>	<p>The CTAP2 iAssessment on line survey tool can generate reports to show who has taken the surveys and what the results of the survey are.</p>	<p>Management Team</p>
<p>District wide staff development on developing information literacy skills and identifying information literacy that is embedded within English Language Arts and History Social Science content standards. Staff development will be provided through a variety of venues such as the return from summer staff development day, after school "buy-back" training workshops, Curriculum Council meetings, and departmental meetings.</p>	<p>Attendance sheets for the various staff development offerings concerning information literacy will be collected and kept by the Educational Services office.</p>	<p>Curriculum Council</p>
<p>At the Curriculum Council Meeting, identify which content standards are related to information literacy at each grade level and in each English Language Arts / History - Social Science course. Use Appendix B from Education Technology Planning: A Guide for School Districts as a starting point. Develop the questionnaire to be distributed to all Elementary teachers and secondary ELA/HSS teachers.</p>	<p>An agenda item will be created for the Curriculum Council Meeting and the results of the work will be recorded in the minutes of Curriculum Council Meeting.</p>	<p>Curriculum Council</p>

<p>Teachers will be given the information literacy survey to fill out and return to their department chairs and ultimately the curriculum council. This survey will be given each spring and progress reported to the curriculum council.</p>	<p>Teacher surveys will collected and reviewed at the next curriculum council meeting.</p>	<p>Curriculum Council</p>
<p>Make sure Aeries ABI is installed at each school's server and that all teachers will have access to the system for the purpose of taking attendance.</p>	<p>Information Systems Supervisor will give weekly status report to Director of Technology until ABI has been installed at each school and configured for all teachers.</p>	<p>Director of Technology</p>
<p>After school training workshops offered to train teachers on how to use the electronic grade book program.</p>	<p>Don Schaafsma will schedule the training workshops in consultation with the Assistant Principal of Curriculum and Instruction. Attendance rosters will be given to the AP.</p>	<p>Assistant Principal of Curriculum and Instruction</p>
<p>Send Assistant Principal, HS Tech Coordinator (Don Schaafsma) and two lead teachers to Pinnacle Administrator's training conference in Fort Collins, Colorado.</p>	<p>Participants will provide a summary of what they learned and how they will use what they learned to enhance the implementation of the electronic grade book at the high school to the Director of Technology upon their return from the conference.</p>	<p>Director of Technology</p>
<p>A web content management system (Ektron CMS) will be installed and configured so that each school will have its own series of web page templates that have been designed for specifically for that school so that teachers can create web pages with the school's logo and colors.</p>	<p>Director of Technology will contract with a consultant to provide the web development services to set up the Ektron system.</p>	<p>Director of Technology</p>
<p>A pilot program will be set up to test the Pinnacle On Line access system and to develop protocols for how parents will obtain their user accounts and receive the appropriate training to use the system.</p>	<p>Assistant Principal will provide updates to the Director of Technology whenever significant progress is made.</p>	<p>Director of Technology</p>

Training handouts and other resources will be created and distributed to parents on how to obtain a user account and how to access their child's information on line using the Pinnacle grade book system. All training materials and resources will be made available on line at the district's website.

Assistant Principal of Curriculum and Instruction will give copies of all training materials to the Director of Technology for posting on the district website.

Director of Technology

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District Office will be moved from its remote location (at the top of Palm Drive) to one that is more centrally located (on Foothill Blvd.), fostering easier access for parents to district office services. As part of the move, district voice and data network infrastructure (core and edge routers, switching gear, telephony equipment) will be upgraded providing a benefit to all users district wide.

The Director of Technology will oversee every part of planning, selection, acquisition, and installation of the new equipment and systems.

Director of Technology

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A new phone system based on digital technology (PBX or Voice Over IP) will be selected, acquired, and installed in the new District Office. This new telephony system will allow greater flexibility and added features to streamline the phone call / messaging process and allow full integration with the voice mail system for all district employees. The new phone system may entail adding to or upgrading the existing SBC Centrex telephone trunk lines to PRI-ISDN or other digital technologies.

Director of Technology will work closely with the architects, vendors, and system integrators to ensure that the phone system is the best solution for the district's needs.

Director of Technology

### 3j2. Monitoring Progress Towards Benchmarks

**Goal:** By June 2008, 100% of all teachers will utilize an on-line tool for taking and reporting attendance.

**Benchmarks:**

**Year 1:** By June 2006, 100% of all district teachers will utilize the Aeries Browser Interface (ABI) on-line tools to take attendance.

**Year 2:** By June 2007, 100% of all district teachers will utilize the Aeries Browser Interface (ABI) on-line tools to take attendance.

**Year 3:** Through June 2008, 100% of all district teachers will utilize the Aeries Browser Interface (ABI) on-line tools to take attendance.

**Monitoring:**

Site-based administrators and technology support personnel will monitor the percentage of teachers using on-line attendance.

**Goal:** By June 2008, 75% of all teachers at the high school and junior high school will have grades posted on-line for parents and students to access from home.

**Benchmarks:**

**Year 1:** By June 2006, 25% of the high school and junior high school teachers will participate in a pilot program to make assignments scores and grades accessible to parents on-line using a school standard grade book software.

**Year 2:** By June 2007, 50% of the high school and junior high school teachers will participate in a pilot program to make assignments scores and grades accessible to parents on-line using a school standard grade book software.

**Year 3:** By June 2008, 75% of the high school and junior high school teachers will make assignments scores and grades accessible to parents on-line using a school standard grade book software.

**Monitoring:**

The Assistant Principal of Curriculum and Instruction will monitor the number of teachers using the Pinnacle Grade book program to keep track of assignments and grades. Those who use Pinnacle for keeping grades will automatically have their grades made available for parental viewing on line.

**Goal:** By June 2008, 90% of all teachers at the high school (grades 7-12) will use a school standard electronic grade book program to keep track student assignments and grades.

**Benchmarks:**

**Year 1:** By June 2006, 30% of the high school and junior high school staff will use a standard electronic grade book program to keep track of student assignments and grades.

**Year 2:** By June 2007, 60% of the high school and junior high school staff will use a standard electronic grade book program to keep track of student assignments and grades.

**Year 3:** By June 2008, 90% of the high school and junior high school staff will use a standard electronic grade book program to keep track of student assignments and grades.

**Monitoring:**

The high school assistant principal of curriculum and instruction will monitor the percentage of teachers using school-standardized electronic grade book software to keep track of their grades. A report will be given to the Director of Technology at the end of each semester.

**Goal:** 100% of all special needs populations (including low incidence disabilities, learning disabled students, other special needs students) will have access to appropriate technology that helps them meet their learning needs.

**Benchmarks:**

**Year 1:** Through June 2006, 100% of all special needs students will have access to the appropriate technology resources (including assistive or adaptive technology) as identified in their IEPs to support their learning.

**Year 2:** Through June 2007, 100% of all special needs students will have access to the appropriate technology resources (including assistive or adaptive technology) as identified in their IEPs to support their learning.

**Year 3:** Through June 2008, 100% of all special needs students will have access to the appropriate technology resources (including assistive or adaptive technology) as identified in their IEPs to support their learning.

**Monitoring:**

Director of Technology will work in partnership with the local SELPA to determine the appropriate technologies required by each special needs student and coordinate the delivery of products and/or services in accordance with the developed educational plan for each identified student.

**Goal:** All students will have access to up-to-date computers and technology resources in every classroom and learning environment.

**Benchmarks:**

**Year 1:** At the end of June 2006, the district will maintain less than a 5.5 to 1 student to computer ratio district wide with no student computer being older than 6 years old.

**Year 2:** At the end of June 2007, the district will maintain less than a 5 to 1 student to computer ratio district wide with no student computer being older than 6 years old.

**Year 3:** At the end of June 2008, the district will maintain less than a 4.5 to 1 student to computer ratio district wide with no student computer being older than 6 years old.

**Monitoring:**

Director of Technology will monitor the acquisition and retirement of computers and technology equipment and will provide reports for the October CBEDS report and the March State School Technology Survey each year.

**Goal:** By June 2008, 85% of all teachers will use technology infused lessons K-12 that are aligned to state curriculum standards. Each grade level or course will develop anchor lessons and/or assignments that utilize technology in the teaching and learning process. Teachers at that grade level or course will use at least one of the anchor lessons developed for that grade level or course. Rubrics will be created for assessing these lessons, and teachers will be trained in how to use these anchor lessons. Teachers will be encouraged to expand their use of technology beyond the technology anchor assignments, but the anchor assignments will form a uniform foundation of technology use across the district. In subsequent years, additional anchor lessons will be added to each grade level, subject area, or course for each grading period.

**Benchmarks:**

**Year 1:** By June 2006, 50% of all teachers will utilize at least one technology infused anchor lesson during the school year.

**Year 2:** By June 2007, 65% of all teachers will utilize at least one technology infused anchor lesson during the school year.

**Year 3:** By June 2008, 85% of all teachers will utilize at least one technology infused anchor lesson during the school year.

**Monitoring:**

Each year, district teachers will participate in a technology use survey provided through the CTAP2 iAssessment tool. Grade level leaders and/or department chairpersons will monitor the creation of technology infused anchor lessons for their grade level or department each year. Information gathered will be passed on to the Director of Technology who will report the findings to the district Technology Leadership Team and the District Curriculum Council.



**Goal:** By June 2008, 100% of all students will be taught information literacy skills through targeted instruction via projects completed at the library media center as well as through English Language Arts and History-Social Science instruction across all grades.

**Benchmarks:**

**Year 1:** By June 2006, 50% of all students will be taught information literacy skills through targeted instruction via projects completed at the library media center as well as through English Language Arts and History-Social Science instruction across all grades.

**Year 2:** By June 2007, 75% of all students will be taught information literacy skills through targeted instruction via projects completed at the library media center as well as through English Language Arts and History-Social Science instruction across all grades.

**Year 3:** By June 2008, 100% of all students will be taught information literacy skills through targeted instruction via projects completed at the library media center as well as through English Language Arts and History-Social Science instruction across all grades.

**Monitoring:**

All elementary teachers and all English Language Arts and History-Social Science teachers at the secondary level will be given a survey in the spring of each year where they are asked whether or not they have taught the specific content standards that relate to information literacy for their grade level or course, and if so, what strategies they used to do so for each identified content standard. If they did not address those content standards, they will be asked to formulate a strategy to do so and implement it before the next survey. The results of the survey will be reported to the Curriculum Council, which will monitor progress towards the benchmarks.

**Goal:** By June 2008, 90% of all students will utilize technology as part of their learning experience through use of computers in classroom projects for electronic research, presentation design and delivery, content creation, exploration, data analysis, diagnostics, skill building, and/or problem solving.

**Benchmarks:**

**Year 1:** By June 2006, 60% of all students will utilize technology as part of their learning experience through use of computers in classroom projects for electronic research, presentation design and delivery, content creation, exploration, data analysis, diagnostics, skill building, and/or problem solving.

**Year 2:** By June 2007, 75% of all students will utilize technology as part of their learning experience through use of computers in classroom projects for electronic research, presentation design and delivery, content creation, exploration, data analysis, diagnostics, skill building, and/or problem solving.

**Year 3:** By June 2008, 90% of all students will utilize technology as part of their learning experience through use of computers in classroom projects for electronic research, presentation design and delivery, content creation, exploration, data analysis, diagnostics, skill building, and/or problem solving.

**Monitoring:**

Each spring, a representative sample of students from various grade levels will be surveyed with a written questionnaire to determine the technology usage patterns they encountered as part of their learning experience in the previous school year. The questionnaire will be grade level appropriate and cover the frequency of use of technology and the mode or methodology of technology used in their learning. The director of technology will make questionnaires available to the school site principals who will distribute the student questionnaires to a representative sample of students at their school. The results will be returned to the director of technology and shared with the district management team.

**Goal:** By June 2008 90% of all students will participate in at least one technology infused lesson that is correlated to the district Technology Scope and Sequence Matrix in each of their classes. Students will become proficient users of technology as they learn via technology infused anchor lessons and assignments that will be developed for each grade level or course. Those technology anchor lessons will be based on the district Technology Scope and Sequence matrix and aligned to state curriculum standards. As the technology anchor lessons are being developed, care will be taken to make sure that as each new lesson is created, it covers technology scope and sequence skills that are not covered by existing anchor lessons appropriate for that grade level. As more and more lessons are created over time, there will be fewer and fewer gaps in the Technology Scope and Sequence matrix that is not covered by an anchor lesson.

**Benchmarks:**

**Year 1:** By June 2006, 30% of all students will participate in at least one technology infused lesson that is correlated to the district Technology Scope and Sequence Matrix in each of their elementary level classes or secondary (7-12) course.

**Year 2:** By June 2007, 60% of all students will participate in at least one technology infused lesson that is correlated to the district Technology Scope and Sequence Matrix in each of their elementary level classes or secondary (7-12) course.

**Year 3:** By June 2008, 90% of all students will participate in at least one technology infused lesson that is correlated to the district Technology Scope and Sequence Matrix in each of their elementary level classes or secondary (7-12) course.

**Monitoring:**

Department chairpersons and grade level leaders will be responsible for ensuring yearly progress is made toward developing anchor technology lessons and assignments. They will report to the Curriculum council each year in the Spring meeting on the status of creating technology infused anchor lessons and their plans for expanding the number of lessons created and used for the following year. They will set goals for the creation of new lesson and assessment rubrics during the upcoming summer curriculum writing workshops.

**Goal:** By June 2008, all teachers will have electronic access to 100% of the standardized testing data and 100% of the multiple measurement data for their students to help guide and provide instruction to their students.

**Benchmarks:**

**Year 1:** By June 2006, teachers will have access to 75% of the available standardized testing data for their students via an online component of the district student information system to help guide and provide instruction to their students.

**Year 2:** By June 2007, teachers will have access to 100% of the available standardized testing data and 50% of the multiple measures data for their students to help guide and provide instruction to their students.

**Year 3:** By June 2008, teachers will have access to 100% of the available standardized testing data and 100% of the multiple measures data for their students to help guide and provide instruction to their students.

