



**Western Placer  
Unified School District**

*"a district on the move"*

**District Technology Plan  
July 1, 2009 – June 30, 2012  
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## **Plan Duration**

**July 1, 2009 – June 30, 2012**

### **1. Stakeholders:**

The main authors of this plan were the Site Technology Trainers (SST), Director of Technology, and the Assistant Superintendent for Educational Services. Through this process, the school sites, district office, and technology technicians were represented. There should be ample opportunity for site administrators, teachers, students, parents, community non-profits and businesses to get involved with the future implementation of this plan. The stakeholders of this plan include the WPUSD board, its Administration, its employees, the parents, and its students. The plan is designed to be dynamic so that as needs arise we will be flexible and able to incorporate any necessary changes.

### **Technology Planning Committee**

Mary Boyle	Assistant Superintendent of Education
Carrie Carlson	Director of Business Services
Chuck Youtsey	Director of Technology
Eli Turner	Network Administrator
Joe Ross	Data Specialist
Gordon West	Technology Support Technician
Ed Newberry	Site Technology Trainer
Bill Justice	Site Technology Trainer
Jason Noonan	Site Technology Trainer
David Swanson	Site Technology Trainer
Gregg Law	Site Technology Trainer
Kris Knutson	Site Technology Trainer
David Lightfoot	Site Technology Trainer
Will Middleton	Site Technology Trainer
Rose Crowther	Site Technology Trainer
Krystal Arnold	Site Technology Trainer

### **Western Placer Unified School District Technology Plan**

In order to be successful in a changing world, students will learn to use technology to explore and create. They will use all available technology-based resources to enhance learning activities in the curricular areas. Provisions will be made for multiple modes of learning and teaching styles supported by the use of technology. Classrooms, labs and libraries will be resources for learning, containing traditional resources along with various forms of media and technology whose purpose will be for students and staff to be able to acquire and share information and gain confidence in their abilities. Classrooms will be settings in which students are able to seek creative solutions and collaborate to achieve goals. Teachers and students will have access to on-going training in a variety of technologies and will be able to adapt to changing conditions as they present themselves. Through the use of telecommunications technology, the schools will implement processes and projects, which access and use educational, local, and world community resources. Goals will be established that support the district in meeting state

guidelines (California K-12 Education Technology plan) and ISTE standards for administration, teachers, and students.

### **Expected student outcomes in 3 years as a result of technology use:**

Students will be able to:

- Apply technology skills to classroom projects and products in all areas of the curriculum.
- Demonstrate understanding in curriculum standards–related technology and information literacy skills as required by the state guidelines and ISTE standards.
- Demonstrate research skills, relevant to curriculum activities, in the area of electronic information and library print resources.
- Improved academic skills through use of core curriculum-specific, support software.
- Possess functional computer skills transferable to the work environment.

### **Expected staff outcomes in 3 years as a result of technology use:**

- Teachers will improve technology skills to support their academic framework and instructional requirements, classroom management, data analysis, and personal growth as required by state guidelines and ISTE teacher standards.
- Teachers and administrators will use technology to develop information retrieval, research, evaluation, critical thinking, and presentation skills (information literacy).
- Administration will use technology to improve communications, data analysis, management, and leadership roles as required by ISTE administrator standards.
- Classified staff will use technology for communications, management, documentation, and data collection/analysis.

## **Western Placer Unified School District Technology Plan**

District documents used in creating this Plan included:

- District Pacing Guides for Language Arts
- Digital High School Plans
- District *Scope and Sequence of Technology Skills*
- District *Goals and Priorities*
- District *Internet Acceptable Use Policy*

Other resources used in creating this Plan included:

- California curriculum standards
- Education Technology Planning, A Guide to School Districts* (CDE publication)
- CTAP2 Teacher Technology Proficiency Survey (online)
- School Technology Survey (online)
- Teacher Technology Proficiencies (CDE)
- California K-12 Education Technology plan (online)* (referred to in this document as the state's guideline)
- ISTE standards for students, teachers, and administrators (online)*

### **3. Curriculum Component**

#### **3.a. Teacher and Student Access to Technology Tools**

##### **District-wide**

Every District classroom has at least one computer for continuous teacher and student access. That computer is connected to the Internet. Elementary sites and middle school sites have after-school programs in which all students – including special education, GATE, and English Language Learners – have access to computers. Elementary and middle school students have access to the computers which are dedicated to the library functions of catalog, circulation, and research. All the high school sites provide computer access, to all interested students, between classes and after school, in classrooms, labs and/or libraries.

All administrators and teachers have District-provided email accounts. The District website provides teachers with twenty-four hour resources, such as: events, web links, professional development listings, curriculum standards, forms, and general site information. Much of the site based technology training and support for teachers is done by Site Technology Trainers and the District Office using classroom or computer labs before school, during preparation periods, and after school. Site Technology Trainers without access to computer labs for faculty technology training may reserve feeder-school labs. Additional training, open to all district personnel, is conducted after school in a variety of locations by various specialists and teachers. IT personnel, and outside vendors. Information about this training is available to all personnel on the District's online Staff Development Area.

##### **Elementary Schools**

Most elementary school classrooms have one or two computers that are 3yrs or less in age and have internet access, with grades four and five striving to attain a 10:1 student to computer ratio. Elementary student use of computers is the most limited in the district, due to high student to computer ratios. Five out of six of our elementary sites have an up-to-date computer lab. The other site incorporates 5 computers in each classroom. Elementary students use technology for at least one of the following:

- Keyboard skills
- Accelerated Reader*
- Word processed or computer-drawing products
- Multimedia presentations
- Simulations
- Skill reinforcement programs

##### **Middle Schools**

Our middle school classrooms average 2 or 3 computers per classroom, with core curriculum classrooms striving to attain a 10:1 student to computer ratio. The site has 2 computer labs, which are connected to the Internet, as well as, library-system computers in the library. Middle school students use technology for at least one of the following:

- Computer applications, such as word processing, database, spreadsheet
- Keyboard skills
- Multimedia presentations
- Accelerated Math*

### High Schools

Our high schools benefited from the Digital High School (DHS) and AB2882 funds in providing a 5:1 student to computer ratio distributed throughout every campus, distributed in classrooms, labs, and libraries. Students and teachers have school-wide access to their files. One high school has purchased laptops for all teachers. High school sites are complying with their DHS Plans to provide access, technology integration, support, and training to all teachers and students.

### 3. b. Current Teacher Use of Technology

Based on results of a District survey – teachers in roughly 40% of elementary classrooms and 40% of middle school classrooms regularly employ computer-based technology. Those teachers use technology for at least one of the following:

- Computer-assisted data collection and analysis
- Making teacher-prepared materials with word processing or desktop publishing software
- Developing multimedia presentations for instruction
- Finding, evaluating and using Internet resources
- Implementing student projects requiring use of Internet and/or computer applications
- Implementing collaborative student email or web-based projects
- Using curriculum-specific software for student review and practice
- Exchanging email district-wide with other teachers and with administrators
- Teaching computer skills to their students

### 3.c. Summary of the district’s curricular goals and academic content standards in various district and site comprehensive planning documents.

Student expectations are included in Board adopted content standards written for each of the five core subject areas by grade level. Based on local and statewide assessments, instructional needs are adjusted on an ongoing basis. The high school WASC report and each school’s Single Plan for Student Achievement outline specific curriculum goals to enhance student achievement. Each school is also included in the Coordinated Compliance Review process every four years in the district. The district technology plan supports goals that have been self-identified by the individual school sites. Some general areas of strengths and weaknesses are identified and summarized below.

<b>Document/Assessments</b>	<b>Student Focus</b>	<b>Subj. Area Strength</b>	<b>Area Focus</b>
<i>California High School Exit Exam (HSEE)</i>	<i>Grades 10-12</i>	<i>Language Arts</i>	<i>Math</i>
<i>Single Plans for Student Achievement</i>	<i>Grades K-12</i>	<i>Many</i>	<i>Reading/Math</i>
<i>WASC – Lincoln High School</i>	<i>Grades 9-12</i>	<i>Many</i>	<i>Reading</i>
<i>WASC – Phoenix High</i>	<i>Grades 10-12</i>	<i>Many</i>	<i>Add</i>
<i>Coordinated Compliance Review</i>	<i>Grades K-12</i>	<i>Compliant Program</i>	<i>Single Student Plan</i>
<i>Physical Education</i>	<i>Grades 5/7/9</i>	<i>7<sup>th</sup> and 9<sup>th</sup> grade</i>	<i>Elementary</i>

<i>STAR Assessments</i>	<i>Grades 2-11</i>	<i>District Growth</i>	<i>Special Education and English Learners</i>
<i>API</i>	<i>Grades 2-11</i>	<i>District Growth</i>	<i>Special Education and English Learners</i>

The adoptions of new materials are key maintaining standards-based instruction and alignment with Board adopted expectations. The following outlines the schedule for changes and adoptions in curriculum in grades K-12:

- 2005-06 - Health
- 2006-07 - History/Social Science
- 2007-08 - Science/Visual and Performing Arts
- 2008-09 - Math

### **3.d. Action Plan for Technology Integration into the curriculum**

#### **Goal statement(s) for curriculum integration of technology to improve teaching and learning.**

The District will advance curriculum integration objectives by supporting the teaching and learning the technology skills embedded in the California Curriculum Standards for Language Arts, Social Science, Science, Visual and Performing Arts, and Math. We will revise our present grade-by-grade **Scope and Sequence of Technology Skills** as needed by incorporating those specific technology skills identified within the Language Arts, Social Science, Science, Visual and Performing Arts, and Math standards and will train K-12 grade teachers in those technology skills with an emphasis on information literacy. The list of information literacy skills tied to standards in the CDE *Education Technology Planning Guide* will be a referenced for these activities.