**Monitoring:**

The director of Technology will work with the director of Assessment and Evaluation to determine what standardized testing data and multiple measures data is available to the district at the beginning of each year. Based on this survey, the director of Technology will formulate a plan to add any new or as yet unincorporated testing data or measurement data to the on line viewer of the district's student information system.

**Goal:** By June 2008, 100% of students and teachers will have access to high speed network resources which will enable multimedia rich learning environments including streaming video, distance learning and tutorials, video conferencing, and multimedia content creation and publishing.

**Benchmarks:**

**Year 1:** By the end of June 2006, 40% of the students and teachers district wide will have access to high speed network resources that enable multimedia rich learning environments including streaming video, distance learning and tutorials, video conferencing, and multimedia content creation and publishing.

**Year 2:** By the end of June 2007, 60% of the students and teachers district wide will have access to high speed network resources that enable multimedia rich learning environments including streaming video, distance learning and tutorials, video conferencing, and multimedia content creation and publishing.

**Year 3:** By the end of June 2008, 100% of the students and teachers district wide will have access to high speed network resources that enable multimedia rich learning environments including streaming video, distance learning and tutorials, video conferencing, and multimedia content creation and publishing.

**Monitoring:**

Director of technology will oversee the upgrade of the district network infrastructure to enable gigabit speeds at the district network backbone and a minimum of switched 100Mbps connections to each network port.

**Goal:** By June 2008, Parents will be able to contact 100% of teachers and administrators through a variety of means including in person, by telephone, voice mail, email, and staff web pages.

**Benchmarks:**

**Year 1:** By June 2006, All teachers will be able to be reached by telephone and email, and administrators will able to be reached by telephone, voicemail, and email. Additionally, 20% of the teachers and administrators will have their own web page on the school's web site.

**Year 2:** By June 2007, All teachers will be able to be reached by telephone and email, and administrators will able to be reached by telephone, voicemail, and email. Additionally, 40% of the teachers and administrators will have their own web page on the school's web site.

**Year 3:** By June 2008, All teachers will be able to be reached by telephone and email, and administrators will able to be reached by telephone, voicemail, and email. Additionally, 80% of the teachers and administrators will have their own web page on the school's web site.

**Monitoring:**

Teachers will take an annual on-line technology use survey (CTAP2 iAssessment) which includes questions on using technology for communication. Additionally, the school sites submit the California School Technology Survey in March of each year, and some of the questions in that survey describe varying levels of access via technology. The Director of Technology collects all of the survey data and reports it to the state. It is therefore natural for the Director of Technology to monitor progress towards the benchmarks.

**Goal:** Through June 2006, 100% of all students will utilize technology appropriately in a safe environment

**Benchmarks:**

**Year 1:** Through June 2006, 100% of all students will operate under a safe computing environment.

**Year 2:** Through June 2007, 100% of all students will operate under a safe computing environment

**Year 3:** Through June 2008, 100% of all students will operate under a safe computing environment

**Monitoring:**

Director of technology will evaluate the effectiveness and appropriateness of technology infrastructure on an ongoing basis and provide updates to the student acceptable use agreement each summer.

### **3j3. Evaluating the Curriculum Component**

The main focus of the technology plan's curriculum component is to ensure that technology is being utilized in all of its ways, shapes, and forms to increase student achievement. Whether through direct applications for instruction and learning, or through indirect applications which create an environment supportive of academic achievement (such as providing enabling infrastructure or better communication access), the use of technology can only be justified if it helps the student to perform at a higher level.

This is why it is not enough just to provide access to technology; the technology must be a means for students to absorb, understand, and utilize the material covered by the content standards. The district already monitors student achievement using a combination of different multiple measures indicators, test scores, and API scores.

The Curriculum Council plays a central role in monitoring district progress towards its curricular goals. Because of this, the status of implementation of the tech plan's curriculum component will be overseen mainly by the District Curriculum Council, which is headed by the Superintendent. The Curriculum Council already deals with district goals, power standards, standardized test scores, and API scores at its quarterly meetings, so it is natural for it to incorporate the technology aspect into its oversight over those indicators. A copy of the Multiple Measures Authentic Assessment weighting Matrix is included in Appendix B which illustrates some of the criteria the Curriculum Council will use to gauge academic performance across a broad spectrum.

The Curriculum Council generally meets four times a year, so there will be regular updates on the status of implementation and plenty of opportunity to evaluate progress toward completing the goals and objectives in the tech plan and discussing its impact on student achievement.

Once a year in the springtime, the status of implementing the technology plan is presented to the local governing board. Evidence linking student achievement to technology use will be presented at that time for board review and comment.

If parts of the curriculum component are not being implemented on schedule, either the Curriculum Council or the District Management Team (depending on the nature, scope, or cause of the delay) will have the authority to prescribe corrective fixes or change the direction and scope of the plan to match new realities.

## Component 4: Professional Development

### 4a. Professional Development Needs and Resources

Teachers and administrators district wide participated in the CTAP2 iAssessment on line survey in 2003 in order to help gauge the district personnel's level of proficiency with technology as well as the frequency of use of technology in the classroom.

Based on the results from the 2003 CTAP iAssessment on-line survey, a majority (52%) of the faculty, administrators, and staff surveyed identified themselves as having intermediate proficiency with computer knowledge and skills. 13 % identified themselves as having beginning proficiency, and 19% rated themselves as proficient.

When asked how often they used technology tools at school to deliver classroom instruction, 8% replied that they used it daily, 15% reported that they 2-4 times a week, 32% reported that they used it between once a week and monthly, 22% reported that they used it less than monthly, and 23% reported that they never used technology tools to deliver classroom instruction.

When asked how often they required students to use technology tools to complete assignments, 5% reported daily, 18% reported 2-4 days a week, 42% reported between once a week and monthly, 17% reported less than monthly, and 18% reported they never required students to use technology to complete assignments.

When asked to evaluate how well prepared teachers felt they were to use computers and/or the Internet for classroom instruction, 10% responded "Not at all prepared", 52% responded "Somewhat prepared", 28% responded "Well prepared", and 10% responded "Very well prepared".

When asked to indicate their needs and preferences regarding the type or level of technology training they would like at their school, 27% responded with basic computer/technology skills, 58% responded with integrating technology into the curriculum, and 15% responded that they preferred neither.

When asked to indicate their needs and preferences regarding the format for technology training at their school, 29% responded with one-on-one informal technology training, 59% responded with small group technology training, and 12% responded with online web-based technology training.

When asked to indicate their needs and preferences for when technology training would be available at their school, 31% said during the school day, 40% said after school, 4% said in the evening, 3% said on the weekend, and 23% said during the summer.

While there is a spectrum of technical proficiencies, utilization rates, and preferences for technology training, if one were to combine the majority responses from all of the above questions to create a profile of the average teacher/administrator in the district, the average teacher/administrator would rate themselves as intermediately proficient with basic computer

knowledge and skills, feel they were somewhat prepared to use technology for instruction, use technology for delivering classroom instruction approximately once a month, require students to complete assignments using technology about once a month, and wish to have technology training after school in small groups focused on integrating technology into the curriculum.

It is clear that while technology is available, teachers feel that they are lacking in the integration of that technology into their curriculum. This technology places emphasis in providing the training for to enable better integration of technology into teaching and learning.



#### **4b. Providing Professional Development Opportunities**

**Goal:** By June 2008, 100% of all teachers, administrator, and staff will have access to district provided technology training classes through after school professional development classes and workshops.

##### **Benchmarks**

###### **Year 1**

In the school year ending June 2006, the district will provide at least 10 hours worth of technology training classes and/or workshops open to all teachers across the district.

###### **Year 2**

In the school year ending June 2007, the district will provide at least 12 hours worth of technology training classes and/or workshops open to all teachers across the district.

###### **Year 3**

In the school year ending June 2008, the district will provide at least 14 hours worth of technology training classes and/or workshops open to all teachers across the district.

**Goal:** Each year, 100% of all teachers will meet regularly throughout each year as grade levels or departments to discuss and coordinate the identification, creation, and usage of the anchor technology infused lessons and to discuss the progress toward focusing on information literacy skills by highlighting instruction in the embedded content standards for English Language Arts and History Social Science.

##### **Benchmarks**

###### **Year 1**

Through June 2006, 100% of all K-12 teachers teaching core subjects will meet as grade levels or departments at least twice to discuss and coordinate the identification, creation, and usage of the anchor technology infused lessons and information literacy embedded content standards.

###### **Year 2**

Through June 2007, 100% of all K-12 teachers teaching core subjects will meet as grade levels or departments at least three times to discuss and coordinate the identification, creation, and usage of the anchor technology infused lessons and information literacy embedded content standards.

###### **Year 3**

Through June 2008, 100% of all K-12 teachers teaching core subjects will meet as grade levels or departments at least four times to discuss and coordinate the identification, creation, and usage of the anchor technology infused lessons and information literacy embedded content standards.

**Goal:** By June 2008, the district will provide the equivalent of ten hours of training videos or movies aligned to State and National Educational Technology standards for Teachers that are accessible on the district intranet. The training resources may include live action videos of effective teachers' use of technology in a lesson, screen shot movies of training tutorials illustrating technology skills or procedures, and handouts that can be printed out for quick reference on how to accomplish a specific task. All training resources will be aligned to State and National Educational Technology Standards for Teachers and/or the California Standards for the Teaching Profession.

### **Benchmarks**

#### **Year 1**

By June 2006, the district will provide the equivalent of three hours of training videos or movies aligned to State and National Educational Technology standards for Teachers that are accessible on the district intranet.

#### **Year 2**

By June 2007, the district will provide the equivalent of six hours of training videos or movies aligned to State and National Educational Technology standards for Teachers that are accessible on the district intranet.

#### **Year 3**

By June 2008, the district will provide the equivalent of ten hours of training videos or movies aligned to State and National Educational Technology standards for Teachers that are accessible on the district intranet.

**4c. Summary of Implementation Steps and Timelines**

**Goal:** By June 2008, 100% of all teachers, administrator, and staff will have access to district provided technology training classes through after school professional development classes and workshops.

<b>Start Date- End Date</b>	<b>Implementation Step</b>	<b>Target Audience</b>	<b>Person/Team Responsible</b>
07/01/2005- 06/30/2008	Courses focusing on technology implementation and technology skills will be offered as part of the menu of training workshops and classes that teachers can choose to attend as part of the district's "off calendar" Buy Back Day Staff Development program. Teachers will be compensated for attending classes totaling 6 1/4 hours of training offered by the district.	Teachers	Director of Technology
08/25/2005- 03/01/2008	Offer 1 hour after school workshops on how to use the Pinnacle electronic grade book at the high school at the beginning of every semester.	Teachers	Don Schaafsma
10/01/2005- 06/30/2008	Offer on-site after school training workshops on how to create and maintain a teacher web page/ web site using the Ektron Content Management System on a quarterly basis.	Teachers, Administrators/Staff	Director of Technology
- 12/15/2005	Once the new district telephone system/voicemail system is acquired, installed, and configured, training workshops will be provided for particular populations of users, such as teachers, office workers, and site administrators on how to use the voice mail/telephone system to its fullest potential.	Teachers, Administrators/Staff	Director of Technology

**Goal:** Each year, 100% of all teachers will meet regularly throughout each year as grade levels or departments to discuss and coordinate the identification, creation, and usage of the anchor technology infused lessons and to discuss the progress toward focusing on information literacy skills by highlighting instruction in the embedded content standards for English Language Arts and History Social Science.

<b>Start Date- End Date</b>	<b>Implementation Step</b>	<b>Target Audience</b>	<b>Person/Team Responsible</b>
09/01/2005- 06/30/2008	Technology infused lesson planning will be a part of the agenda items for at least four of the grade level / department meetings held throughout the year. In those meetings, plans will be made to identify, develop, share, and peer coach one another in the implementation of the technology anchor lessons developed for each grade level or course.	Teachers	Department Chair / Grade Level Leader
07/01/2006- 06/30/2008	Week long summer writing workshops will be offered by the district to train teachers how to create technology infused lessons that are aligned to State and National educational technology standards for teachers and students as well as state curriculum standards. Resources used will include the ISTE NETS for students handbook, the CLRN website, and the lessonplanbuilder.org website.	Teachers	Director of Technology
08/20/2006- 10/30/2006	District will provide training on defining student information literacy skills and finding ways to teach them by identifying information literacy skills that are embedded in English Language Arts and History Social Science content standards and discussing strategies on how to best engage the student in developing those skills. Training may occur at after school buy back workshops or through departmental or grade level meetings.	Teachers	Director of Technology

**Goal:** By June 2008, the district will provide the equivalent of ten hours of training videos or movies aligned to State and National Educational Technology standards for Teachers that are accessible on the district intranet. The training resources may include live action videos of effective teachers' use of technology in a lesson, screen shot movies of training tutorials illustrating technology skills or procedures, and handouts that can be printed out for quick reference on how to accomplish a specific task. All training resources will be aligned to State and National Educational Technology Standards for Teachers and/or the California Standards for the Teaching Profession.