#### **Curriculum Integration - Lesson Components**

**Goal 1 of 2:** Teachers will integrate technology into the curriculum as integral components of lessons to increase student achievement. Technology and information literacy skills found in the Language Arts standards will be the primary focus, with secondary emphasis on Math, Social Science, Visual and Performing Arts, and Science.

**Objective 1.1** By June of 2012, 85% of K-12<sup>th</sup> grade teachers will regularly integrate technology into the curriculum as integral components of lessons, measured by annual District surveys and principals' observations, in at least one of the following ways:

- Making and using teacher-prepared materials from word processing or desktop publishing software
- Developing multimedia presentations for instruction
- Finding, evaluating and using Internet resources
- Implementing student projects requiring use of Internet and/or computer applications
- Implementing collaborative student email or web-based projects

#### **Benchmarks for curriculum integration**

**1.1a** By June of 2010, 75% of K-12<sup>th</sup> grade teachers will integrate technology into the curriculum as integral components of lessons.

**1.1b** By June of 2011, 80% of K-12<sup>th</sup> grade teachers will integrate technology into the curriculum as integral components of lessons.

**1.1c** By June of 2012, 85% of K-12<sup>th</sup> grade teachers will integrate technology into the curriculum as integral components of lessons

### **Curriculum Integration - Core Skills for Teachers**

**Goal 2 of 2:** Identify core technology skills for teachers to support technology integration in teaching and learning. Those skills will primarily be identified in the revised District *Scope and Sequence of Technology Skills*, as well as in the middle and high school technology course descriptions.

**Objective 1.2** By June of 2012, the District *Scope and Sequence of Technology Skills* will be revised to reflect technology skills from the K-12<sup>th</sup> grade Language Arts, Math, Social Science, Visual and Performing Arts, and Science standards, with a major focus on information literacy skills at every grade level as monitored and confirmed by the Assistant Superintendent of Curriculum.

### **Benchmarks for curriculum integration**

**1.2a** By June of 2010, the *Scope and Sequence of Technology Skills* will be revised to reflect technology and information literacy skills from the K-12 Language Arts standards.

**1.2b** By June of 2011, the *Scope and Sequence of Technology Skills* will be revised to reflect technology and information literacy skills from the K-12 Math standards.

**1.2c** By June of 2012, the *Scope and Sequence of Technology Skills* will be revised to reflect technology and information literacy skills from the K-12 Social Science and Science standards.

Objective	Curriculum Integration Implementation Plan/Activities	Responsible Dept. or Position	Timeline	Budget Source*	Monitoring and Evaluation activities
1.1	Provide professional development for teachers in applications, info. Literacy, and tech. Integration. (See Professional Development Component for details.)	Assistant Superintendent of Education (ASE)	On-going, all year	NA	Sign-in sheets and Participant evaluations.
1.1	Teachers will implement technology and information literacy skills based on standards as outlined in the District Scope & Sequence of Technology Skills, see below.	Teachers, Principals	On-going, all year	NA	Principal evaluations, CTAP, and District surveys
1.1	Develop a District Technology Use Survey that will pinpoint teachers' technology integration instruction and practices, among other items.	Information Technology (IT)	Jan-09	NA	District Technology Use Survey, approved by the IT & ASE
1.1	The District Technology Use Survey will be distributed and data collected.	IT, ASE, all Teachers and Principals	Jun-09	NA, small cost for paper	IT will collect and interpret data for the Technology Plan Sub-Committee's annual evaluation.
1.1 - 1.2	Revise the Scope & Sequence of Technology Skills. Revise the middle and high school technology course descriptions	STT & ASE	Summer, Early Fall each year, starting 2009	NA	Sign-in sheets and participant evaluations. The revised Scope & Sequence of Technology Skills and course descriptions, approved by the STT and ASE.
1.2	Teachers use skills as identified in the Scope and Sequence in each subject area	Teachers	Each subject area based on timeline	Projectors for classroom use (Title IID)	Teacher survey of implementation level, needs.

All curriculum integration activities are accompanied by student support activities and supervised by certificated personnel to meet the expectations of each goal. Each site maintains a portion of the district website, some of it student authored. Each site maintains data to ensure each of the projects leads to student achievement.

### 3.e. Goal Statement for student acquisition of technological and information literacy skills

Digital High School guidelines still guide high school student acquisition of technology and information literacy skills at the high school level. In the middle schools, students learn technology skills in their computer applications and elective computer classes. In addition, the District's Digital Middle School model computer lab provides a technology-rich environment for participating students to learn multimedia and presentation skills.

In the elementary schools, the high student to computer ratio limits the amount of direct instruction students receive in technology skills. However, the computer labs will provide elementary sites with whole-class technology instruction.

The District *Scope and Sequence of Technology Skills* and the core curriculum standards are the guidelines for K-8 technology instruction. By incorporating curriculum standards and information literacy skills into a revision of the *Scope and Sequence of Technology Skills*, teachers will have a single document to help guide their technology instruction.

**Technology and Information Literacy Skills**

**Goal 1 of 1:** Students will learn technology and information literacy skills based on curriculum standards.

**Objective 2.1:** By June of 2012, 75% of grade K-12 students will learn at least half of their grade level technology and information literacy skills from the revised District *Scope and Sequence of Technology Skills* as shown by student products and teacher observation.

**Benchmarks for technology and information literacy skills**

**2.1a** By June of 2010, 55% of grade K-12 students will learn at least a half of their grade level technology and information literacy skills from the revised District *Scope and Sequence of Technology Skills*.

**2.1b** By June of 2011, 65% of grade K-12 students will learn at least a half of their grade level technology and information literacy skills from the revised District *Scope and Sequence of Technology Skills*.

**2.1c** By June of 2012, 75% of grade K-12 students will learn at least a half of their grade level technology and information literacy skills from the revised District *Scope and Sequence of Technology Skills*.

Objective	Curriculum Integration Implementation Plan/Activities	Responsible Dept. or Position	Timeline	Budget Source*	Monitoring and Evaluation activities
2.1	Provide professional development for teachers in applications, information Literacy, and technology Integration after school.	Site Technology Trainer (STT), Assistant Superintendent of Education (ASE)	On-going, all year	NA	Sign-in sheets and Participant evaluations.
2.1	Teachers will implement student instruction of standards based technology and information literacy skills as outlined in the District Scope & Sequence of Technology Skills.	Teachers, Principals	On-going, all year	NA	Teacher observations, CTAP and District surveys, student products.

**3.f. Goal statement for utilization of technology to ensure appropriate access for students.**

Currently, our high ratio of students per computer, according to CBEDS and School

Technology Survey results, limits the technology skills that students can learn in classrooms. Our elementary sites have up-to-date computer labs for whole class instruction. In the middle school students have access to computer labs for application classes, but limited access for curriculum-related projects. The high schools have benefited from Digital High School grants and High School Technology Grants that have provided more effective numbers of computers for student access in multiple settings. In order to better meet goals and objectives, student to computer ratios need to be improved and alternative technology resources, to computers, will be sought.

### **Appropriate Access for Students**

**Goal 1 of 3:** Students – including ELL, GATE, and those with special needs – will have increased access to technology in elementary and middle school classrooms, libraries, and/or labs.

**Objective 3.1:** By June of 2012, the student to computer ratio in elementary and middle schools will improve by 20% over the 2006 base-year data as measured by CBEDS and School Technology Survey data.

### **Benchmarks for appropriate student access**

**3.1a** By June of 2010, the student to computer ratio in elementary and middle schools will improve by 5% as measured by CBEDS and School Technology Survey data.

**3.1b** By June of 2011, the student to computer ratio in elementary and middle schools will improve by 10% as measured by CBEDS and School Technology Survey data.

**3.1c** By June of 2012, the student to computer ratio in elementary and middle schools will improve by 20% as measured by CBEDS and School Technology Survey data.

### **Appropriate Access for Students**

**Goal 2 of 3:** Examine and implement alternate technology resources, such as PDAs (handheld computers), and assistive technology tools, in order to provide more K-12 student access to technology and the curriculum.