Start Date- End Date	Implementation Step	Target Audience	Person/Team Responsible
07/01/2005- 06/30/2008	Existing district provided on line training materials will be compared with staff technology use surveys to identify new training materials that need to be created. Director of Technology will coordinate the creation of new on line training materials (such as web accessible documents and short training movies) and make sure they are posted on the district website. Director will strive to ensure all training is aligned to ISTE National Educational Technology Standards for Teachers and California Educational Technology Standards for Teachers.	Teachers, Administrators/Staff	Director of Technology
08/01/2005- 11/01/2005	Training resources such as videos and/or handouts on how to use the electronic grade book program will be posted to the district website.	Teachers	Don Schaafsma
08/15/2005- 12/15/2005	Once the new district voicemail/telephone system has been selected, on line training resources including handouts and video clip animations will be created demonstrating how to use the new system effectively.	Teachers, Administrators/Staff	Director of Technology

**4d1. Monitoring Plan Implementation**

<b>Implementation Step</b>	<b>Method of Monitoring</b>	<b>Person/Team Responsible</b>
<p>Technology infused lesson planning will be a part of the agenda items for at least four of the grade level / department meetings held throughout the year. In those meetings, plans will be made to identify, develop, share, and peer coach one another in the implementation of the technology anchor lessons developed for each grade level or course.</p>	<p>Department chairs will report their meeting agendas to the principal, showing that the technology anchor lessons were a main topic of discussion and/or training for at least five of the meetings each year.</p>	<p>Principal</p>
<p>Week long summer writing workshops will be offered by the district to train teachers how to create technology infused lessons that are aligned to State and National educational technology standards for teachers and students as well as state curriculum standards. Resources used will include the ISTE NETS for students handbook, the CLRN website, and the lessonplanbuilder.org website.</p>	<p>Director of Technology will solicit teacher participants for the summer workshop each year in the springtime.</p>	<p>Director of Technology</p>
<p>Existing district provided on line training materials will be compared with staff technology use surveys to identify new training materials that need to be created. Director of Technology will coordinate the creation of new on line training materials (such as web accessible documents and short training movies) and make sure they are posted on the district website. Director will strive to ensure all training is aligned to ISTE National Educational Technology Standards for Teachers and California Educational Technology Standards for Teachers.</p>	<p>Director of Technology will provide ongoing monitoring of what is available on line at the district's training webpage and what needs to be added to fulfill teacher needs.</p>	<p>Director of Technology</p>
<p>Courses focusing on technology implementation and technology skills will be offered as part of the menu of training workshops and classes that teachers can choose to attend as part of the district's "off calendar" Buy Back Day Staff Development program. Teachers will be compensated for attending classes totaling 6 1/4 hours of training offered by the district.</p>	<p>Director of Technology will submit a list of technology related training classes or workshops to the Superintendent (or Assistant Superintendent of Curriculum and Instruction) each October.</p>	<p>Director of Technology</p>

<p>Offer 1 hour after school workshops on how to use the Pinnacle electronic grade book at the high school at the beginning of every semester.</p>	<p>Collect signatures of those in attendance at the workshop and submit the list to the district office of educational services.</p>	<p>Assistant Principal of Curriculum and Instruction</p>
<p>Offer on-site after school training workshops on how to create and maintain a teacher web page/ web site using the Ektron Content Management System on a quarterly basis.</p>	<p>Sign in sheets shall be maintained and sent to the district educational services office after each workshop.</p>	<p>Educational Services Office (Curriculum &amp; Instruction)</p>
<hr/>		
<p>Once the new district telephone system/voicemail system is acquired, installed, and configured, training workshops will be provided for particular populations of users, such as teachers, office workers, and site administrators on how to use the voice mail/telephone system to its fullest potential.</p>	<p>Sign in sheets will be kept of participants in the workshops and submitted to the district educational services office.</p>	<p>Director of Technology</p>
<p>Training resources such as videos and/or handouts on how to use the electronic grade book program will be posted to the district website.</p>	<p>Don Schaafsma will provide electronic copies of resources to the director of technology who will post them on the district training website.</p>	<p>Director of Technology</p>
<p>Once the new district voicemail/telephone system has been selected, on line training resources including handouts and video clip animations will be created demonstrating how to use the new system effectively.</p>	<p>As the resources are created and posted to the district web site, an email will be sent out to every district employee inviting them to go to the webpage and access the training material on their own.</p>	<p>Director of Technology</p>
<p>District will provide training on defining student information literacy skills and finding ways to teach them by identifying information literacy skills that are embedded in English Language Arts and History Social Science content standards and discussing strategies on how to best engage the student in developing those skills. Training may occur at after school buy back workshops or through departmental or grade level meetings.</p>	<p>Director of Technology will coordinate with the educational services department to determine when the trainings and workshops may be offered.</p>	<p>Director of Technology</p>

#### 4d2. Monitoring Progress Towards Benchmarks

**Goal:** By June 2008, 100% of all teachers, administrator, and staff will have access to district provided technology training classes through after school professional development classes and workshops.

**Benchmarks:**

**Year 1:** In the school year ending June 2006, the district will provide at least 10 hours worth of technology training classes and/or workshops open to all teachers across the district.

**Year 2:** In the school year ending June 2007, the district will provide at least 12 hours worth of technology training classes and/or workshops open to all teachers across the district.

**Year 3:** In the school year ending June 2008, the district will provide at least 14 hours worth of technology training classes and/or workshops open to all teachers across the district.

**Monitoring:**

The Director of Technology will work together with the Superintendent (or Assistant Superintendent of Curriculum and Instruction) to develop a menu of training classes to be published and disseminated to district teachers and staff in October of each year.

**Goal:** Each year, 100% of all teachers will meet regularly throughout each year as grade levels or departments to discuss and coordinate the identification, creation, and usage of the anchor technology infused lessons and to discuss the progress toward focusing on information literacy skills by highlighting instruction in the embedded content standards for English Language Arts and History Social Science.

**Benchmarks:**

**Year 1:** Through June 2006, 100% of all K-12 teachers teaching core subjects will meet as grade levels or departments at least twice to discuss and coordinate the identification, creation, and usage of the anchor technology infused lessons and information literacy embedded content standards.

**Year 2:** Through June 2007, 100% of all K-12 teachers teaching core subjects will meet as grade levels or departments at least three times to discuss and coordinate the identification, creation, and usage of the anchor technology infused lessons and information literacy embedded content standards.

**Year 3:** Through June 2008, 100% of all K-12 teachers teaching core subjects will meet as grade levels or departments at least four times to discuss and coordinate the identification, creation, and usage of the anchor technology infused lessons and information literacy embedded content standards.

**Monitoring:**

Site administrators and department chairs will add time in meeting agendas to give teachers the opportunity to share information and plan for technology infusion into curriculum.

**Goal:** By June 2008, the district will provide the equivalent of ten hours of training videos or movies aligned to State and National Educational Technology standards for Teachers that are accessible on the district intranet. The training resources may include live action videos of effective teachers' use of technology in a lesson, screen shot movies of training tutorials illustrating technology skills or procedures, and handouts that can be printed out for quick reference on how to accomplish a specific task. All training resources will be aligned to State and National Educational Technology Standards for Teachers and/or the California Standards for the Teaching Profession.

**Benchmarks:**

**Year 1:** By June 2006, the district will provide the equivalent of three hours of training videos or movies aligned to State and National Educational Technology standards for Teachers that are accessible on the district intranet.

**Year 2:** By June 2007, the district will provide the equivalent of six hours of training videos or movies aligned to State and National Educational Technology standards for Teachers that are accessible on the district intranet.

**Year 3:** By June 2008, the district will provide the equivalent of ten hours of training videos or movies aligned to State and National Educational Technology standards for Teachers that are accessible on the district intranet.

**Monitoring:**

The director of Technology will oversee the planning, production, and posting of the training videos, movies and handouts on the district website. Data will be gathered from CTAP2 iAssessment results annually to plan the following year's offerings.



### **4d3. Evaluating the Professional Development Component**

Each spring and/or summer, all district teaching staff will participate in the CTAP2 iAssessment on-line teacher technology proficiency and use survey tool. Results from the annual iAssessment survey will be studied to track changes in teacher technology proficiency and usage patterns and to identify additional target areas for subsequent technology staff development. Teacher technology proficiency measures will be compared from year to year to evaluate the progress and the successfulness of the professional development programs offered by the district and to plan future training opportunities offered by the district.

The Director of Technology will gather survey and usages results and report them to the District Management Team (which includes the Superintendent, Principals, and district Directors) each fall and those results will help the Management Team plan for the year's professional development activities. Throughout the school year, the Director of Technology will report the on-going progress towards fulfilling the professional development goals outlined in the district technology plan to the District Management Team (The District Management Team meets twice a month throughout the year.) If any deficiencies are discovered (if targets are not being met) or if changes to district practice or to the technology plan are required, the Management Team will work with the Director of Technology to identify those changes and put them into place.

The Director of Technology will give a "State of Technology" report to the School Board in the spring of each year and that report will include an update on the status and effectiveness of technology related professional development.

Staff surveys will be provided after each training class or workshop to allow participants to provide feedback on the strengths and areas of improvement for that particular training class or workshop and to suggest a next course of action for future trainings.

## Component 5: Infrastructure

### 5a&b. Infrastructure Needs and Resources

Goals	Infrastructure Type	Need	Have	Need to Obtain
By June 2008, 100% off all teachers will utilize an on-line tool for taking and reporting attendance.	Hardware	Dedicated web server for each school site with ABI installed and configured.	Web servers for LCHS, PCY, PCR, LCE have been set up with ABI.	ABI needs to be installed on a web server for Foothills school.
By June 2008, 75% of all teachers at the high school and junior high school will have grades posted on-line for parents and students to access from home.	Networking and Telecommunications	Web server with sufficient network bandwidth to handle the data traffic that will be generated by the on line grade book program and someone located on site at the high school to manage the system.	Pinnacle grade book and web access module share space on existing servers at the high school. Network bandwidth usage is being monitored for overload conditions.	Separate server to host the pinnacle grade book and web access server. Potentially greater network bandwidth may require an upgrade of the district's network infrastructure to prevent the bogging down of the network at the high school.
By June 2008, 90% of all teachers at the high school (grades 7-12) will use a school standard electronic grade book program to keep track student assignments and grades.	Technical Support	A dedicated person to manage the web based systems such as the Pinnacle electronic grade book and the Ektron Content Management system at the high school. Not only do the databases need to be kept current and updated, user accounts need to be created and maintained.	The volunteer effort of a lead teacher.	A 0.5 to 1.0 FTE classified support staff person dedicated to maintaining the network, database (such as Pinnacle Grade book and Aeries ABI), and web services (such as Pinnacle Internet Viewer and Ektron content management system) at the high school.

<p>All students will have access to up-to-date computers and technology resources in every classroom and learning environment.</p>	<p>Networking and Telecommunications</p>	<p>As bandwidth utilization reaches 70% for any line, consider adding a second T1 to elementary schools and increasing bandwidth to LCHS to 4 T1's, a DS3 connection, or joining the cable company's fiber network. Upgrade district internet access to DS3 or above.</p>	<p>Dual T1 to the district, Dual T1 to LCHS, Single T1 to each elementary school. Switched 100 speed to the desktop at the HS and switched 10 speed to the desktop at the elementary schools.</p>	<p>Up-to-date edge router at the district office and intranet router that can handle the increased bandwidth needs and have robust Quality of Service capability for potential Voice Over IP or video surveillance applications. Upgrade backbone switches to gigabit speed capable layer 3 switches and upgrade all other switches to support minimum of 100Mbps with QoS.</p>
	<p>Hardware</p>	<p>Up to date computers in every classroom and learning environment.</p>	<p>3 desktop computers in each elementary class room, 4 desktop computers in 7-8 classrooms, 2 desktop computers in 9-12 classrooms, on computer lab at each school.</p>	<p>Acquire mobile laptop carts with 36 laptop computers at each school site. Replace existing computers when they reach 6 years of service. Replace any inkjet printers in the classroom with laser printers.</p>

By June 2008, 85% of all teachers will use technology infused lessons K-12 that are aligned to state curriculum standards. Each grade level or course will develop anchor lessons and/or assignments that utilize technology in the teaching and learning process. Teachers at that grade level or course will use at least one of the anchor lessons developed for that grade level or course. Rubrics will be created for assessing these lessons, and teachers will be trained in how to use these anchor lessons. Teachers will be encouraged to expand their use of technology beyond the technology anchor assignments, but the anchor assignments will form a uniform foundation of technology use across the district. In subsequent years, additional anchor lessons will be added to each grade level, subject area, or course for each grading period.

Electronic Learning Resources

As teachers develop technology infused lesson plans, they will need access to electronic learning resources to build their lessons on.

Microsoft Office district wide, access to the world wide web, selected software titles at each school, access to the CLRN website for finding content standards aligned electronic learning resources

Additional software applications as defined by the teachers that are appropriate to their subject matter and lesson content.

By June 2008, all teachers will have electronic access to 100% of the standardized testing data and 100% of the multiple measurement data for their students to help guide and provide instruction to their students.

Technical Support

Student information system that will be able to import a variety of testing data into a centralized repository and the ability to query the data and generate reports on specific populations within the database.

Eagle Aeries student information system has had some limited ability to import external data in the past but recently has promised to increase its ability to do so in the near future.

Technical support from Aeries to refine their import process so that it will work with any and all data.

By June 2008, 100% of students and teachers will have access to high speed network resources which will enable multimedia rich learning environments including streaming video, distance learning and tutorials, video conferencing, and multimedia content creation and publishing.

Hardware

Gigabit speed (1000Mbps) capable routers and switches to form the backbone of the district's data network, and new switches that can provide appropriate Quality of Service at 100Mbps to the desktop to handle Voice over IP and or video surveillance applications on top of data.

Routers and switches capable of handling 100Mbps at the high school, and 10Mbps at the elementary school.

New routers and switches that are capable of Gigabit speeds (1000 Mbps) at each school to form the backbone, and new switches that can provide appropriate Quality of Service at 100Mbps to the desktop

Hardware

Sufficient file server storage space with redundancy and backup for managing multimedia rich content. 1 Terabyte at HS, 200 Gb at each ES needed and 1 Terabyte at DO

200Gb at HS, 65 Gb at ES, 300Gb at DO

Additional file server storage capacity with redundancy and or backup to reach 1 Terabyte at HS, 200 Gb at each ES, and 1 Terabyte at DO.

Networking and Telecommunications

Sufficient data network bandwidth to handle multimedia files and broad band applications.

Dual T1 to the district office provided by LACOE as the ISP, dual T1 point to point service to the high school, single T1 to the elementary schools.

High speed internet service growing from T1 speeds to DS3 and potentially OC3 speeds (Sonnet from Monrovia) or access to cable company fiber network.

<p>By June 2008, Parents will be able to contact 100% of teachers and administrators through a variety of means including in person, by telephone, voice mail, email, and staff web pages.</p>	<p>Networking and Telecommunications</p>	<p>Telephone service to each school with fully functioning voice mail for both staff and teachers.</p>	<p>Analog Centrex phone lines to each school site with a voice mail system (Startel Trilog) that is unreliable and unable to provide voice mail to the teachers. Voice mail is only available for office staff.</p>	<p>Telephone service that can provide voice mail for all district employees. For cost effectiveness, a migration from analog Centrex lines to digital PRI-Centrex service or Voice over IP may be warranted.</p>
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**5c. Technology Infrastructure Acquisition/Repurposing Plan**

Infrastructure to Obtain	How	Due Date	Person/Team Responsible
<p>Up-to-date edge router at the district office and intranet router that can handle the increased bandwidth needs and have robust Quality of Service capability for potential Voice Over IP or video surveillance applications. Upgrade backbone switches to gigabit speed capable layer 3 switches and upgrade all other switches to support minimum of 100Mbps with QoS.</p>	<p>New equipment will be obtained using a combination of funds including funds set aside for the district office move to the Foothill location in the summer and fall of 2005 as well as Technology departmental funds. Funds may be available from a portion of the bond money set aside for installing video surveillance at each school. If a Video over IP solution is chosen, those routers as well as related switches may be able to be funded from the video surveillance budget.</p>	12/31/2005	Director of Technology
<p>Acquire mobile laptop carts with 36 laptop computers at each school site. Replace existing computers when they reach 6 years of service. Replace any inkjet printers in the classroom with laser printers.</p>	<p>Laptops and replacement desktops will be obtained through continued use of a 3 year lease-purchase program every three years to replace those computers which have reached the end of their useful lifespan. The lease purchase program is paid for out of the districts general budget and amounts to approximately \$110,000 each year. Purchase of computer hardware and software will be done according to the district standard to ensure interoperability, reliability and maintainability. Whenever new computers are purchased, licenses for Microsoft Office and anti virus software must also be secured one a one for one basis.</p>	11/01/2006	Director of Technology
<p>Telephone service that can provide voice mail for all district employees. For cost effectiveness, a migration from analog Centrex lines to digital PRI-Centrex service or Voice over IP may be warranted.</p>	<p>Director of technology will work with telecomm providers to determine the most cost effective solution for providing basic telephony service to the district. One time equipment acquisition funds may be obtained through modernization funds used for the planned move of the district office. District has budgeted for ongoing costs associated with basic telephony services and may use Erate funds to offset some of the cost of the ongoing usage fees.</p>	06/30/2008	Director of Technology
<p>New routers and switches that are capable of Gigabit speeds (1000 Mbps) at each school to form the backbone, and new switches that can provide appropriate Quality of Service at 100Mbps to the desktop</p>	<p>New network gear will be obtained through a variety of means including: modernization of the district office during the move in the summer of 2005, Technology department funds, and any funds made available through the installation of district wide surveillance gear that utilizes network infrastructure. Additionally, trade-in value credit is often given by new equipment manufacturers when the new equipment is replacing older equipment. Such trade-ins may be utilized to lower the total cost of acquisition.</p>	06/30/2008	Director of Technology

<p>Additional file server storage capacity with redundancy and or backup to reach 1 Terabyte at HS, 200 Gb at each ES, and 1 Terabyte at DO.</p>	<p>New network gear will be obtained through a variety of means including funds set aside for the move of the district office in the summer/fall of 2005 as well as technology department funds.</p>	<p>06/30/2008 Director of Technology</p>
<p>ABI needs to be installed on a web server for Foothills school.</p>	<p>The ABI services will be run on top of an existing server at PCR to service the needs of Foothills school.</p>	<p>09/01/2005 Technology Department Staff</p>
<p>Separate server to host the pinnacle grade book and web access server. Potentially greater network bandwidth may require an upgrade of the district's network infrastructure to prevent the bogging down of the network at the high school.</p>	<p>Older servers being taken off line after the district office move will be repurposed to provide functionality for the new services being offered at the high school.</p>	<p>06/30/2006 Technology Department Staff</p>
<p>A 0.5 to 1.0 FTE classified support staff person dedicated to maintaining the network, database (such as Pinnacle Grade book and Aeries ABI), and web services (such as Pinnacle Internet Viewer and Ektron content management system) at the high school.</p>	<p>High school will explore funding this position out of School Improvement, education foundation grants or donations, balancing of teaching loads, or other site based means.</p>	<p>06/30/2008 Principal</p>
<p>Additional software applications as defined by the teachers that are appropriate to their subject matter and lesson content.</p>	<p>Funds will be obtained from school site department and grade level funds, School improvement funds, and donations from education foundations as needed on an ongoing basis.</p>	<p>06/30/2008 Department Chair / Grade Level Leader</p>
<p>Technical support from Aeries to refine their import process so that it will work with any and all data.</p>	<p>Telephone support from Aeries is included in the yearly maintenance fees. We can also submit change and modification requests to the system and if Eagle Software deems the request to be significant enough, they may include the modifications at no additional charge once they develop it. The need for technical support is ongoing.</p>	<p>06/30/2008 Technology Department Staff</p>
<p>High speed internet service growing from T1 speeds to DS3 and potentially OC3 speeds (Sonnet from Monrovia) or access to cable company fiber network.</p>	<p>As data bandwidth demands rise, additional funds from the general operating budget will be necessary to pay for ongoing high speed internet service charges. The district will pursue the Federal Erate grants and California Teleconnect Funds discount to offset some of the ongoing network service charges. When the district office moves to its new location in the summer/fall of 2005, it will use some of the funds set aside for the move to pay for new routing equipment that will be needed for higher bandwidth connection speeds.</p>	<p>12/31/2005 Director of Technology</p>



**5d1. Monitoring Plan Implementation**

<b>Infrastructure to Obtain</b>	<b>Method of Monitoring</b>	<b>Person/Team Responsible</b>
Up-to-date edge router at the district office and intranet router that can handle the increased bandwidth needs and have robust Quality of Service capability for potential Voice Over IP or video surveillance applications. Upgrade backbone switches to gigabit speed capable layer 3 switches and upgrade all other switches to support minimum of 100Mbps with QoS.	Director of technology will provide progress reports to the Superintendent and management team at the district management team meetings and/or the director's meetings.	Management Team
Acquire mobile laptop carts with 36 laptop computers at each school site. Replace existing computers when they reach 6 years of service. Replace any inkjet printers in the classroom with laser printers.	Director of technology will provide progress reports to the Superintendent and management team at the district management team meetings and/or the director's meetings.	Management Team
Telephone service that can provide voice mail for all district employees. For cost effectiveness, a migration from analog Centrex lines to digital PRI-Centrex service or Voice over IP may be warranted.	Director of technology will provide progress reports to the Superintendent and management team at the district management team meetings and/or the director's meetings.	Management Team
New routers and switches that are capable of Gigabit speeds (1000 Mbps)at each school to form the backbone, and new switches that can provide appropriate Quality of Service at 100Mbps to the desktop	Director of technology will provide regular progress reports to the Superintendent and management team at the district management team meetings and/or the director's meetings.	Management Team
Additional file server storage capacity with redundancy and or backup to reach 1 Terabyte at HS, 200 Gb at each ES, and 1 Terabyte at DO.	Director of technology will provide regular progress reports to the Superintendent and management team at the district management team meetings and/or the director's meetings.	Management Team
ABI needs to be installed on a web server for Foothills school.	Information Systems Supervisor (Jeff Watts) will provide ongoing updates as to the progress of installing the ABI services until it is completed.	Director of Technology
Separate server to host the Pinnacle grade book and web access server. Potentially greater network bandwidth may require an upgrade of the district's network infrastructure to prevent the bogging down of the network at the high school.	The Information Services Supervisor (Jeff Watts) will provide monthly updates to the director of technology on the progress of repurposing older servers for new needs.	Director of Technology
A 0.5 to 1.0 FTE classified support staff person dedicated to maintaining the network, database (such as Pinnacle Gradebook and Aeries ABI), and web services (such as Pinnacle Internet Viewer and Ektron content management system) at the high school.	Principal will explore funding options as they arise and make a decision based on input from the Superintendent.	Superintendent

<p>Additional software applications as defined by the teachers that are appropriate to their subject matter and lesson content.</p>	<p>All software purchases must be pre-approved by the Director of Technology</p>	<p>Director of Technology</p>
<p>Technical support from Aeries to refine their import process so that it will work with any and all data.</p>	<p>Information Systems Supervisor (Jeff Watts) will work with Aeries to identify needed changes and report the status of the change requests to the director of technology on an ongoing basis.</p>	<p>Director of Technology</p>
<p>High speed internet service growing from T1 speeds to DS3 and potentially OC3 speeds (Sonnet from Monrovia) or access to cable company fiber network.</p>	<p>Director of technology will give monthly updates to the superintendent on the progress toward selecting acquiring and installing the most cost effective service that meets the districts needs.</p>	<p>Superintendent</p>

## **5d2. Evaluating the Infrastructure Component**

The director of technology will oversee the detailed planning for acquisition and installation of all of the technology infrastructure outlined in the technology plan. The director will constantly monitor implementation status and give regular progress reports to the district management team at the regularly scheduled management team meetings. Typically, the district management team (M-Team) meets every two weeks throughout the year. The director of technology will provide updates on the status of any new developments in the implementation of the technology plan and progress towards benchmarks at least once a month at these meetings.

A district wide inventory of technology resources will be compiled by the technology department in database form and it will be updated constantly as new equipment is acquired and old equipment is retired. The computer support technician will manage the district computer inventory database, and the information systems supervisor will manage the network infrastructure inventory database. Once a year, the director of technology will oversee the gathering and reporting of data to the State for the California School Technology Survey which is typically conducted around March of each year.

Implementation status of the infrastructure, hardware, technical support and software components of the district technology plan will be reported to the superintendent and district management team regularly at the district management team meetings (which meet approximately every two weeks) whenever there is a change in the status of any of those components. The local governing board will receive a "district state of technology" report at least once every year given by the director of technology at a time determined by the superintendent.

If any parts of the tech plan are not being implemented according to schedule, the director of technology will discuss the reasons for the shortcoming with the management team and a plan of action will be created with input from the management team and the director of technology to address the reasons for non-implementation. In the case that a delay in implementation timeline or a modification of the original goals or implementation steps to match new realities is required, agreement from the management team, director of technology and the superintendent will be solicited and recorded in the minutes of the management team meeting.

## Component 6: Funding and Budget

### 6a. Funding Sources

La Cañada Unified School District is unique among California public schools because of its partnership with the local community in generating significant sums of money every year to help fund additional programs, staff, and capital expenditures. Because it is located in a fairly wealthy neighborhood, La Cañada Unified does not enjoy the significant amounts of categorical funds that many of the neighboring districts receive. The community, however, has stepped in and has consistently donated significant sums of money to help the district reach its goals each year.

Unique to LCUSD is a commitment to invest regularly in the replacement of classroom computers. The district has entered into a three year lease-purchase agreement to fund the acquisition of new computers with the goal of replacing half of the computers every three years resulting in a complete refresh of every classroom computer every six years. In the past, the Education Foundation has contributed largely toward those acquisitions, but in the new budget, the cost of maintaining the lease-purchase will be born entirely by the district and the foundation monies will go to other district priorities.

The district recently passed a bond measure which has enabled some much needed repairs and will help pay for the move of the district office to a new location in the summer/fall of 2005. Some money has been set aside by the district for the move to fund the acquisition of technology infrastructure at the new site. Because of the dearth of low income families in the surrounding neighborhood, the federal Erate discount for the district is only 23%. While the district technology office still applies for the Erate discount, the net savings is not all that great. Another source of discounts comes from the California Teleconnect Fund, which further lowers the monthly rate charged for internet service and phone calls.

Funding Source – District Office	Funding Sources – Individual School Sites
General Fund	School Improvement Funds
La Cañada Educational Foundation Donations	Site Block Grant
Modernization funds from Bond measure	Governor Performance / other awards
ERATE	PTAs and PTSAs
California Teleconnect Fund Discount	Gifts
Funds set aside for District Office move	Donation from La Cañada Educational Foundation
Technology Department budget	

LCUSD’s on-going technology budget funds the following:

- technology department salaries
- student information system database support and maintenance
- support for network servers, email system, anti virus applications
- computer, TV, and printer repair
- limited technology related staff development
- internet service to the district office (which feeds the schools)
- licensing for district wide network applications such as Ektron and ABI

The District general fund pays for the following technology related expenditures:

- telephone service
- acquisition of new classroom computers on a three year refresh cycle
- general staff development (“Buyback” training workshops which may be technology related)
- instructional technology specialists who run the elementary computer labs

Schools (with a lot of help from their PTAs) are responsible for the following technology related expenditures:

- peripherals such as printers, scanners, and digital cameras along with their consumables
- attendance at conferences
- software
- additional technology support personnel

**6b. Costs and Budget**

**Technology Department Budget (Estimated)**

**Object of Expenditure**

<b>Category</b>	<b>2005-2006</b>	<b>2006-2007</b>	<b>2007-2008</b>
1000 - Certificated Personnel Salaries	\$85632	\$87344	\$89057
2000 - Classified Personnel Salaries	\$86760	\$88495	\$90230
3000 - Employee Benefits	\$62982	\$64241	\$65501
4000 - Books, Materials, Supplies	\$62351	\$20000	\$20000
5000 - Services and Other Operating Expenses (Including Travel)	\$80600	\$80600	\$80600
6000 - Capital Outlay (Equipment)	\$140000	\$110000	\$110000
7000 - Indirect Cost (per J-380 Report)	\$	\$	\$
8000 - Classified Personnel Salaries	\$	\$	\$

**Budget Narrative**

<b>Category</b>	<b>Description</b>
1000 - Certificated Personnel Salaries	<p>Curriculum Writing for Summer writing workshops. \$25/hr x 8 hrs x 5 days = \$1000 per person for a week of curriculum writing. Each summer, 10 teachers will be "hired" to create technology infused lessons that are aligned with state curriculum standards and which support the district technology plan.</p> <p>Director of Technology Salary</p>
2000 - Classified Personnel Salaries	Salaries for Information Systems Supervisor and a portion of the cost of the Computer Support Technician (The other portion is picked up by the high school)
3000 - Employee Benefits	Benefits for technology department staff
4000 - Books, Materials, Supplies	<p>Supplies used in the day to day operation of the technology department</p> <p>For 2005-06, a portion of the lease purchase monies was placed in this budget category and came from the education foundation.</p>
5000 - Services and Other Operating Expenses (Including Travel)	A significant portion of this is the annual repair budget and the costs of maintaining district licenses for certain server and software applications
6000 - Capital Outlay (Equipment)	<p>Purchase voice mail system or upgrade existing network infrastructure to enable network based voice mail (for example, a voice over IP solution)</p> <p>Purchase a mobile laptop cart for each school site 4 x \$30,000 (part of the next lease purchase)</p> <p>Ongoing Lease - Purchase payments of \$110,000 per year to fund the replacement of 50% of the district's classroom computers every three years.</p> <p>Starting in 2006-07, the full amount of the lease Purchase will be come out of this account.</p>
7000 - Indirect Cost (per J-380 Report)	
8000 - Classified Personnel Salaries	

Additional strategies have been put into place to ensure that the procurement of technology hardware and software is done in the most economic way possible. The Technology Department must pre-approve all technology purchases to ensure that the equipment is aligned with district standards for hardware and software. The district has standardized on HP enterprise class computers with a three year warranty to facilitate the ease of servicing and maintainability. Hardware purchases are done off of the CSMART or WSCA (Western States Contracting Alliance) price lists whenever possible to ensure the lowest cost. The district no longer accepts donated computers due to the prohibitively large cost of servicing non standard equipment.