**Objective 1 of 1:** By June of 2012, K-12 student use of alternative technology resources, such as PDA's, or IEP-identified assistive technology tools, will increase by 15% over the 2009 base-year data as measured by a District technology use survey.

### **Benchmarks for appropriate student access**

**9a** By June of 2010, K-12 student use of alternative technology resources such as PDA's, or IEP-identified assistive technology tools, will increase by 5%.

**3.3b** By June of 2011, K-12 student use of alternative technology resources such as PDA's, or IEP-identified assistive technology tools, will increase by 10%.

**3.3c** By June of 2012, K-12 student use of alternative technology resources such as PDA's, or IEP-identified assistive technology tools, will increase by 15%.

### **Appropriate Access for Students**

**Goal 3 of 3:** See the Infrastructure Component for details on acquiring technology hardware and software.

Objective	Curriculum Integration Implementation Plan/Activities	Responsible Dept. or Position	Timeline	Budget Source*	Monitoring and Evaluation activities
3.1	Schools will make annual purchases of computers. See also, Infrastructure Component.	Principals, Director of IT	Annually	Grant proposals, misc. categorical funds.	Purchase orders. CBED and CA School Technology Survey reports.
3.2	The Director of IT will seek, evaluate, and recommend alternative technology resources for District and site purchase.	Director of IT	On-going	NA	Purchase orders.

**3.g. Goal statement for utilization of technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet each student's academic needs.**

Currently, teachers make use of miscellaneous grade book and classroom management software for maintaining student records and plan for instruction. In addition, a sophisticated student data system is used for general student information, attendance, and other District record-keeping functions. The *Making the Grade* grade book management system was purchased in 2002 to enable teachers to make data-driven decisions for instruction.

**Record Keeping and Assessment**

**Goal 1 of 1:** Teachers will use multiple means of record keeping and data analysis to better meet each student's academic needs.

**Objective 4.1:** By June of 2012, 75% of 1-5 teachers will make use of Curriculum Based Measurement (*CBM*) resources and data analysis to better meet student academic needs as measured by principal evaluation.

**Objective 4.2:** By June of 2012, 50% of K-12 teachers will be using a District supplied electronic grade book, *Making the Grade* (MTG) or other district approved electronic grade book to track student performance.

**Benchmarks for record keeping and assessment**

**4.1a** By June of 2010, 50% of 1-5 teachers will make use of *CBM* resources and data analysis to better meet student academic needs.

**4.1b** By June of 2011, 60% of 1-5 teachers will make use of *CBM* resources and data analysis to better meet student academic needs.

**4.1c** By June of 2012, 70% of 1-5 teachers will make use of *CBM* resources and data analysis to better meet student academic needs.

**4.2a** By June of 2010, 30% of teachers will make use of *Grade book* resources and data analysis to better meet student academic needs.

**4.2b** By June of 2011, 40% of teachers will make use of *Grade book* resources and data analysis to better meet student academic needs.

**4.2c** By June of 2012, 50% of teachers will make use of *Grade book* resources and data analysis to better meet student academic needs.

Objective	Record Keeping / Assessment Implementation Plan/Activities	Responsible Dept. or Position	Timeline	Budget Source*	Monitoring and Evaluation activities
4.1 - 4.2	After-school training for teachers in Curriculum Based Management and Grade book programs will be conducted throughout the year.	Assistant Superintendent of Education.	Multiple training sessions, annually.	NA	Sign-in sheets and training evaluations.
4.1 - 4.2	Principals will evaluate teachers on their use of data management and analysis.	Principals	Continuous	NA	Principal observations and surveys.

### 3.h. Goal statement for utilization of technology to make teachers and administrators more accessible to parents.

#### Accessible to Parents

**Goal 1 of 1:** Teachers and administrators will be more accessible to parents through the use of web pages.

Currently, District and School web pages provide general, one-way information about events, staff, and demographics. Some teachers post Internet links or homework assignments for the benefit of parents and students. Email communication and providing web page content is optional for teachers. However, the ease of use in posting web pages and sending email is significantly enhanced with the District's email and Web Page system. It is anticipated that, with on-going training, more teachers will begin to make use of those optional resources. Due to legal concerns, teachers are not encouraged to email parents.

**Objective 5.1** By June of 2012, the number of teachers who regularly post class web page content to communicate homework assignments, classroom events, and/or, classroom projects will increase by 50% over 2005-2006 practices as measured by a count of teacher-produced web pages which reside on the District server which are reported to the Information Technology Department (IT).

#### Benchmarks for communicating via technology

**5.1a** By June of 2010, the number of teachers who regularly post class web page content to communicate homework assignments, classroom events, and/or, classroom projects will increase by 20% over 2005-2006 practices.

**5.1b** By June of 2011, the number of teachers who regularly post class web page content to communicate homework assignments, classroom events, and/or, classroom projects will increase by 30% over 2005-2006 practices.

**5.1c** By June of 2012, the number of teachers who regularly post class web page content to communicate homework assignments, classroom events, and/or, classroom projects will increase by 50% over 2005-2006 practices.

Objective	Accessibility to Parents Implementation Plan/Activities	Responsible Dept. or Position	Timeline	Budget Source*	Monitoring and Evaluation activities
5.1	Professional Development will be provided for teachers on using email and creating web pages.	Informational Technology (IT) Site Technology Trainer (STT)	On-going	NA	Sign-in sheets and training evaluation forms.
5.1	The District Internet Acceptable Use Policy will be revised to include teacher web page content guidelines.	IT	On-going	NA	The revised AUP will reflect stipulated content.
5.2	The District Internet Acceptable Use Policy will be revised to include teacher guidelines on parent-teacher communication.	IT	On-going	NA	The revised AUP will reflect stipulated content.
5.1 - 5.2	Questions on web page development will be included in the District Technology Use Survey. The survey will be conducted annually.	IT	On-going	NA	The survey will reflect stipulated content. It will be distributed in May and evaluated by the IT.

#### 4. Professional Development Component

##### Current Teacher and Administrator Use of Technology:

A district survey indicated that teachers in roughly 40% of elementary classrooms and 40% of middle school classrooms regularly employ computer-based technology. Those teachers use technology for at least one of the following:

- Computer-assisted data collection and analysis
- Making teacher-prepared materials with word processing or desktop publishing software
- Developing multimedia presentations for instruction
- Finding, evaluating and using Internet resources
- Implementing student, collaborative, email or web-based projects
- Curriculum-specific software for student review and practice
- Implementing student projects requiring use of Internet and/or computer applications
- Exchanging email with other teachers and with administrators, District-wide.
- Teaching computer skills to their students

The Western Placer Unified School District offers various means of support for teachers to integrate technology into the curriculum. After-school, hands-on, in-services are regularly provided for interested teachers to learn software that promotes technology integration including: *Word*, *PowerPoint*, *Inspiration*, email, and others. Software is offered as an incentive for teachers who attend this training. In addition, the Assistant Superintendent of Education, the Director of Technology, and the Information Technology Specialist are on call to assist teachers with curriculum integration planning and implementation. Our teachers also take advantage of regional technology training. Many WPUSD teachers have participated in regional, CTAP-funded technology integration Training. Participating teachers have returned to their sites better prepared to support and instruct their students and colleagues in the use of technology.

## Needs that will guide technology professional development

*District Goals and Priorities* are strongly tied to standards-based instruction that will improve student achievement. Despite district and regional support for teachers, technology skills are viewed by many as “add-ons,” not as helpful tools to support standards-based instruction in the core curriculum. Therefore, there is little teacher “buy-in” to learn technology skills and initiate the use of technology in the classroom.

Question: How can we best exemplify technology integration as an important factor in the standards-based instruction, which our District promotes? Answer: Specific technology skills identified within the Language Arts, Math, Social Science, Visual and Performing Arts, and Science, Standards will be included in the **Scope and Sequence of Technology Skills**. We will train teachers in those technology and information literacy skills which they will implement in their standards-based instruction. Site Technology Trainers (STT) and the District Instructional Technology Specialist will revise **The Scope and Sequence of Technology Skills** by adding in the standards-based technology and information literacy skills for each grade level, K-12. Professional Development conducted by the STTs for their constituent teachers will focus on those skills.

The result will be to establish technology integration as a crucial link between curriculum standards and technology skills.

## Long-term Professional Development Goals

Teachers will be trained in technology skills that will improve student achievement, communication, standards-based instruction, assist with data-driven decision-making, and motivate teachers to seek and effectively use technology resources to meet student needs. The *National Educational Technology Standards for Teachers* (NETST), published by ISTE, will be analyzed for use within the District. The NETST will serve as a resource for establishing our own technology standards for teachers and the subsequent professional development to support those standards.

Administrators will be trained in technology skills that will enhance their leadership capabilities, improve efficiency and communication, as well as assist data-driven decision-making, evaluation and planning. The *National Technology Standards for School Administrators* (TSSA), published by ISTE, will be analyzed for use within the District. The TSSA will serve as a resource for establishing our own technology standards for administrators and the subsequent professional development to support those standards.