### **6c. Ongoing Technical Support**

At the central office, the District will provide a Director of Technology (1.0 FTE) to oversee the technology needs of the district. The Director of Technology will be a certificated administrator so that he/she can manage and provide staff development for district teachers and staff on the use of technology. The district will also provide a Information Systems Supervisor (1.0 FTE) who will be in charge of maintaining the district's network infrastructure and district student information systems database. The district will also provide a full time computer support technician who will be responsible for installing new computers and equipment, troubleshooting faulty equipment, and repairing or coordinating the repair of broken equipment. This technician will spend half of their time at the high school and the remainder of the time visiting the other school sites to manage their technology support needs. The district will also work with school sites to identify funding sources and resources to hire additional site based technology support personnel to manage the increased need for technology and network infrastructure support as new electronic grade book, content management systems, and broad band communication tools are put into place.

All new computer equipment purchased will adhere to district standards from a chosen vendor and come with an extended three year warranty to facilitate a streamlined support and repair process. Computers will thus be compatible with a standard hard drive image which will facilitate the ease of installing new hardware.

Networking gear will be purchased preference given to products with lifetime warranties to minimize the cost of repair and replacement in the case of equipment failure.

With any major purchases of computers and networking equipment, arrangements will be made by the district to acquire extra computers or networking gear to be kept in storage as spares and/or backups in order to provide a quick turn around time in the event of failure of one of the components.

Over time, the district will explore creating a Student Technology Leadership Program. The program will have a two-fold purpose: 1) provide students with technical, communication, and leadership skill development opportunities; 2) create a technology support resource for the school district. The growing quantity and variety of technology resources within the district demand an ever-increasing technical support base. The program will require students to participate in training (either as a class or after school as a club), and to work to support the high school each week.

## **6d. Replacement Policy for Obsolete Equipment**

Computers will be upgraded every 6 years with half of the district's computers being replaced every three years. According to this technology plan, the next upgrade cycle will occur in the summer of 2006. The hardware budget for the duration of this plan will reflect this replacement cycle. Hardware will be repaired by the District's IT department, however sites may be responsible for upgrading computers. The cost of the repair will be the district's responsibility as long as the repair costs do not exceed 40% of the replacement cost of the broken equipment. When computer hardware is no longer able to access district resources and/or run electronic learning resources, or if repair costs exceed 40% of the replacement cost of the broken equipment, the site will work with the district to replace it using funding sources identified in this plan. See appendix for minimum computer hardware configuration.

When computer equipment has reached the end of its useful lifespan, the district will make arrangements to donate the obsolete equipment to charitable non-profit organizations. Any remaining equipment, including broken equipment that can not be repaired economically will be disposed of in an environmentally friendly manner and in accordance with district policy and procedures.

## **6e. Monitoring and Updating Funding and Budget Decisions**

The technology budget has been integrated into the district general budget process in a manner that is consistent with the Funding and Budget component allowing for the appropriate funding of items identified in the district technology master plan. Funds have been identified in the general budget and from other sources such as grants, modernization bonds, and community foundations which will enable the technology plan to be carried out.

The director of technology will be responsible for monitoring the necessary modifications of the physical plant, acquisition of equipment, and updating of the budget to reflect technology goals. The director will report any changes required and secure the cooperation and help of the necessary parties through the regularly scheduled meetings (approx. every two weeks) of the district management team which is lead by the district Superintendent. In particular, the director will address the following issues when necessary at these meetings: (1) progress in obtaining funds to support implementation of the plan; (2) explain difficulties; and (3) offer revisions to the plan to resolve the problems. Furthermore, the director of technology will meet with the school board at least once every year in the spring time to give a "state of technology in the district" report.

If parts of the Funding and Budget component are found not to be implemented on schedule, a discussion with the entire management team will be held to discover the causes of the shortfall and a plan of action determined to readjust priorities to meet the timeline, or a consensus developed to modify the scope of the technology plan to reflect new budgetary realities.



## **Component 7: Monitoring and Evaluation**

### **7a1. Evaluation Plan for Attainment of the District's Curricular Goals**

Progress towards the district's educational goals is overseen by the district's Curriculum Council, which is composed of administrators, department and grade level leaders, parents, and teachers from every school. The Curriculum Council typically meets at least four to six times each year and provides leadership to the rest of the district in developing strategies to improve student learning and evaluating progress toward educational goals. It played an instrumental role in helping to define and develop the district's technology plan.

The district utilizes a variety of means to gauge the progress towards curricular goals. Each year, a comprehensive look at the success of student learning is evaluated using multiple measures that are tailored for each specific grade level. Student achievement in Math and English/Language Arts is focused on through a variety of measures that might include standardized test scores, performance on district writing tests, performance on district reading tests, and final exam grades, among others. These measures are developed through the Curriculum Council with input from teachers and administrators and in some cases are done in partnership with a local university. For example, one of the high school Math measures is a diagnostic instrument developed and scored by UCLA. A multiple measures binder is created for each school every summer that breaks down the performance of each of that school's various student populations (including English Language Learners, Special Education, and ethnic groups) for each measure. Success of the technology plan will be measured in part by analyzing the results of these multiple measures to see if there are improvements from year to year. The curriculum council also reviews the school and district's progress toward achieving Acceptable Yearly Progress while monitoring changes in the schools' Academic Performance Index. While it would be difficult to pinpoint a sole cause in the rise or fall of specific measures, technology integration will play some part in the performance of students in concert with the other strategies developed through the Curriculum Council to improve student achievement. When the Curriculum Council evaluates the school and district's performance towards educational goals each year, the impact of technology will be one component in the overall evaluation.

The Curriculum Council will also track the rate of development, creation, and implementation of the technology infused anchor assignments for each grade level and course through reports from the site administrators, grade level leaders, and department chairs using an annual questionnaire to be distributed each spring. Results from that questionnaire will be used to plan the subsequent summer's curriculum writing workshops for creating new technology infused lessons that address an area that has not been addressed before. Success of the technology plan will be measured in large part by the number of technology anchor assignments developed, their level of use by the teachers, and student performance on those assignments as defined by the grading rubric developed for each assignment.

Since the technology plan calls for technology infused lessons to be offered by all teachers in all grade levels and courses, special population students will benefit in the same manner as non-targeted student populations. Access to technology has been the same for all populations within the district.

## **7a2. Evaluation Plan for Classroom and School Management**

La Cañada Unified School District uses technology throughout district management to streamline administrative processes and assist site and district administrators in making decisions based on data. Already, the district employs an electronic Student Information System (Eagle Aeries) for managing student records, enrollment, class scheduling, attendance, and grade reporting. Most of the district's standardized tests are Pre-ID'd and pre-printed to streamline the testing process using data extracted from the student information system. Textbook and library books are checked out using barcodes and the district lunch program handles payments electronically through the internet.

Use of technology reduces time spent by teachers on administrative tasks and allows them to focus more on instruction. Several examples of using technology to improve classroom and school management that are covered by this technology plan include:

1. Using electronic gradebooks (Pinnacle Gradebook System)
2. Using a web based on-line tool to take attendance (Aeries Browser Interface)
3. Using a web based on-line tool to submit grades (Aeries Browser interface)
4. Using email to communicate between staff and parents
5. Teacher created web pages (Ektron CMS)
6. Voice Mail system (new system to be acquired)

General technology use levels throughout the district will be monitored by annual participation by all staff in the CTAP2 iAssessment on-line survey and self assessment tool. The survey addresses four areas of teacher technology usage: 1) use of technology tools for classroom management and instruction; 2) their student's use of technology tools for classroom assignments; 3) their professional development preferences, and 4) their technical support experiences. Information about personal proficiency as well as frequency of technology use will be gathered every summer when teachers and staff will be asked to complete the web based survey. Teachers who have not completed the annual survey by the end of the summer will be asked to complete them before the opening of school when they return from their summer vacations. The director of technology will collect the aggregated data and share the results with the district technology leaders at the monthly Technology Leaders meetings. The district Technology Leaders group will ensure that all students, teachers, and administrators have equal access to technologies and will make recommendations if corrective action is required.

Another monitoring tool that will be used as an indicator of success is the California Technology Survey, which is completed by each school in the spring time. This survey includes portions regarding technology use, access to technical support services and training, and infrastructure which can be used as indicators of success.

Ongoing usage of all electronic tools for classroom and school will be monitored by the director of technology in conjunction with the Technology Leaders team on an ongoing informal basis. Formal reports will be provided to the district Management Team and the Curriculum Council each semester or as needed with an annual evaluation performed by the management team in the spring time using the checklist provided in the next section.

## **7b. Monitoring Plan Implementation**

The LCUSD technology plan envisions positive and significant impact in student achievement during its duration. It is clear in the research that this is achievable, given appropriate vision, planning, professional development and allocation of resources. Key guiding principles of the monitoring and evaluation of this plan include the following strategic considerations, to serve as an ongoing checklist for formal and informal evaluation through the Technology Leader's Group, Curriculum Council, District Management Team, and School Board.

### A. Technology Impact:

1. Were the goals of the district technology plan met?
2. What is in progress and what has been implemented?
3. Are sites using all of the hardware and software available to them?
4. What has been the learner's response to a shift to greater use of technology for learning?
5. What emerging areas will need to be added to the Technology Plan?
6. What areas in the existing plan need to be modified?

B. Curriculum Development: Did the technology plan and related technology systems implemented...

1. provide tools that allowed for preparation of instructional materials, with easy access to pre-evaluated tools and resources?
2. support gathering of source materials from many sources of multiple media?
3. support teachers in knowing what to teach through profiling of students and the class, all related to California State standards?
4. support cross-curriculum development?
5. support real-time classroom feedback to enable teachers to understand who knows what and when?
6. support multiple learning styles in delivery of instruction?
7. support resources that can be accessible by both parent/guardians and students outside of the classroom that extend upon classroom instruction?
8. provide tools to teachers that support multiple methods of delivery?
9. provide a collaboration model to support all aspects of curriculum development and delivery?
10. provide periodic and year-end assessment?
11. make students responsible for learning by providing access to assessment results by both students and parents/guardians?
12. provide for multiple ways to access lessons?
13. minimize challenges to teachers related to acquisition, set-up, and use of instructional material?
14. support paperless record keeping?
15. support access to and synthesis of individual student data?
16. automate record keeping and data entry to improve feedback loops and limit teacher workload?
17. provide access to records across classes, schools, and district and ensure that records are transferable to other schools/districts when teachers move?

18. provide easy to use tools to support multiple classroom and student configurations?
19. make records associated with students accessible to all necessary parties (i.e., teachers, administrators, students, and parents/guardians)

C. Professional Development: Did the technology plan and related technology systems implemented..

1. integrate technology training into all professional development?
2. promote on-site, small group, technical and curriculum support that is delivered by colleagues and based on teacher and student needs?
3. make professional development have immediate application to classroom with follow-up assessment?
4. allow for independent learning, practice, reflection, and evaluation?
5. remain flexible to accommodate different learning styles?
6. reduce the workload burden of teachers?
7. develop and support collaboration?
8. support curriculum development and encourage problem solving?
9. support anytime/anywhere training?

D. Infrastructure: Did the technology plan and related technology systems implemented....

1. provide a reliable, scalable and future-proof system that accommodates growth and new technologies?
2. provide for support of multiple systems, different instructional settings and virtual classrooms?
3. support individual self-assessment?
4. provide access for community-based resources (homes, schools, etc.)?
5. maintain affordability now and in the future?
6. promote standardization of infrastructure to support resource sharing, maintainability, enhancement, and to employ common protocols?
7. provide tie-ins to the California State Information System ?
8. provide seamless entry to a uniform environment, network-based applications and data?
9. provide appropriate security and privacy?
10. provide easy access to network-based content?

Plan implementation will be informally evaluated by the director of technology and the Technology Leaders' group (which includes teachers, administrators, students, and parents) on an ongoing basis throughout the year using the strategic considerations listed above. Formal evaluation of the technology plan implementation will be conducted once a year by the district Management Team (consisting of district administrators, principals, and directors) using questions based on the strategic considerations listed above in written form each spring. The results of the formal evaluation will be presented to the Curriculum Council (consisting of administrators, teachers, community members, and board members) where discussions will be held to determine the effect of the technology plan on teaching and learning. The results of the formal evaluation will also be made available to the School Board at the annual "State of Technology Report" to be given by the Director of Technology each spring.

### **7c. Using Evaluation Results**

The status of the technology plan implementation will be reported to the District Management Team (consisting of the Superintendent, Assistant Superintendents, Principals, and Directors) on an ongoing basis throughout the year by the Director of Technology at their bi-monthly (twice a month) meetings. Status reports will also be given by the Director of Technology at the Curriculum Council meetings (consisting of site administrators, grade level leaders, and department chairs) at their regular meetings (four to six times a year). The Director of Technology also publishes a monthly Technology Update newsletter which is sent to every staff member in the district and outlines the latest developments in technology. Finally, the Director of Technology will report to the School Board the results of the monitoring and evaluation process at an annual "State of Technology" report each spring.

If necessary, mid-course corrections to the district's implementation of the technology plan will be conducted through the District Management Team. The Management team, in cooperation with the Curriculum Council will be able to determine modifications to district practice or to the district technology plan to accommodate new realities or implementation deficiencies as they are identified.

Strategies that have had a positive effect on teaching and learning will be highlighted in the monthly Technology Update newsletter published by the Director of Technology and distributed district wide. Additionally, the Director of Technology will share effective strategies with neighboring districts through the monthly Foothill Exchange Consortium Meetings which is composed of the director of technologies of 18 other neighboring districts in the San Gabriel Valley. Furthermore, technology success stories will be written up and published on the District's website.

## **Component 8: Adult Literacy**

### **8a. Collaboration with Adult Literacy Providers**

La Cañada is a highly affluent area with low adult literacy needs. Even so, La Cañada has a number of adult immigrants, mostly from Asia, who are in need of language training. The local community center, the Roger Barkley Community Center, holds adult ESL classes at its own facility just off the main street in La Cañada to service their language development needs.

Through a partnership with the City of La Cañada Flintridge, the community is able to make use of the high school's Information Resource Center from 3:30 - 8:30pm on Tuesdays, Wednesdays, and Thursdays. The city pays for keeping the Information Resource Center open beyond the regular school day and employs school district personnel to man the center and answer questions and give assistance to the general public. This center provides books, computers, and Internet access to the general public as well as students. From time to time, the Roger Barkley Community Center holds computer skills classes for the general public at the high school's Instructional Resource Center. Sometimes, it even utilizes the school district employees as the trainers, furthering the partnership between city, school district, and community center to benefit community outreach and technology access.

## Component 9: Research

**CEO Forum. (2001, June). The CEO Forum school technology and readiness report: *Key building blocks for student achievement in the 21st century.***  
**<http://www.ceoforum.org/downloads/report4.pdf>**

This report concludes that effective uses of technology to enhance student achievement are based on four elements: alignment to curricular standards and objectives, assessment that accurately and completely reflects the full range of academic and performance skills, holding schools and districts accountable for continuous evaluation and improvement strategies, and an equity of access across geographic, cultural, and socio-economic boundaries.

Consistent with this research, the La Cañada Unified School District will carefully analyze learning resources and lessons both for alignment with California content standards and for the ability to measure growth/achievement on those standards in a variety of ways. Through ongoing data collection and analysis, the La Cañada Unified School District will continuously monitor its attainment of the goals and objectives of the Educational Technology Plan, and will report results annually to the superintendent, the school board, and the public. Throughout the plan, attention is paid to providing equitable access to all students in our community, including students in special populations.

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**WestEd Regional Technology in Education Consortium (June, 2002). *The learning return on our educational technology investment.*** **<http://www.wested.org/cs/wew/view/rs/619>**

This report seeks to answer the question “what do we need to do to maximize the return on our technology investment?” It offers suggestions related to issues such as professional development, access to technology, and long term planning.

These issues are addressed within the development of our district technology plan, and we have considered the ten lessons from this research that address the conditions under which technology has the most benefits for students.

- Technology is best used as one component in a broad-based effort.
- Teachers must be adequately trained to use technology
- Teachers may need to change their beliefs about teaching and learning – embrace a constructivist model of learning
- Technological resources must be sufficient and accessible -
- Appropriate placement – Distributed computing model shows more student improvement. Push the computers out of the labs and into the classrooms.
- Computer access at home – allows continued exploration and building of skills
- Effective technology use requires long-term planning and support – beyond the initial purchase are “hidden” costs of repair, maintaining, and eventually replacing the machine in addition to software

- Technical and instructional support – support needs change as a teacher becomes more proficient.
- Technology should be integrated into the curricular and instructional framework.

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**Marzano, R, Pickering, D., and Pollock, J. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*. Virginia: Association for Supervision and Curriculum Development.**

This book summarizes the research supporting a variety of instructional strategies with proven successes in improving student achievement. The research-based strategies include 1) identifying similarities and differences; 2) summarizing and note-taking; 3) reinforcing effort and providing recognition; 4) homework and practice; 5) nonlinguistic representations; 6) cooperative learning; 7) setting objectives and providing feedback; 8) generating and testing hypotheses; and 9) cues, questions, and advance organizers.

As noted in our action plan for meeting our curricular goals of literacy for all students, a variety of instructional strategies and technologies will be used to assist students in acquiring literacy skills and all content areas. As described in the research, the used of nonlinguistic representations such as graphic organizers are effective tools for supporting understanding of key concepts, and graphic representations are highly effective tools for supporting new concepts and vocabulary. Simulation software allows students to generate and test hypotheses quickly and efficiently. Using presentation software to organize information, coupled with using a printed copy of the presentation to assist in note-taking skills, helps students to better identify key concepts and summarize critical information. Consistent with the research, our curricular and staff development goals include the use of Inspiration and other mind-mapping tools, the use of simulation software and probeware, and PowerPoint handouts to guide students in note-taking.

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Annually, the representatives from the Curriculum Council and the Technology Leaders Committee will examine the studies in the What Works computer database. 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 the 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.

These resources will be utilized and incorporated as appropriate to ensure that the education technology program in the La Cañada Unified School District is consistent with current scientifically-based research regarding technology, teaching, and learning. .

Software evaluation and selection will be made with the assistance of the California Learning Resources Network web site, funded and run by the California Department of Education, which contains a database of different electronic learning resources that have been aligned with California curriculum frameworks to ensure that the software supports California content standards.

## **9b. Educational Technology Models**

Technology plans from the surrounding school districts were studied before this technology plan was developed in order to learn about various educational technology models and strategies. Technology plans from Glendale Unified School District and Burbank Unified school district received extensive review and full copies of technology plans were provided to each member of the technology plan writing team.

Another resource that played a critical role in preparing the groundwork for writing this technology plan was the West Ed publication "The Learning Return on Our Educational Technology Investment: A Review of Findings from Research 2002". This document pointed the way to a host of original research that documented various applications of technology to meet learning needs.

The technology plan writing team also made use of the Center for Applied Research in Educational Technology's (CARET) website to locate research on specific issues related to educational technology applications in the school setting. (<http://caret.iste.org>) Many of the resources cited in this document were found using that website.

Additionally, key members of the technology plan writing team were sent to the Computer Using Educators conference in the Spring of 2004 to learn about current teaching models and strategies using technology.

Finally, the training videos provided by the George Lucas Educational Foundation showcasing successful uses of technology in a variety of educational settings were shown at each of the planning meetings of the technology writing team in order to spark discussion and provide inspiration as to what was possible with technology in the classroom. (<http://www.glef.org/>) The George Lucas Educational Foundation was contacted and permission was sought and granted to allow the district to use those training videos for training purposes throughout the district.

### **9c. Innovative Strategies for Using Technology**

The district has acquired certain software programs and hardware resources that allow teachers to incorporate innovative technology techniques into the standards-based classroom.

ArcView Geographic Information System (GIS) software has been acquired which allows a teacher to have students use a mapping/database program to make maps and do spatial analysis of geographic information. The science department at the high school recently acquired Global Positioning System (GPS) receivers. This allows students to take geographic coordinates (waypoints) and then plug those coordinates into the aforementioned GIS program. Statistical software is also used at the high school for the advanced placement statistics class. The chemistry teacher at the high school uses scanners and WinZip compression software to have students make standards-based portfolios of their work in the class.

One of the math teachers at the high school uses Camtasia presentation software to deliver lectures and lessons on-line with full motion graphics and computer screen-shot movies. He also posts homework answers and homework help.

Three of the teachers in the science department at the high school publish lessons, PowerPoint presentations, syllabi, and worksheets on-line through a web site. This is especially helpful for students who are absent for class.

An art teacher in the 7-8 portion of the high school posts lessons and drawing exercises on-line.

Developing distance learning opportunities to extend the activities in the classroom is the goal of the district. We hope that the use of web sites and online learning resources will continue to expand as teachers see the applications of technology outside the classroom.

**Appendix A: Student Technology Skills Scope and Sequence**

<b>Grade</b>	<b>Strand</b>	<b>Standard</b>	<b>Software</b>	<b>Introduced</b>
	<b>Kindergarten</b>			
		<b>1.0 Information Technology Basics</b>		
		1.1 Identify and demonstrate basic skills such as using the computer, mouse, keyboard, removable storage device, monitor, microphone, speakers and printer.	None	Lab/Classroom
		1.2 Demonstrate file management skills of creating new documents and printing them.	KidPix Deluxe	Lab
		1.3 Demonstrate basic operating system skills such as point and click, navigation on desktop items and using the Start menu	Windows OS	
		<b>2.0 Application and Integration of Technology</b>		
		2.1 Create multimedia documents to reinforce curricular concepts such as number, letter and patterns.	KidPix Deluxe	Lab
		2.2 Use developmentally appropriate multimedia resources (e.g., interactive books, educational software, elementary multimedia encyclopedias, etc.) to support learning.	Various	Classroom
		2.3 Create simple sentences related to curriculum	Microsoft Word	
		<b>3.0 Use of Creativity Tools</b>		
		3.1 Create simple, original computer art.	KidPix	Lab
		<b>4.0 Information Technology in Life and Society</b>		
		4.1 Work cooperatively and collaboratively with peers, family members, and others when using technology in the classroom.	Various	Classroom
		4.2 Practice responsible use of technology systems and software.	None	Classroom

<b>Grade Strand</b>	<b>Standard</b>	<b>Software</b>	<b>Introduced</b>
<b>Grade One</b>			
<b>1.0 Information Technology Basics</b>			
1.1	Identify the home row keys to make keyboarding more familiar.	Type to Learn Jr.	Lab
1.2	Demonstrate file management skills of using Network server and the local hard drive, removable storage device	Windows OS	Lab
1.3	Demonstrate basic word processing skills such as creating and saving files, inserting and deleting characters and changing fonts.	MS Word	Lab
1.4	Turn on and shut down a computer properly.	Windows OS	Classroom
1.5	Demonstrate the ability to start, use and quit a variety of programs (e.g., instructional software on the hard drive or CD, tool-based software, etc.).	Various	Classroom
1.6	Demonstrate basic operating system skills such as point and Click navigation on desktop items and using the start menu.	Windows OS	
<b>2.0 Application and Integration of Technology</b>			
2.1	Use developmentally appropriate multimedia resources (e.g., interactive books, educational software, elementary multimedia encyclopedias, etc.) to support learning.	Various	Classroom
2.2	Use, to the extent possible, information technologies found outside the school to extend their learning (e.g., computer, cable TV, etc.).	Various	Classroom
2.3	Observation of information found on the Web as displayed by the teacher.	Internet Explorer	Classroom
<b>3.0 Use of Creativity Tools</b>			
3.1	Use multimedia software to create more sophisticated, original computer art.	KidPix	Lab
3.2	Use multimedia software to create poems, stories and Diagram with pictures that reinforce classroom assignments.	Kidspiration	Lab
<b>4.0 Information Technology in Life and Society</b>			
4.2	Communicate about technology using developmentally appropriate and accurate terminology.	None	Classroom
4.3	Work cooperatively and collaboratively with peers, family members, and others when using technology in the classroom.	Various	Classroom
4.4	Practice responsible use of technology systems and software.	Various	Classroom

<b>Grade</b>	<b>Strand</b>	<b>Standard</b>	<b>Software</b>	<b>Introduced</b>
	<b>Grade Two</b>			
		<b>1.0 Information Technology Basics</b>		
		1.1 Demonstrate basic skills in word processing such as aligning text, highlighting and deleting, bulleting and numbering.	Word	Lab
		1.2 Demonstrate basic operating system skills such as point-and-click navigation on desktop items and using the start menu.	Windows OS	Lab
		1.3 Identify all of the keys on the keyboard in preparation for learning keyboarding skills.	Type To Learn	Lab
		<b>2.0 Application and Integration of Technology</b>		
		2.1 Use developmentally appropriate multimedia resources (e.g., interactive books, educational software, elementary multimedia encyclopedias, etc.) to support learning.	Various	Classroom
		2.2 Create personal letters or short stories using appropriate formatting on a word processor.	Word	Lab
		2.3 Browse the Web at teacher-selected sites/bookmarks to reinforce classroom assignments.	Internet Explorer	Lab/Classroom
		<b>3.0 Use of Creativity Tools</b>		
		3.1 Use multimedia tools to create more sophisticated, original computer art.	KidPix	Lab
		3.2 Demonstrate the basic use of hypermedia (multimedia with links) to create a classroom project.	HyperStudio	Lab
		3.3 Create a graphic organizer for writing	Kidspiration	
		<b>4.0 Information Technology in Life and Society</b>		
		4.1 Understand and follow the K-4 Internet Use Guidelines.	Navigator	Lab/Classroom
		4.2 Communicate about technology using developmentally appropriate and accurate terminology.	Various	Classroom
		4.3 Work cooperatively and collaboratively with peers, family members, and others when using technology in the classroom.	Various	Classroom
		4.4 Practice responsible use of technology systems and software.	None	Lab

<b>Grade Strand</b>	<b>Standard</b>	<b>Software</b>	<b>Introduced</b>
<b>Grade Three</b>			
<b>1.0 Information Technology Basics</b>			
1.1	Demonstrate word processing skills such as the use of the spell-checker and thesaurus.	MS Word	Lab
1.2	Demonstrate intermediate operating system skills such as creating folders and moving files.	Windows OS	Lab
1.3	Use both hands for all word processing to reinforce keyboarding skills.	MS Word	Lab
1.4	Browse the Web at teacher-selected sites/bookmarks to learn new subject matter.	Internet Explorer	Lab
1.5	Demonstrate File Management Skills of copying, move Rename, reopen personal files, and back up files to File server and removable storage device.	Windows OS	
<b>2.0 Application and Integration of Technology</b>			
2.1	Use information technology as a tool and as a resource for learning and skill-building throughout the curriculum (e.g., language arts, mathematics, science, social science).	Internet Explorer	Classroom
2.2	Create and edit paragraphs and short reports, edit with the spell checker, align text, use the tab key, insert word art, insert pictures, and change fonts.	MS Word	Lab
2.3	Copy and paste text or graphics within a document.	MS Word	Lab
2.4	Use basic features of electronic mail under the direct supervision of a teacher for classroom projects.	Groupwise	Lab/Classroom
2.5	Practice evaluating the validity of information resources Found on the web	Internet Explorer	Lab
2.6	Learn the correct way to use a search engine	Internet Explorer	Lab
<b>3.0 Use of Creativity Tools</b>			
3.1	Students will be introduced to the digital camera to incorporate pictures into documents.	Various	Classroom
3.2	Create a multimedia or hypermedia (multimedia with links) project based on a curriculum focus.	Various	Lab
<b>4.0 Information Technology in Life and Society</b>			
4.1	Understand and follow the K-4 Internet Use Guidelines.	None	Lab/Classroom
4.2	Discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use.	None	Lab