Classified personnel will be trained in technology skills that will enhance efficiency, assist with data-driven decision-making, help them make better use of District systems, and aid in communication, evaluation and planning.

## Evaluation of Technology Proficiency Skills and Levels

Teachers will be encouraged to utilize the CTAP Teacher Technology Proficiencies website utility for self-evaluation of their technology skills. Based on the their CTAP 2 website (<http://ctap2.iassessment.org>) results, and District surveys, teachers will formulate a “personal growth plan” for technology skills. Technology proficiencies for teachers will be based on the California State Department of Education’s “Teacher Technology Proficiencies Guidelines.”

The District will utilize or develop Technology Proficiencies and on-line data base self-evaluation tools for administrators and classified personnel. Timelines for the optional use of self-evaluation tools for each target group will be established.

The District will develop a “Needs Assessment for Technology Professional Development” based on survey results, personal growth plans, and the identified core technology and information literacy skills taken from state curriculum standards.

## **Communication**

The District posts its professional development opportunities on the District website and via email and fliers. In order to facilitate the website feature, a form for automated website posting and updating of professional development opportunities was developed by the Information Technology (IT). The resulting online Professional Development Calendar lists events for teachers, administrators, and classified personnel.

## **People**

Technology professional development will be organized and coordinated by the District Assistant Superintendent of Education (ASE) The ASE will establish annual training priorities (based on needs); coordinate requests for training; schedule training opportunities; establish and provide the means of training and the resources required (including trainers); maintain the technology professional development budget; promote the training opportunities through various means of communications; and help evaluate the training.

Site Technology Trainers (STT) will provide the core, standards-related training for their site colleagues. The ASE and IT personnel, will conduct open training district-wide professional development opportunities, open to all staff.

When necessary, outside trainers will be brought in. These trainers will be contracted either upon the purchase of new systems, or for specialized, on-going training that cannot be provided by the District’s trainers. A budget will be allocated for reimbursement of these outside trainers.

Incentives will be provided for technology professional development participants, such as the Site Technology Trainers. These incentives may include release time, conference attendance, new software, hardware upgrades, and/or professional expert pay.

Motivation to attend technology skills training is crucial. Administrators, management, teacher leaders, and other key people will encourage their constituents to advance their technology proficiency levels.

## **Means of Training**

The District is anticipating the implementation of multiple means of training, beyond the fundamental, hands-on use of computers. In addition, we are considering multimedia tutorials on CD ROM; online, distance learning opportunities; the use of videos; and satellite and video conferencing. These multi-faceted trainings will be further developed, not just in training for technology, but for other professional development offered across the District.

## **Resources to be used**

A variety of technology resources will be needed to support technology professional development. In addition to miscellaneous software, the following resources are being considered for the District office training facility:

- Additional laptops
- Scanner
- Digital Cameras
- Printers
- Projector and instructor's computer – housed/mounted permanently
- Video equipment
- Television and VCR
- PDAs (Palm/Visor) or other handheld computers

## **PROFESSIONAL DEVELOPMENT ACTION PLAN**

### **B1. Goal statements for professional development based on needs assessment**

Our goal is to get 50% of our teachers and administrators to complete the CTAP2 Technology Proficiency Survey, or other district approved survey, by June, 2009. The site survey results will be analyzed for use by the Site Technology Trainers (STT) and will be major factors in planning and implementing site training.

#### **Professional Development Based on Needs Assessment**

**Goal 1 of 1:** Teachers and staff will annually complete the CTAP2 Technology Proficiency Survey, or other district approved survey, to help the Site Technology Trainers plan technology professional development in the identified core, standards-based technology and information literacy skills.

**Objective 1.1:** By June of 2009, 50% of teachers will make use of the CTAP2, or other survey to help them create a plan for technology skills as collected and monitored by the Site Technology Trainers (STT).

#### **Benchmarks for needs-based professional development**

**1.1a** By June of 2010, 30% of teachers will make use of the CTAP2, or other, survey to help them create a plan for technology skills.

**1.1b** By June of 2011, 40% of teachers will make use of the CTAP2, or other, survey to help them create a plan for technology skills.

**1.1c** By June of 2012, 50% of teachers will make use of the CTAP2, or other, survey to help them create a plan or technology skills.

Objective	Training Based on Needs Implementation Plan/Activities	Responsible Dept. or Position	Timeline	Budget Source*	Monitoring and Evaluation activities
1.1	CTAP2, or other technology proficiency surveys will be conducted annually. STT will provide training for the survey, when necessary. Teachers will create PLPs based on their results.	STT, Teachers	On-going	NA	District and School CTAP2 reports. Teacher PLPs reflecting goals for acquiring technology skills.

**B2. Goal statement(s) for professional development based on curriculum component:**

**Professional Development Based on Curriculum**

**Goal 1 of 1:** Site Technology Trainers will plan and implement site training in technology integration skills taken from curriculum standards with an emphasis on standards-based technology and information literacy skills.

**Objective 2.1:** By June of 2012, Site Technology Trainers will each have conducted 30 hours of training and support (10 hours each year) for K-12 teachers in standards-based, technology skills as evidenced by hourly time sheets, teacher sign-in sheets, and training evaluations.

**Benchmarks for curriculum-based professional development**

**2.1a** By June of 2010, Site Technology Trainers will each have conducted 10 hours of training and support for K-12 teachers in standards-based, technology skills as evidenced by hourly time sheets, teacher sign-in sheets, and training evaluations.

**2.1b** By June of 2011, Site Technology Trainers will each have conducted 10 additional hours of training and support for K-12 teachers in standards-based, technology skills as evidenced by hourly time sheets, teacher sign-in sheets, and training evaluations.

**2.1c** By June of 2012, Site Technology Trainers will each have conducted 10 additional hours of training and support for K-12 teachers in standards-based, technology skills as evidenced by hourly time sheets, teacher sign-in sheets, and training evaluations.

Objective	Curriculum-Based Training Implementation Plan/Activities	Responsible Dept. or Position	Timeline	Budget Source*	Monitoring and Evaluation activities
2.1	Site Technology Trainers (STT) will be selected: 1 per elementary; 2-3 per middle school; 2-3 per high school	Principals, ASE	On-going	NA	ITS will collect names from each District School
2.1	Representative Site Technology Trainers will attend a Planning session to revise the District Scope and Sequence of Technology Skills.	ASE	On-going	NA	Sign-in sheets. The revised Scope and Sequence of Technology Skill reflecting the desired outcome.
2.1	Site Technology Trainers will attend Train-the-trainer sessions to learn/reinforce the identified core technology and information literacy skills. A team of 'experts' will provide the training (see next column).	STT, ASE	On-going	NA	Sign-in sheets, evaluations
2.1	The K-8 Site Technology Trainers will plan and conduct professional development at their schools, based on the identified skills and their colleagues PLPs.	K-8 STT, ASE	On-going	NA	Sign-in sheets, evaluations timesheets (for STT reimbursement for training and preparation)
2.1	The school STT, who have learned technology integration and information literacy skills through DHS, will collaborate with their feeder elementary and middle schools to provide additional training &/or support as needed.	STT, ASE	On-going	NA	Sign-in sheets, evaluations timesheets (for STT reimbursement for training and preparation)

**B3. Goal statement(s) for classroom management tools, i.e. grade books, attendance and assessment.**

**Professional Development for Assessment, etc.**

**Goal 1 of 1:** Teachers and Administrators will be trained in the use of student data systems and data analysis to better meet each student's academic needs.

**Objective 3.1** By June 2012, 70% of 1-5 teachers will be trained in the use of *CBM* resources and data analysis as measured by sign-in sheets and training evaluations also 50% of K-12 teachers will be trained in the use of an electronic grade book.

**Benchmarks for teacher training in data and assessment tools:**

**3.1a** By June 2010, 50% of 1-5 teachers will be trained in the use of *CBM* resources and data analysis as measured by sign-in sheets and training evaluations also 50% of K-12 teachers will be trained in the use of an electronic grade book.

**3.1a** By June 2011, 60% of 1-5 teachers will be trained in the use of *CBM* resources and data analysis as measured by sign-in sheets and training evaluations also 50% of K-12 teachers will be trained in the use of an electronic grade book.

**3.1a** By June 2012, 70% of 1-5 teachers will be trained in the use of *CBM* resources and data analysis as measured by sign-in sheets and training evaluations also 50% of K-12 teachers will be trained in the use of an electronic grade book.

Objective	Training - Data & Assessment Implementation Plan/Activities	Responsible Dept. or Position	Timeline	Budget Source*	Monitoring and Evaluation activities
3.1	CBM training will be conducted for 1-5 teachers. Follow up training will be scheduled as needed.	ASE	On-going	Title 2	ASE will collect sign-in sheets and training evaluations.
3.1	MTG training will be conducted for K-12 teachers.	STT, ASE	On-going	Title 2	STT, ASE will collect sign-in sheets and training evaluations.