<b>Grade Strand</b>	<b>Standard</b>	<b>Software</b>	<b>Introduced</b>
<b>Grade Four</b>			
<b>1.0 Information Technology Basics</b>			
1.1	Copy and paste text or pictures between 2 different programs, (e.g., Word and PowerPoint, etc.).	Word	Lab
1.2	Accurately touch type at least 15 words per minute accurately As measured by a school-approved keyboarding program.	Type To Learn	Lab
1.3	Demonstrate file management skills of copy, move, rename, reopen personal files, back up files to a network server and Removable storage device	Windows OS	Lab
1.4	Provide credit for the use of pictures and information from copyrighted sources where appropriate.	Various	Lab
1.5	Create a graph of Science or Social Science data		
<b>2.0 Application and Integration of Technology</b>			
2.1	Use information technology as a tool and as a resource for learning and skill-building throughout the curriculum (e.g., language arts, mathematics, science, social science).	Various	Classroom
2.2	Use the school library on-line catalogs to find resources.	Various	Library
2.3	Demonstrate basic search strategies using Internet search engines.	Internet Explorer	Lab/Library
2.4	Use e-mail to communicate with other students and experts on classroom projects under a teacher's supervision.	Groupwise	Lab
2.5	Demonstrate intermediate word processing skills in the context of writing stories and essays for classroom assignments using proper elements of style for electronic documents.	Word	Lab
2.6	Practice evaluating the validity of information resources found on the Web.	Internet Explorer	Lab/Classroom
2.7	Practice using the correct way to a search engine properly	Internet Explorer	Lab/Classroom
<b>3.0 Use of Creativity Tools</b>			
3.1	Create at least one classroom report or project using multimedia (e.g., text and graphics in a Word document, etc.).	MSWord/MS Paint KidPix Deluxe/Inspiration	Lab
3.2	Create at least one classroom report or project using hypermedia (e.g., text, graphics and links with HyperStudio, etc.).	HyperStudio Powerpoint	Lab
3.3	Work cooperatively with two or more students on group projects utilizing technology.	Various	Classroom
3.4	Demonstrate advanced features of Powerpoint in classroom Presentation to include graphics, animation, transitions, and sound	Powerpoint	Classroom



**4.0 Information Technology in Life and Society**

- |     |  |      |             |
|-----|--|------|-------------|
| 4.1 | Understand and follow the K-4 Internet Use Guidelines.   | None | Lab/Library |
| 4.2 | Discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use. | None | Lab         |

<b>Grade</b>	<b>Strand</b>	<b>Standard</b>	<b>Software</b>	<b>Introduced</b>
<b>Grade Five</b>				
<b>1.0 Information Technology Basics</b>				
1.1		Demonstrate intermediate word processing skills in writing reports for classroom assignments (e.g., bibliographies, page set up, margins, paragraphs, etc.).	Word	Lab
1.2		Demonstrate the ability to find topical information on the Internet and incorporate it into research projects.	Internet Explorer	Lab/Library
1.3		Demonstrate intermediate skills in the use of an Internet browser to bookmark pages, store html files and related graphics, go between multiple Navigator windows, etc.	Internet Explorer	Lab
1.4		Demonstrate a variety of strategies for using Internet search engines to find information.	Internet Explorer	Lab/Library
1.5		Create spreadsheets that utilize multiple fields of Numeric and text data and perform basic operations, Use Formulas and create graphs	MS Excel	Lab
<b>2.0 Application and Integration of Technology</b>				
2.1		Use information technology as a tool and as a resource for learning and skill-building throughout the curriculum (e.g., language arts, mathematics, science, social science).	Various	Classroom
2.2		Create reports that incorporate graphics from various resources (e.g., Internet, CD-ROMs, digital cameras, etc.).	Various	Lab
2.3		Use technology resources (e.g., calculators, data collection probes, videos, educational software) for problem-solving, self-directed learning, and extended learning activities.	Various	Classroom
2.4		Determine when technology is useful and select the appropriate tool(s) and technology resources to address a variety of tasks and problems.	Various	Classroom
2.5		Evaluate the accuracy, relevance, appropriateness, comprehensiveness and bias of electronic information sources.	Various	Classroom
<b>3.0 Use of Creativity Tools</b>				
3.1		Create at least one classroom report or project using multimedia (e.g., text and graphics in a Word document, etc.	Word	Lab
3.2		Create at least one classroom report or project using hypermedia (e.g., text, graphics and links with PowerPoint, etc.	PowerPoint	Lab
3.3		Demonstrate advanced features of PowerPoint in classroom Presentations to include graphics, animations, transitions, And sound	PowerPoint	Lab
<b>4.0 Information Technology in Life and Society</b>				
4.1		Understand and follow the 7-12 Technology Use Agreement.	None	Classroom
4.2		Discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use	None	Lab
4.3		Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide.	None	Lab

<b>Grade Strand</b>	<b>Standard</b>	<b>Software</b>	<b>Introduced</b>
<b>Grade Six</b>			
<b>1.0 Information Technology Basics</b>			
1.1	Create a flat-file database to store, sort and filter text information.	Excel	Lab
1.2	Create spreadsheets that utilize multiple fields of numeric and text data and perform basic operations, formulas and graphs.	Excel	Lab
<b>2.0 Application and Integration of Technology</b>			
2.1	Use information technology as a tool and as a resource for learning and skill-building throughout the curriculum (e.g., language arts, mathematics, science, social science).	Various	Classroom
2.2	Application of advanced electronic research skills	Various	Lab/Library
2.3	Demonstrate the application of spreadsheets to solve mathematics, social science or science problems.	Excel	Lab
2.4	Use content-specific tools, software and simulations (e.g., environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research.	Various	Classroom
2.5	Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum.	Various	Classroom
<b>3.0 Use of Creativity Tools</b>			
3.1	Demonstrate advanced features of PowerPoint in classroom presentations to include graphics, animations, transitions and sounds.	PowerPoint	Lab
3.2	Design, develop, publish, and present products (e.g., Web pages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.	Various	Classroom
<b>4.0 Information Technology in Life and Society</b>			
4.1	Understand and follow the 5-12 Internet Use Guidelines.	None	Classroom
4.2	Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.	Various	Lab/Library
4.3	Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse.	Various	Lab

<b>Grade Strand</b>	<b>Standard</b>	<b>Software</b>	<b>Introduced</b>
<b>Grades Seven and Eight</b>			
<b>1.0 Information Technology Basics</b>			
1.1	Identify internal hardware parts of a computer system (e.g., main memory, auxiliary memory, CPU, hard drive, cards, chips, removable storage devices etc.).	None	Lab
1.2	Demonstrate an understanding of concepts underlying hardware, software, networks and practical applications to learning and problem solving.	None	Lab
1.3	Touch type at least 30 words per minute without looking at the keyboard with at least 90% accuracy.	MicroType	Lab
1.5	Use basic information technology terms appropriately, such as multimedia, hypertext, CD-ROM, the Web, etc.	None	Lab
1.6	Demonstrate an acceptable level of word processing competency with classroom assignments (e.g., use of tabs, spell-check, outlines, importing clipart, formatting text and pages, etc.).	Word	Lab/Classroom
1.7	Demonstrate an acceptable level of spreadsheet competency with classroom assignments (e.g., creating graphs, using simple mathematical formulas, etc.).	Excel	Lab/Classroom
1.8	Demonstrate an acceptable level of flat-file database competency with classroom assignments (e.g., formatting, sorting, searching, reporting, using terminology correctly, etc.).	Excel	Lab/Classroom
<b>2.0 Application and Integration of Technology</b>			
2.01	Evaluate, select and use various media for classroom presentations based on their relevance and effectiveness.	Various	Classroom
2.02	Articulate the differences between print-based and on-line information resources and describe the advantages and disadvantages of each medium.	None	Lab/Classroom
2.03	Make decisions about information they find from a variety of information sources and determine which information is most appropriate for their work.	Various	Lab/Classroom
2.04	Use e-mail and on-line information services for school related projects.	Various	Lab/Classroom
2.05	Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems.	Various	Classroom
2.06	Use spreadsheet programs to create and select the graph which best represents data they need to analyze and complete assigned projects.	Excel	Classroom
2.07	Research the use of information technology in a variety of occupational settings (e.g., space program, publishing, entertainment, etc.).	Various	Classroom

2.08	Use content-specific tools, software and simulations (e.g., environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research.	Various	Classroom
2.09	Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum.	Various	Classroom
2.10	Design, develop, publish, and present products (e.g., Web pages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.	Various	Lab/Classroom
2.11	Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and information, and to develop solutions or products for audiences inside and outside the classroom.	Various	Lab/Classroom
2.12	Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.	Various	Library
2.13	Make extensive use of instructional software to support and extend their learning.	Various	Classroom
<b>3.0 Use of Creativity Tools</b>			
3.1	Use creativity and authoring tools to develop more complex reports, presentation and projects in a variety of subject areas (e.g., Hyper Studio, Home Page development, etc.).	PowerPoint	Lab/Classroom
3.2	Use software programs designed to foster creativity in designing and completing projects.	Various	Home/Classroom
3.3	Devise innovative ways of using available information technology resources.	Various	Home/Classroom
<b>4.0 Information Technology in Life and Society</b>			
4.1	Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse.	Various	Lab/Classroom
4.2	Discuss current news and events in the world of information technology.	None	Lab/Classroom
4.3	Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society.	None	Classroom
4.4	Demonstrate an understanding of how technology affects different communities and societal groups differently depending on their extent of access to technological resources.	None	Classroom
4.5	Explain how technology can be helpful or destructive depending on how it is used.	None	Classroom
4.6	Explain why technology may produce unplanned or unanticipated results.	None	Lab/Classroom
4.7	Understand and follow the 7-12 Technology Use Agreement.	None	Classroom

<b>Grade Strand</b>	<b>Standard</b>	<b>Software</b>	<b>Introduced</b>
<b>Grades Nine through Twelve</b>			
<b>1.0 Information Technology Basics</b>			
1.1	Develop expertise in selected groups of useful software.	Various	Classroom
1.2	Use teacher-managed e-mail accounts to support learning (e.g., contacting experts, collaborating, posting messages to lists, etc.).	Various	Lab/Classroom
1.3	Use on-line information sources to support research and learning.	Various	Library
1.4	Properly cite references from on-line sources.	Word	Lab/Classroom
1.5	Download images and software and import them to other applications.	Internet Explorer	Lab
<b>2.0 Application and Integration of Technology</b>			
2.01	Use information technology as a tool and resource for learning and skill-building across the curriculum.	Various	Classroom
2.02	Select and apply technology tools for research, information analysis, problem-solving, and decision-making in content learning.	Various	Classroom
2.03	Evaluate information gathered from technology resources for its reliability and validity.	Various	Library
2.04	Apply information technology resources to address life skill issues (e.g., managing finances, seeking employment, selecting colleges, etc.).	Various	Classroom
2.05	Analyze and describe how the selection and presentation of information in different media formats affects peoples' perception of the information.	Various	Classroom
2.06	Work in teams using technology tools and resources to create products larger and more complex than one student could accomplish alone.	Various	Classroom/Lab
2.07	Create and maintain a digital portfolio of academic achievements and career interests.	Various	Lab/elective
2.08	Experience the opportunity to become proficient in one or more programming languages.	C++	Lab / elective
2.09	Use equipment and software for advanced study in technology-related fields.	Various	Elective
2.10	Evaluate technology-based options, including distance and distributed education, for lifelong learning.	Various	Classroom
2.11	Routinely and efficiently use online information resources to meet needs for collaboration, research, publications, communications, and productivity.	Various	Library

**3.0 Use of Creativity Tools**

3.1	Design creative, effective presentations for the purposes of information dissemination, persuasion, entertainment and education.	PowerPoint	Classroom / lab
3.2	Select and integrate written, audio, and video elements to convey a unified message.	PowerPoint	Lab/Classroom
3.3	Demonstrate effective applications of advanced multimedia (video editing, desktop publishing, authoring tools, etc.).	Various	Elective
3.4	Discover and describe new applications for technology tools beyond their original purpose.	Various	Home/Classroom
3.5	Demonstrate self-directed applications of creativity tools.	Various	Home/Classroom
3.6	Use creativity tools to produce musical compositions, animations, 3-D renderings, etc.	Various	Elective
3.7	Use computer systems with specialized interfaces or components (e.g., video input/output card, digital camera connection, microphone, etc.).	Various	Elective

**4.0 Information Technology in Life and Society**

4.1	Demonstrate an understanding and application of legal and ethical issues related to information technology use.	None	Lab/Classroom
4.2	Analyze advantages and disadvantages of widespread use and reliance on technology in the workplace and in society as a whole.	Internet Explorer	Classroom
4.3	Analyze the actual and potential effects of information technology for the country and world (e.g., productivity, privacy, security, information overload, automation, etc.).	None	Lab/Classroom
4.4	Formulate reasoned predictions of the future directions of information technology and how these changes may affect society.	None	Classroom
4.5	Describe the factors that serve to foster or block the adoption of technology by nations and groups.	None	Classroom
4.6	Understand and follow the 5-12 Internet Use Guidelines.	Internet Explorer	Classroom

**APPENDIX B**  
**Accountability Model – Multiple Measures**  
**Grade Level Standards for 2003-2004 school year**

updated 11/1/2004

Grade - Kinder	Content Area	Measure	Weight	Does Not Meet	Meets	Exceeds
K	Language Arts	DWA - District Writing Assessment	100	1-2	3-4	5-6
K	Math	No Math Assessment	xx	xx	xx	xx