## 5. Infrastructure, Hardware, Technical Support and Software

### D1. Hardware

All computers must meet technical requirements necessary for networking and multimedia applications. Hardware needs to meet the professional development, educational and or management needs. Hardware needs to be purchased from approved vendors with minimum hardware specifications. District computers need to be able to access all District recommended multimedia software. In addition computers need to be able to access the District Internet and Intranet via Ethernet. The District will predominately support the Windows PC platform. For example, in most careers, Windows-based machines and software are the standard.

#### Needs:

Each **high school** will have 1 computer per 5 students. Each classroom will have 3 computers to allow for exploratory, production and presentation centers. Each classroom will have a printer shared through an Ethernet connection. Each computer will be capable of printing to the networked printer. In addition the classroom will have a presentation system that will include either a LCD projector or mounted 27-inch monitor to display electronic media from the computer. Through a yearly analysis of the school's hardware database, by the District's IT department, a recommendation of hardware purchases will be given to the school. Installation and setup of these computers will be done by the District's IT department.

**Elementary and middle schools** will have a choice of two configurations for enabling appropriate hardware access in the regular classroom. Each school will have 1 computer per 10 students. Schools will have 2 computers per classroom that will include hardware to allow for exploratory and presentation centers for curriculum and technology integration. Elementary schools may add to the configuration by adding additional computers in the upper grades (4 per upper grade).

Each classroom will have a networked printer. In addition the classroom will have a presentation system that will include either a LCD projector or mounted 27-inch monitor to display electronic media from the computer. Through a combination of resources from site funds, District funds and grants, schools will maintain this ratio. Through a yearly analysis of the school's hardware database, by the District's IT department, a recommendation of hardware purchases will be

given to the school. Installation, inventory and setup of these computers will be done the District's IT department.

Students have access to computers both in the classroom and in the site computer lab to accomplish the goal of integrating technology into the core curriculum. During the school day, students are able to access computers in the classroom or at the Computer lab during designated periods. In addition, the goal of providing students access to computers after school is accomplished through library computers.

Each middle school and high school has one or more Library computers available to all students. Teachers bring their students during the day to access a variety of technologies and technology resources. Teachers may use those labs for the goal of providing students an opportunity to use unique learning resources from a technology integrated core curriculum. Using an electronic calendaring system, schools are able to manage the days and times in the computer lab. In addition, students may use the designated library computers after school to access technology resources. Those opportunities at the secondary schools will be expanded to include one library computer center at each elementary school. Each computer center will be developed around technology hubs or centers. The library media center will have an exploratory, collaborative, research, presentation and publishing hub.

Sites and District personnel purchase hardware through a specific process. The site's technology committee reviews hardware purchases to evaluate educational need and technical requirements. District IT department field's additional questions. Schools requisition hardware based on District standards, appropriate hardware vendors and specifications. Hardware specifications and authorized vendors can be accessed via District's email system or the District's technology purchasing agent. Once hardware is delivered a process for installation by the IT department is initiated. The District's User Support staff upgrades and installs all hardware. School and District personnel request these installs through a work order process that is initiated electronically at the site, processed by District IT department, installed by District IT department and evaluated by IT supervisors and by site requestors (the user). Hardware needs to be replaced at a regular interval. When computers are no longer able to access District resources and run necessary software, computer hardware will be replaced. Computers should be upgraded every 5 years with the cycle of replacement of computers beginning in year 1 of the cycle. The site computers can be divided into fifths and then replaced. Sites will be responsible for upgrading computers. Hardware will be repaired by the District's IT department. The cost of the repair will be IT Department responsibility until the hardware no longer meets the District's minimum standards. When computer hardware is no longer able to access District resources and run necessary software, the site will replace computer hardware.

### **3.2. Goal statements for hardware:**

**Goal 1 of 2:** The schools will have the hardware necessary to implement the educational programs and to teach the grade level standards.

#### **3.2.1 Objective**

By June 30, 2012, 100% of sites will have the designated hardware configuration per classroom. (10:1 student to computer ration, 2 computers, presentation unit, and networked printer for elementary and middle schools. A 5:1 student to computer ratio, 3 computers, presentation unit and networked printer for High Schools).

### **Benchmark statements for hardware:**

**3.2.1.a** By June 30, 2010, 32% of sites will have the designated hardware configuration per classroom. (10:1 student to computer ratio, 2 computers, presentation unit, and networked printer for elementary and middle school classrooms. A 5:1 student to computer ratio, 3 computers, presentation unit and networked printer for High School classrooms)

**3.2.1.b** By June 30, 2011, 64% of sites will have the designated hardware configuration per classroom (10:1 student to computer ration, 2 computers, presentation unit, and networked printer for elementary and middle schools. A 5:1 student to computer ratio, 3 computers, presentation unit and networked printer for High Schools)

**3.2.1.c** By June 30, 2012, 100% of sites will have the designated hardware configuration per classroom. (10:1 student to computer ration, 2 computers, presentation unit, and networked printer for elementary and middle schools. A 5:1 student to computer ratio, 3 computers, presentation unit and networked printer for High Schools)

Objective	Implementation Plan/Activities	Responsible Dept. or Position	Timeline	Budget Source*	Monitoring and Evaluation activities
3.2.1	Secure funds for hardware	District IT	Annually	School	Analysis of funding sources applied die and secured.
3.2.1	Purchase Computers	District IT	Annually	School	Analyze reports from Database of inventory.
3.2.1	Provide each classroom with the hardware necessary to allow for the equitable access to multimedia technology resources, applications, printing and presentation tools by June of 2005 and measured through site surveys.	District IT	Annually	Site funds, potential grant sources	Analyze reports from Database of inventory.

**Benefits from hardware:**

The hardware will provide equal access to educational opportunities and resources through technology. The classroom configuration will allow teachers and students to communicate with others, access resources, and share information in an effective way.

**D2. Software**

The District is implementing a complete process for inventorying, selecting, purchasing, installing and monitoring software that meets the educational, legal and technical standards. The District maintains standardized software systems in business, student, database, spreadsheet, word processing, email, grade book, language arts assessment software, and browser. The District standards include the following: *Microsoft Office Professional Suite*, *Symantec Anti virus*, and *Aeries*. When changes are necessary, the District's technology planning committee provides recommendations to Cabinet. Cabinet authorizes new District standards. For software needs beyond the District standards, site committees will provide

additional recommendations based on the District's scope and sequence as well as technical requirements.

On all new computers, a software package of District-needed software is ordered and installed upon delivery. The price of the software is automatically included at the purchase of the computer. There is an office, teacher, and student package and the appropriate package will be ordered for each new computer (See appendix for Packages). The cost for the software is added to each computer and is funded by the department or school that purchases the computer. In addition to adding new software resources, presently, schools have access to a variety of software learning resources already at their campus. At the middle and high school level, students may access specific math courseware (*Accelerated Math*) that provides Computer Assisted Instruction.

The site will establish a technology committee that will include the Site Technology Trainer. (Each site has either one or two software trainers who receive a stipend for training, installing, and monitoring software at the school.) When new software, such as courseware, is needed, the committee will review the software based on content standards, District's technology scope and sequence, school site plan, and technical requirements to determine if the software is appropriate. This committee will publish site software standards and recommendations via the District's Web Server. After software is reviewed by the site technology committee, software is requisitioned and a copy of the purchase requisition is sent to the District's IT department. The Instructional Technology Specialist reviews educational Software. After the technology-purchasing agent reviews the requisition, the purchase order is processed through the regular channels. When the District receives the software, the licensing information is recorded into a database and supporting licensing documentation is entered into the District's document imaging system by the business department. The software is installed by District's IT department and/or the site's Software Trainer. The physical media is stored at the IT department and copies are distributed as necessary. All software licenses are inventoried at the District level. Through a database, software licenses are tracked by the District's IT department. When software needs to be reinstalled or moved to another location, the IT dept tech will remove the program from the hard drive (if necessary). In addition to the checks and balances by the IT techs, each site will have an electronic means for insuring legal software compliance. If software needs to be changed to a different computer, the IT tech is informed and the software is reissued or checked-out to the new teacher via the District IT dept. system. The IT tech reinstalls the software and insures that it is functioning correctly.

#### **3.4. Goal statements for software:**

Schools will use a process for selecting, installing and using software that aids students in the achievement of grade level standards and increases District efficiency.

**Objective 3.4.1** By June 30, 2012, 100% of sites will have the Districts standardized computer software installed on their computer.

#### **Benchmark statements for software:**

**3.4.1.a** By June 2010, 100% of sites will have the Districts standardized computer software installed on their computer

Objective	Implementation Plan/Activities	Responsible Dept. or Position	Timeline	Budget Source*	Monitoring and Evaluation activities
3.4.1	Secure funds for software	District IT	On-going	General Fund	Analysis of funding sources applied for and secured.
3.4.1	Purchase Software	District IT	On-going	General Fund	Analyze reports from Database of inventory.
3.4.1	Publish software standards	District IT	On-going	General Fund	District IT department
3.4.1	Inventory and record licenses	District IT	On-going	General Fund	District IT department
3.4.1	Install Software onto computers	District IT	On-going	General Fund	Assessment of inventory which shows all software have been installed and is functioning
3.4.1	Train Users in the use of the software	District IT	On-going	District IT dept Budget	Survey and sign in sheets at trainings
3.4.1	Install minimum standardized software package for all business and educational computers and establish a process for selecting new software tools.	District IT	On-going	District IT dept Budget	Data report analysis

**Objective 3.4.2** By June 30, 2012, 100% of sites will be using the District's formal process for selecting and purchasing new software.

**Benchmarks**

**3.4.2.a** By June 30, 2010, 100% of sites will be using the District's formal process for selecting, purchasing and implementing new software.

Objective	Implementation Plan/Activities	Responsible Dept. or Position	Timeline	Budget Source*	Monitoring and Evaluation activities
3.4.2	Secure funds for software	District IT	On-going	General Fund	Analysis of funding sources applied for and secured.
3.4.2	Purchase and inventory Software	District IT	On-going	General Fund	Analyze reports from Database of inventory.
3.4.2	Identify site committee	School	On-going	Site	Examine sign-in sheets for committee
3.4.2	Provide training to site committee	District IT	On-going	General Fund	Assess surveys given to committee
3.4.2	Establish a process for acquiring, installing, inventorying, and monitoring software that meets the educational, legal, and technical needs of the District	District IT, Dir of curriculum	On-going	General Fund	IT meeting and site surveys
3.4.2	Install software onto computers	District IT	On-going	District IT dept Budget	Assessment of inventory which shows all Software have been installed and is functioning

### Benefits from Software:

There are benefits from acquiring new standardized software and implementing a new Software Program. By supplying staff members and educational leaders with greater standardized software tools, productivity can be increased through leveraging resources such as training and minimizing total cost of ownership. The educational needs can be met by aligning software choices with specific educational goals and standards. The new process will ensure that alignment between educational needs and software selection. In addition, legal and ethical guidelines will be followed so that the school District can maintain its integrity and legal duty by following its licensing obligation.

### D3. Infrastructure

Through the District's network, documents, resources, email, and printers can be shared. The District has 11 school sites that have a fully functional Local Area Network that is connected to the rest of the District through the District's wide area network. This wide area network has access to the Internet through its Internet Service Provider, Starstream Communications. All school offices and all classrooms have multiple computers' that are able to access the Internet.

The goal is to provide users access to a variety of network services and network resource for educational and management purposes. This purpose is accomplished through the site's LAN, WAN, Internet Connection and servers. Through services such as the District's Intranet, users

can access lesson plans, District forms, learning resources, community resources and student and business databases from the network.

The District educational community can access their email and other educational resources from any computer that has Internet access. The network is monitored on a regular basis by the District's IT department. When maintenance or fixes are necessary the District's IT department has a Network Administrator that provides this function. The Network Administrator uses monthly benchmarks of the networks speed and reliability to determine if the goal is being met. Bandwidth usage on the LAN, WAN and Internet connection is monitored and assessed weekly through reports from a variety of technology tools. These functions and services are maintained and monitored by the District's IT department and its budget.

The goal of providing students and the educational community appropriate Learning Resources is accomplished through the District's educational portal (website). The portal provides a guide to educational content and materials that are relevant to students and teachers. As a part of this portal WPUSD has contracted to receive special informational services through World Book Online. This service gives the WPUSD community access to online encyclopedias. Students and teachers can explore other educational resources on the Internet with the protection of a filtering system. Within the District's network, users are protected from violent, pornographic and other inappropriate Internet material through the District's Internet content filter. Although the filter affords protection it does not guarantee that all inappropriate sites will be blocked. This website is maintained by the District's IT department and specifically through the department's Network Administrator. Necessary upgrades are funded through the IT Department's annual budget. On a monthly basis, content is updated by automated downloads of revised filters. Dynamic content will be updated by IT as necessary.

To further the goal of providing relevant learning resources and information to the community, school websites are being developed to better communicate relevant information to particular school communities within the District. The Network Administrator, site Technology committee, Site Administrator and Director of Technology will be working together to develop each school site's website. The content of the website will be updated by the site's *designated staff member* and the programming will be done by the District IT web programmer. These websites will benefit parents, students, teachers, administrators, and local communities of particular schools. This benefit will be from information that is more relevant and particular to each site's needs.

**Current:** The District has a load sharing device to allow redundant access to the internet. The total band width available is 4.5 Meg. The LAN at each site is an Ethernet Network running at either 10mbs or 100mbs. The high schools and one middle school operate at 100mbs speed to the desktop.

Currently our schools are connected to each other via 100Meg fiber link provided by our local cable company and one T1 line connecting one school outside of the cable company's service area.

**Needs:** The current available band width to the internet needs to be increased to keep up with the additional school sites being added to the district.

The District maintains the network connectivity, network services and network security. To ensure the goal of network security, both physical and electronic security are addressed and implemented by the IT department. Through a tiered approach, security is maintained.

Passwords, IP Filtering, Firewall, Network Address Translation and Network Authentication are combined to build the network's security. Physical security is addressed by maintaining cabinets and rooms that are locked and alarmed. The District IT department will ensure that as additional switches and servers get installed, those network devices are stored in cabinets that are locked. Data is physically secured by keeping backups of the data in a fireproof safe. Daily backups of all critical data from each site will continue to be stored at the District Office. The District's IT department will maintain, coordinate and fund the backup's security.

**3.1 Goal statements for infrastructure:**

Schools will have the infrastructure necessary to access educational resources, to increase the quality of instruction, and to promote student achievement through a reliable and speedy network.

**Objective 3.1.1** By June 30, 2009, 100% of sites will have upgrades to their LAN, WAN, and Internet connection to increase the bandwidth and speed to utilize multimedia client/server programs and data management applications measured by analysis of data systems reports.  
**\*(LAN Speed to be increased to 100mbs to desktop)**  
**\*(WAN Speed to be increased to 8.5mbs)**

**Benchmark statements for infrastructure:**

**3.1.1.a** By June 30, 2007, 32% of sites will have upgrades to their LAN to increase the bandwidth and speed to utilize multimedia client/server programs and data management applications.

**3.1.1.b** By June 30, 2008, 64% of sites will upgrades to their LAN, WAN, and Internet connection to increase the bandwidth and speed to utilize multimedia client/server programs and data management applications

**3.1.1.c** By June 30, 2009, 100% of sites will have upgrades to their LAN, WAN, and Internet connection to increase the bandwidth and speed to utilize multimedia client/server programs and data management applications.

Objective	Implementation Plan/Activities	Responsible Dept. or Position	Timeline	Budget Source*	Monitoring and Evaluation activities
3.1.1	Secure funds for infrastructure	District IT	Annually	General Fund	Analysis of funding sources applied for and secured.
3.1.1	Prioritize sites for completion plan	District IT	Annually		Analyze reports from Database of inventory.
3.1.1	Purchase Hardware at sites to accommodate increased LAN and WAN speeds.	District IT		General Fund	Inventory and analysis of items purchased vs. items needed using network maps/documentation
3.1.1	Setup, install, test and configure all hardware	District IT	Annually	District IT dept Budget	Assessment which shows all sites have been completed and are fully functional.
3.1.1	Upgrade the network to accommodate the reliable, delivery of multimedia instructional technology as well as data management applications over the LAN, WAN, and Internet connection by expanding the capacity of the District's network to increase speed and bandwidth to and within sites.	District IT	On-going	General Fund, IT budget, Erate	Annual analysis by IT department

### Benefits from Infrastructure Upgrade:

There are three main benefits to the upgrades in the network. Students, staff and management will be able to access multimedia learning resources and large databases for increases in achievement, productivity and efficiency. In addition through increases in network performance resources can be shared and leveraged. Finally, communication can be more effective through the asynchronous and multimedia communication made possible by high-speed networks.

### D4. Technical Support

Current: The District's Technology Support Systems (TSS) Department provides support and maintenance for computer-related equipment used by teachers and staff. A web based Tech Center is provided for assistance with computer-related problems and questions and will be monitored by TSS personnel. Any certificated or classified employee can place a repair request for assistance. User Support Analysts in the TSS Department provide technical assistance for hardware, software, and network issues. The District has two user support personnel who provide technical help in the area of LAN networks, computer hardware, software and application support. The User Support staff provides dedicated support in the area of applications and training to users. In addition to the two User Support personnel, there are site technicians to assist with localized problems and issues.

Needs: The current ratio of User Support to computers is one support person for every 600 computers. As the number of computers in the District grows, WPUSD will reduce that ratio to 350 to 1. The service that is provided is evaluated through service ratings based on surveys. TSS will survey service once a month through phone calls and /or email using the Service Survey. The feedback is reviewed monthly and adjustments are made accordingly.