Grade - Primary	Content Area	Measure	Weight	Does Not Meet	Meets	Exceeds
1	Language Arts	DWA - District Writing Asmnt	50	1-2	3-4	5-6
1	Language Arts	DRA - District Reading Assessment (CRI)	50	1	2	3
2	Language Arts	DWA - District Writing Asmnt	20	1-2	3-4	5-6
2	Language Arts	DRA - District Reading Assessment (CRI)	20	1	2	3
2	Language Arts	CAT6 Total Reading	12.5	1-49	50-69	70-99
2	Language Arts	CAT6 Total Language	12.5	1-49	50-69	70-99
2	Language Arts	CST English Language Arts (Performance Level)	35	1-3	4	5
3-6	Language Arts	DWA - District Writing Asmnt	25	1-2	3-4	5-6
3-6	Language Arts	CAT6 Total Reading	17.5	1-49	50-69	70-99
3-6	Language Arts	CAT6 Total Language	17.5	1-49	50-69	70-99
3-6	Language Arts	CST English Language Arts	40	1-3	4	5
1-6	Mathematics	District Assessment in Math (DAM)	40	0-69	70-89	90-100
1-6	Mathematics	CAT6 Math	20	1-49	50-69	70-99
1-6	Mathematics	CST Total Math (Performance Level)	40	1-3	4	5

Grade - Secondary	Content Area	Measure	Weight	Does Not Meet	Meets	Exceeds
7-12	Language Arts	English 2nd Semester Grade	50	F or D	B or C	A
7-12	Language Arts	CAT6 (Percentile Rank)	25	1-49	50-69	70-99
7-12	Language Arts	CST (Performance Level)	25	1-3	4	5
7-12	Mathematics	UCLA percentage	50	0-69	70-89	90-100
7-12	Mathematics	CST (Math, Algebra, Geometry, etc.) PerfLvl	50	1-3	4	5



### Appendix C

#### Criteria for EETT-Funded Education Technology Plans

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

- *For corresponding EETT Requirements, see Appendix F.*
- *If the technology plan is revised, insert the Education Technology Plan Benchmark Review Form (Appendix I) at the beginning of the technology plan.*
- *Include this form (Appendix C) with “Page in District Plan” completed at the end of your technology plan.*

1. PLAN DURATION CRITERION	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
<b>a. The plan should guide the district’s use of education technology for the next three to five years.</b>	3	The education technology plan describes the districts use of education technology for the next three to five years.	The plan is less than three years or more than five years in length.
2. STAKEHOLDERS CRITERION Corresponding EETT Requirement(s): 7 & 11 (Appendix F)	Page in District Plan	Example of Adequately Addressed	Not Adequately Addressed
<b>a. Description of how a variety of stakeholders from within the school district and the community-at-large participated in the planning process.</b>	4	The planning team consisted of representatives who will implement the plan. If a variety of stakeholders did not assist with the development of the plan, a description of why they were not involved is included.	Little evidence is included that shows that the district actively sought participation from a variety of stakeholders.

<b>3. CURRICULUM COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 1, 2, 3, 8, 10, & 12 (Appendix F)	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
a. Description of teachers' and students' current access to technology tools both during the school day and outside of school hours.	<b>5</b>	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.	<b>7</b>	The plan describes the typical frequency and type of use (technology skills/information literacy/integrated into the curriculum).	The plan cites district policy regarding use of technology, but provides no information about its actual use.
c. Summary of the district's curricular goals and academic content standards in various district and site comprehensive planning documents.	<b>10</b>	The plan references other district documents that guide the curriculum and/or establish goals and standards.	The plan does not reference district curriculum goals.
d. List of clear goals and a specific implementation plan for using technology to improve teaching and learning by supporting the district curricular goals and academic content standards.	<b>12</b>	The plan delineates clear, specific, and realistic goals and target groups for using technology to support the district's curriculum goals and academic content standards to improve learning. The implementation plan clearly supports accomplishing the goals.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
e. List of clear goals and a specific implementation plan detailing how and when students will acquire technology and information literacy skills needed to succeed in the classroom and the workplace.	<b>14</b>	For the focus areas, the plan delineates clear, specific and realistic goals for using technology to help students acquire technology and information literacy skills. The implementation plan clearly supports accomplishing the goals.	The plan suggests how technology will be used, but is not specific enough to determine what action needs to be taken to accomplish the goals.
f. List of clear goals and a specific implementation plan for programs and methods of utilizing technology that ensure appropriate access to all students.	<b>16</b>	For the focus areas, the plan delineates clear, specific and realistic goals for using technology to support the progress of all students. The implementation plan clearly supports accomplishing the	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.

		goals.	
g. List of clear goals and a specific implementation plan to utilize technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs.	<b>18</b>	The plan delineates clear, specific and realistic goals for using technology to support the district's student record-keeping and assessment efforts. The implementation plan clearly supports accomplishing the goals.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
h. List of clear goals and a specific implementation plan to utilize technology to make teachers and administrators more accessible to parents.	<b>19</b>	The plan delineates clear, specific and realistic goals for using technology to facilitate improved two-way communication between home and school. The implementation plan clearly supports accomplishing the goals.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
i. List of benchmarks and a timeline for implementing planned strategies and activities.	<b>20</b>	The benchmarks and timeline are specific and realistic. Teachers, administrators and students implementing the plan can easily discern what steps will be taken, by whom, and when.	The benchmarks and timeline are either absent or so vague that it would be difficult to determine what should occur at any particular time.
j. Description of the process that will be used to monitor whether the strategies and methodologies utilizing technology are being implemented according to the benchmarks and timeline.	<b>29</b>	The monitoring process is described in sufficient detail so that who is responsible, and what is expected is clear.	The monitoring process is either absent, or lacks detail regarding who is responsible and what is expected.

<p><b>4. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 5 &amp; 12 (Appendix F)</p>	<p><b>Page in District Plan</b></p>	<p><b>Example of Adequately Addressed</b></p>	<p><b>Example of Not Adequately Addressed</b></p>
<p>a. Summary of the teachers' and administrators' current technology skills and needs for professional development.</p>	<p>45</p>	<p>The plan provides a clear summary of the teachers' and administrators' current technology skills and needs for professional development. The findings are summarized in the plan by discrete skills to facilitate providing professional development that meets the identified needs and plan goals.</p>	<p>Description of current level of staff expertise is too general or relates only to a limited segment of the district's teachers and administrators in the focus areas or does not relate to the focus areas, i.e., only the fourth grade teachers when grades four to eight are the focus grade levels.</p>
<p>b. List of clear goals and a specific implementation plan for providing professional development opportunities based on the needs assessment and the Curriculum Component goals, benchmarks, and timeline.</p>	<p>47</p>	<p>The plan delineates clear, specific and realistic goals for providing teachers and administrators with sustained, ongoing professional development necessary to implement the Curriculum Component of the plan. The implementation plan clearly supports accomplishing the goals.</p>	<p>The plan speaks only generally of professional development and is not specific enough to ensure that teachers and administrators will have the necessary training to implement the Curriculum Component.</p>
<p>c. List of benchmarks and a timeline for implementing planned strategies and activities.</p>	<p><b>49</b></p>	<p>The benchmarks and timeline are specific and realistic. Teachers and administrators implementing the plan can easily discern what steps will be taken, by whom, and when.</p>	<p>The benchmarks and timeline are either absent or so vague that it would be difficult to determine what steps will be taken, by whom, and when.</p>
<p>d. Description of the process that will be used to monitor whether the professional development goals are being met and whether the planned professional development activities are being implemented in accordance with the benchmarks and timeline.</p>	<p>51</p>	<p>The monitoring process is described in sufficient detail so that who is responsible and what is expected is clear.</p>	<p>The monitoring process is either absent, or lacks detail regarding who is responsible and what is expected.</p>

<b>5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT CRITERIA</b>	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
<p>a. Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed by the district’s teachers, students, and administrators to support the activities in the Curriculum and Professional Development Components of the plan.</p>	<p>56</p>	<p>The plan clearly summarizes the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support proposed to support the implementation of the district’s Curriculum and Professional Development Components. The plan also includes the list of items to be acquired, which may be included as an appendix.</p>	<p>The plan includes a description or list of hardware, infrastructure and other technology necessary to implement the plan, but there doesn’t seem to be any real relationship between the activities in the Curriculum and Professional Development Components and the listed equipment. Future technical support needs have not been addressed or do not relate to the needs of the Curriculum and Professional Development Components.</p>
<p>b. Describe the existing hardware, Internet access, electronic learning resources, and technical support already in the district that could be used to support the Curriculum and Professional Development Components of the plan.</p>		<p>The plan clearly summarizes the existing technology hardware, electronic learning resources, networking and telecommunication infrastructure, and technical support to support the implementation of the Curriculum and Professional Development Components. The current level of technical support is clearly explained.</p>	<p>The inventory of equipment is so general that it is difficult to determine what must be acquired to implement the Curriculum and Professional Development Components. The summary of current technical support is missing or lacks sufficient detail.</p>
<p>c. List of clear benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components.</p>		<p>The benchmarks and timeline are specific and realistic. Teachers and administrators implementing the plan can easily discern what needs to be acquired or repurposed, by whom, and when.</p>	<p>The benchmarks and timeline are either absent or so vague that it would be difficult to determine what needs to be acquired or repurposed, by whom, and when.</p>
<p>d. Description of the process that will be used to monitor whether the goals and benchmarks are being reached within the specified time frame.</p>		<p>The monitoring process is described in sufficient detail so that who is responsible and what is expected is clear.</p>	<p>The monitoring process is either absent, or lacks detail regarding who is responsible and what is expected.</p>

<b>6. FUNDING AND BUDGET COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 7 & 13, (Appendix F)	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
a. List of established and potential funding sources and cost savings, present and future.	66	The plan clearly describes resources* that are available or could be obtained to implement the plan. The process for identifying future funding sources is described.	Resources to implement the plan are not identified or are so general as to be useless.
b. Estimate implementation costs for the term of the plan (three to five years).	67	Cost estimates are reasonable and address the total cost of ownership.	Cost estimates are unrealistic, lacking, or are not sufficiently detailed to determine if the total cost of ownership is addressed.
c. Description of the level of ongoing technical support the district will provide.	69	The plan describes the level of technical support that will be provided for implementation given current resources and describes goals for additional technical support should new resources become available. The level of technical support is based on some logical unit of measure.	The description of the ongoing level of technical support is either vague or not included, is so inadequate that successful implementation of the plan is unlikely, or is so unrealistic as to raise questions of the viability of sustaining that level of support.
d. Description of the district’s replacement policy for obsolete equipment.	70	Plan recognizes that equipment will need to be replaced and outlines a realistic replacement plan that will support the Curriculum and Professional Development Components.	Replacement policy is either missing or vague. It is not clear that the replacement policy could be implemented.
e. Description of the feedback loop used to monitor progress and update funding and budget decisions.	70	The monitoring process is described in sufficient detail so that who is responsible, and what is expected is clear.	The monitoring process is either absent, or lacks detail regarding who is responsible and what is expected.
* In this document, the term “resources” means funding, in-kind services, donations, or other items of value.			

<b>7. MONITORING AND EVALUATION COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 11 (Appendix F)	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
a. Description of how technology’s impact on student learning and attainment of the district’s curricular goals, as well as classroom and school management, will be evaluated.	71	The plan describes the process for evaluation utilizing the goals and benchmarks of each component as the indicators of success.	No provision for an evaluation is included in the plan. How success is determined is not defined. The evaluation is defined, but the process to conduct the evaluation is missing.
b. Schedule for evaluating the effect of plan implementation.	73	Evaluation timeline is specific and realistic.	The evaluation timeline is not included or indicates an expectation of unrealistic results that does not support the continued implementation of the plan.
c. Description of how the information obtained through the monitoring and evaluation will be used.	75	The plan describes a process to report the monitoring and evaluation results to persons responsible for implementing and modifying the plan, as well as to the plan stakeholders.	The plan does not provide a process for using the monitoring and evaluation results to improve the plan and/or disseminate the findings.

<p><b>8. EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS TO MAXIMIZE THE USE OF TECHNOLOGY CRITERION</b>                      Corresponding EETT Requirement(s): 11 (Appendix F)</p>	<p><b>Page in District Plan</b></p>	<p><b>Example of Adequately Addressed</b></p>	<p><b>Example of Not Adequately Addressed</b></p>
<p>a. If the district has identified adult literacy providers, there is a description of how the program will be developed in collaboration with those providers.</p>	<p>76</p>	<p>The plan explains how the program will be developed in collaboration with adult literacy providers. Planning included or will include consideration of collaborative strategies and other funding resources to maximize the use of technology. If no adult literacy providers are indicated, the plan describes the process used to identify adult literacy providers.</p>	<p>There is no evidence that the plan has been, or will be developed in collaboration with adult literacy service providers, to maximize the use of technology.</p>



<p><b>9. EFFECTIVE, RESEARCHED-BASED METHODS, STRATEGIES, AND CRITERIA</b> Corresponding EETT Requirement(s): 4 &amp; 9 (Appendix F)</p>	<p><b>Page in District Plan</b></p>	<p><b>Example of Adequately Addressed</b></p>	<p><b>Not Adequately Addressed</b></p>
<p>a. Description of how education technology strategies and proven methods for student learning, teaching, and technology management are based on relevant research and effective practices.</p>	<p>77</p>	<p>The plan describes the relevant research behind the plan’s design for strategies and/or methods selected.</p>	<p>The description of the research behind the plan’s design for strategies and/or methods selected is unclear or missing.</p>
<p>b. Description of thorough and thoughtful examination of externally or locally developed education technology models and strategies.</p>	<p>80</p>	<p>The plan describes references to research literature that supports why or how the model improves student achievement.</p>	<p>No research is cited.</p>
<p>c. Description of development and utilization of innovative strategies for using technology to deliver rigorous academic courses and curricula, including distance-learning technologies (particularly in areas that would not otherwise have access to such courses or curricula due to geographical distances or insufficient resources).</p>	<p>81</p>	<p>The plan describes the process for development and utilization of strategies to use technology to deliver specialized or rigorous academic courses and curricula, including distance learning.</p>	<p>There is no plan to utilize technology to extend or supplement the district’s curriculum offerings</p>

Education Technology Plan Review System

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