The TSS Support process for providing assistance to users is as follows:

- When the user encounters a problem and/or has a question they submit a repair order online or call the district tech support office.
- If the user's problem can't be resolved over the phone then a technician is dispatched to investigate the problem.
- TSS will review submitted repair orders to determine severity and priority.
- Once User Support personnel receive repair orders for a site, TSS will interface with the site's designated technology representative to determine site priorities.
- TSS will visit each school once a week to address any current normal priority repair orders for that site and resolve open repair orders.
- TSS will determine if repairs are to be done by staff, contracted out, or handled through warranties. After a computer problem is resolved, a receipt of service (copy of repair request) will be left with the user's computer.

## **Project Development**

TSS will assign project status to any request that requires more than one full work day by a technician and is a new or improvement request. For any requests that are assigned a project status TSS will:

- Assign Project leads and develop a Project plan that will include projected start and end dates.
- Determine priority of the project in alignment with priorities established by Cabinet (CBO, Assistant Superintendents and Superintendent).
- Coordinate all tasks that need to be completed by TSS and other District departments.
- Help to determine if outside resources/contractors will be needed to complete the project.
- Provide follow-up service after the project has been completed.

### **3.2 Goal statements for technical support:**

School will receive professional and reliable technical support in order to maintain and support the educational programs in the schools.

**Objective 3.2** By June 30, 2012 all hardware and software problems will be resolved in a one-week period through Help line and onsite assistance by the District's user support team and measured through site surveys.

### **Benchmark statements for technical support:**

**3.3.a** By June 30, 2010, 32% of site technical problems will be resolved within a week by either fixing the problem or providing a loaner.

**3.3.b** By June 30, 2011, 64% of site technical problems will be resolved within a week by either fixing the problem or providing a loaner.

**3.3.c** By June 30, 2012, 100% of site technical problems will be resolved within a week by either fixing the problem or providing a loaner.

Objective	Implementation Plan/Activities	Responsible Dept. or Position	Timeline	Budget Source*	Monitoring and Evaluation activities
3.3	Secure funds for additional User Support Person and loaner equipment.	District IT	Annually	General Fund	Analysis of funding sources applied for and secured
3.3	Post and hire additional User Support and purchase loaner equipment	Personnel	On-going		Signed paper work at completion
3.3	Develop rotational schedule so that sites get weekly support.	District IT	On-going		Site surveys

**Benefits from technical support:**

Through technical support, students will be able to have greater access to learning resources because computer hardware will be functioning for longer periods. In addition productivity of support staff will be increased because technologies that assist them in their work will be functioning. In addition, with application support, staff will be more efficient in their work.

**6. Funding and Budget**

The District has used the following sources of the past 5 years to fund technology projects:

- General Fund
- E-Rate
- Various State and Federal Categorical Funds and Grants

The District will seek funding from the following sources to fund technology projects:

- No Child Left Behind
- District General Fund
- Local bonds
- Site based categorical funds

WPUSD recognizes that one of the greatest challenges is to continually reinvest in upgrading the District’s technology assets. WPUSD will continue to aggressively seek additional funding sources to expand its support of technology in schools.

The current funding model is:

**Technology Vision  
Funding Model For  
Year 2009 thru 2012  
ESTIMATED BUDGET**

Action Item	Type	Year	Cost	Notes
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**YEAR 1 (2009/2010)**

Establish 3.0 FTE At large positions to be used where needed for schools	Ongoing one		\$ 175,000.00	To cover new schools, email admin, growth
Teacher, Admin, and Lab computer refreshes (purchased and installed)	Ongoing One		\$ 20,000	
existing network, phone maintenance and upgrades	Ongoing One		\$ 10,000.00	
server upgrades and refreshes	Ongoing One		\$ 10,000.00	
Infrastructure Maintenance	Ongoing One		\$ 10,000.00	growth/wiring of network
Staff Development	Ongoing One		\$ 5,000.00	Ongoing Staff Development
<b>Total Year 1</b>			<b><u>\$ 230,000.00</u></b>	

**YEAR 2 (2010/2011) –  
Represents 2%  
increase from Year 1**

Establish 4.0 FTE At large positions to be used where needed for schools	Ongoing Two		\$ 178,500.00	To cover new schools, email admin, growth
Teacher, Admin, and Lab computer refreshes (purchased and installed)	Ongoing Two		\$ 20,400.00	
server upgrades and refreshes	Ongoing Two		\$ 10,200.00	
Infrastructure Maintenance	Ongoing Two		\$ 10,200.00	growth/wiring of network
New staff support costs (equipment/SW)	Ongoing Two		\$ 10,200.00	Training and equip. for 4 net new staff
Staff Development			\$ 5,100.00	
<b>Total Year 2</b>			<b><u>\$ 234,600.00</u></b>	

**YEAR 3 (2011/2012) –  
Represents 2%  
increase from Year 2**

Establish 4.0 FTE At  
large positions to be  
used where needed for  
schools

Ongoing Three	\$	182,070.00	To cover new schools, email admin, growth
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Teacher, Admin, and  
Lab computer

Ongoing Three	\$	20,808.00	
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refreshes (purchased  
and installed)

Ongoing Three	\$	10,404.00	
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server upgrades and  
refreshes

Ongoing Three	\$	10,404.00	growth/wiring of network
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Infrastructure  
Maintenance

Ongoing Three	\$	10,404.00	Training and equip. for 4 net new staff
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New staff support costs  
(equipment/SW)

Ongoing Three	\$	5,202.00	
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Staff Development

<b>Total Year 3</b>		<b><u>\$ 239,292.00</u></b>	
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**Total District Funds  
Needed 2003-2006**

**\$ 703,892.00**

See each component's individual Tables, which follow Benchmarks for additional information.

**Description of ongoing Technical Support:**

See page 28-30 for details on the level of on-going District technical support.

**Description of Obsolete Policy:**

See page 26-27 for the District's replacement policy for obsolete equipment.

**Feedback loop for evaluating budget:**

**Goal:** The Technology budget will reflect appropriate allocations and expenditures to effectively implement goals, objectives, and benchmarks.

The Assistant Superintendent of Education, The Director of Business Services and the Director of Technology will allocate budget funding for Technology. The Technology budget allocations and expenditures will be monitored and evaluated bi-annually by those responsible parties.

**Objective 2.1** By June 2012, the above administrators will have met twice a year to evaluate allocations and expenditures on Technology to determine adjustments for subsequent years.

**Benchmarks for budget monitoring and evaluation**

**2.1a** By June 2010, the above administrators will have met twice a year to evaluate allocations and expenditures on Technology to determine adjustments for subsequent years.

**2.1b** By June 2011, the above administrators will have met twice a year to evaluate allocations and expenditures on Technology to determine adjustments for subsequent years.

**2.1c** By June 2012, the above administrators will have met twice a year to evaluate allocations and expenditures on Technology to determine adjustments for subsequent years.

Objective	Monitoring & Evaluation Implementation Plan/Activities	Responsible Dept. or Position	Timeline	Budget Source*	Monitoring and Evaluation activities
1.1	The Assistant Superintendent of Education (ASE) will convene bi-annual meetings of Site Technology Trainers (STT) to evaluate and further Tech Plan implementation.	ASE,STT	Fall & Spring Annually	General Fund	ASE will collect sign-in sheets, agendas, and meeting minutes.
1.2	The Information Technology (IT) dept. will meet monthly to evaluate and further Tech Plan implementation.	TC, IT, ASE	Each Month	NA	ASE will collect sign-in sheets, agendas, and meeting minutes.
1.3	The Technology Plan Committee will meet each year to evaluate and update the plan. Subsequent Technology Plan revisions will be distributed to all stakeholders.	Tech Plan committee	Spring, annually	NA	The committee chair will collect sign-in sheets, agendas,meeting minutes and Tech Plan revisions.
2.1	District leadership meetings will address technology expenditures and budget.	ASB, ASE, TC	On-going	NA	The ASE will collect agendas and meeting minutes.

## 7. Monitoring and Evaluation Component

Monitoring and evaluation details are included for each benchmark in the Tables immediately following each Goal section, above.

See Component pages for:

**Curriculum** monitoring and evaluation details

**Professional Development** monitoring and evaluation details

**Infrastructure** monitoring and evaluation details

**Budget** monitoring and evaluation details

### C1. Goal statements for monitoring and evaluation of the Technology Plan:

Implementation will be supported through Site Technology Trainer (STT) meetings in which the revised Technology Plan will be distributed and discussed. Technology benchmarks that involve schools, teachers, and students will be stressed. The STT will collaborate and outline strategies for the support and training they will provide in the coming school year to support the goals and objectives of the Plan. The STT, the Instructional Technology Specialist, and the ASE will meet to evaluate and assess the success of implementing the educational benchmarks of the Technology Plan. The focus of each meeting will be for the STT to develop strategies for support of their site faculty in implementing the benchmarks.

The District Information Technology (IT) Department will regularly convene to evaluate and assess the progress of implementing infrastructure benchmarks. The Technology Plan committee will meet annually to assess the status of the District in implementing the Technology Plan and will make recommendations for improvements or changes to the Plan, budget, and/or the implementation process as needed.

### **Monitoring & Evaluation of Plan Implementation**

**Goal 1 of 2:** On-going evaluations of the implementation of Technology Plan benchmarks will ensure that District Technology Goals will be achieved.

**Objective 1.1** By June 2012, Site Technology Trainers will have participated in meetings to evaluate progress and develop strategies to support their school faculty in meeting the Technology Plan benchmarks as measured by sign-in sheets, agendas, and meeting minutes.

#### **Benchmarks for monitoring and evaluation of plan implementation**

**1.1a** By June 2010, Site Technology Trainers will have participated in meetings to evaluate progress and develop strategies to support their school faculty in meeting the Technology Plan benchmarks.

**1.1b** By June 2011, Site Technology Trainers will have participated in meetings to evaluate progress and develop strategies to support their school faculty in meeting the Technology Plan benchmarks.

**1.1c** By June 2012, Site Technology Trainers will have participated in meetings to evaluate progress and develop strategies to support their school faculty in meeting the Technology Plan benchmarks.

**Objective 1.2** By June 2012, Information Technology (IT) Department meetings will have been convened to evaluate the effectiveness of meeting infrastructure benchmarks as measured by agendas and sign-in sheets.

#### **Benchmarks for monitoring and evaluation of plan implementation**

**1.2a** By June 2010, Information Technology (IT) Department meetings will have been convened to evaluate the effectiveness of meeting infrastructure benchmarks.

**1.2b** By June 2011, Information Technology (IT) Department meetings will have been convened to evaluate the effectiveness of meeting infrastructure benchmarks.

**1.2c** By June 2012, Information Technology (IT) Department meetings will have been convened to evaluate the effectiveness of meeting infrastructure benchmarks.

**Goal 2 of 2:** The Technology budget will reflect appropriate allocations and expenditures to effectively implement goals, objectives, and benchmarks.

The Assistant Superintendent of Education, The Director of Business Services and the Director of Technology will allocate budget funding for Technology. The Technology budget allocations and expenditures will be monitored and evaluated bi-annually by those responsible parties.

**Objective 2.1** By June 2012, the above administrators will have met to evaluate allocations and expenditures on Technology to determine adjustments for subsequent years.

#### **Benchmarks for budget monitoring and evaluation**

**2.1a** By June 2010, the above administrators will have met to evaluate allocations and expenditures on Technology to determine adjustments for subsequent years.

**2.1b** By June 2011, the above administrators will have met to evaluate allocations and expenditures on Technology to determine adjustments for subsequent years.

**2.1c** By June 2012, the above administrators will have met to evaluate allocations and expenditures on Technology to determine adjustments for subsequent years.

Objective	Monitoring & Evaluation Implementation Plan/Activities	Responsible Dept. or Position	Timeline	Budget Source*	Monitoring and Evaluation activities
1.1	The ASE will convene meetings of the Site Technology Trainers (STT) to evaluate and further Tech Plan implementation.	ASE, STT	On-going	NA	ASE will collect sign-in sheets, agendas, and meeting minutes.
1.2	The Information Technology Dept.(IT) will meet to evaluate tech plan implementation.	TC, IT personnel	Twice yearly	NA	TC will collect sign-in sheets.
2.1	District Leadership meetings will address technology expenditures and budget.	ASE,TC, ASB	On-going	NA	The ASE will collect agendas and meeting minutes.

## **EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS COMPONENT**

### **8.A ADULT LITERACY:**

Western Placer Unified School District’s Adult School is small. The Adult School offers parenting classes and ESL classes. The ESL classes had 8-15 learners each. Both of these classes are housed adjacent to Phoenix High School.

Our district currently provides an adult English language class to parents in our district. The class is held at the adult school building adjacent to Phoenix High School. Childcare is provided while parents are in class.

In addition to the WPUSD Adult School, our local community college also provides community education. These courses are open to anyone in the community. Classes are conducted both in a classroom setting and now a large number are now being offered online. Test prep for the GED, SAT and ACT are provided through this community service.

Lincoln High School also houses three Regional Occupational Programs on its campus. ROP is a strong partner with the district concerning education of adults.

## **EFFECTIVE RESEARCH BASED METHODS AND STRATEGIES COMPONENT**

## **9.A AND B RESEARCH AND STRATEGIES OVERVIEW.**

The Educational Services department, which includes all components of curriculum and staff development, is committed to providing our teachers and students the very best possible instruction. Our instructional methods are based on proven methodologies. This technology plan has goals and benchmarks that will require ongoing efforts by both the technology and educational services department. With the assistance of our local CTAP region we have learned of models and strategies that are the most accessible and reliable research-based and proven information for hardware specifications, standards aligned software, implementation models and instructional strategies. The chart below gives examples:

<b>Component Reinforcement</b>	<b>Research Source</b>	<b>Research Summary</b>
Curriculum, Reading & Writing Technology Skills	Sandholtz, Ringstaff and Dwyer, in <i>Teaching with technology; Creating student-centered classrooms</i> , 1997.	"Students engagement remained highest when technology use was integrated into the larger curricular framework, rather than being an "add-on" to an already full curriculum."
Information Literacy Skills History/Social Studies	<i>Critical Issue: Using technology to improve student's achievement</i> , 1999 NCREL web site.	"Using technology within the curriculum framework can enhance important skills that will be valued in the workplace, such as locating and accessing information, organizing and displaying data, and creating persuasive arguments.
Core Content, including Math and Science	Sivin-Kachala and Bialo, <i>2000 research report on the effectiveness of technology in schools</i> , 2000.	"Computer-assisted instruction and drill-and-practice software can significantly improve students' scores on standardized achievement tests in all major subject areas."
Reading	Results! California Professional Development Institute. Research includes: Moats, <i>Educational Leadership</i> , March 2001; Reading/Language Arts Framework for California Public Schools Kindergarten Through Grade Twelve, Chapter 4; Fielding and Person, <i>Educational Leadership</i> , February 1994.	"Researched-based reading strategies can build a foundation for reading success in students of all ages. These include: Phonological awareness and decoding; reading fluency and word recognition; vocabulary and phrase meanings; teaching comprehension; and including writing response to reading. Administer measures of assessment and assign students materials and programs that will enable them to read with 90-95 percent accuracy. Teach individually or in small groups as much as possible. Schedule at least two hours a day for reading instruction for struggling readers. Monitor progress and adjust instruction and time allocations accordingly."
Writing	Gray, Thomas, D'Aoust, Willet and Olson, <i>Practical Ideas for Teaching Writing as a Process at the Elementary and Middle School Levels</i> , 1996	"Children possess the requisite linguistic knowledge to write. Teachers need to use every possible means to give student confidence in their linguistic knowledge. Writing is a process and teaching writing is the process of helping students use and perfect their linguistic knowledge and get it on paper. Academic language must be taught. Four strategies are suggested: reading aloud; instructional discussions; reading by students; writing by students."
Integration Strategies to Improve Teaching and Learning	Dwyer, ACOT: <i>History, finds, impact.</i> 1992	"Technologies provided a conceptual environment where children could collect information in multiple formats and then organize, play, visualize, link and eventually construct new ideas about relationships among facts and events. The same technology could then be used ... by students to communicate their

		ideas to other students.”
Staff Development: Adult Learning Models	Schacter, <i>The impact of education technology on student achievement: What the most current research has to say.</i> Milken Family Foundation web site, 1999	“The most important staff-development features include opportunities to explore, reflect, collaborate with peers, work on authentic learning tasks, and engage in hands-on active learning.”

**9.C. DELIVERY OF SPECIALIZED COURSES.**

CTAP has been and will continue to be Western Placer Unified School District’s most important source of information about quantity and quality of instructional technology. All software purchased and used will be state approved as meeting California content standards and aligned to the standards. As Western Placer Unified School District staff and administration will annually review our curriculum in relation to identified student needs for additional academic curricula and/or distance learning needs. Taking into account the total needs of all students, including social interaction and mentoring, staff and administration will research the most effective learning models and strategies. These will include site based enrichment software, individualized coursework and distance learning opportunities, community college, and online.

**GOAL: INCREASE ABILITY TO OFFER SPECIALIZED OR RIGOROUS ACADEMIC COURSES THROUGH THE USE OF TECHNOLOGY, INCLUDING DISTANCE LEARNING.**

**OBJECTIVE:** By June 2009, students will be engaged in a variety of projects and course work through the Internet and other distance learning technologies.

**Benchmarks:**

June, ‘07	Students in grades 10 through 12 complete multi-media projects and/or simulations in core academic areas.
June, ‘07	Students in grades 6 through 12 complete multi-media projects and/or simulations in core academic areas.
June, ‘08	Students in grades 6 through 12 participate in such activities as Digital Curriculum, Web Quest, Camp Internet and other online resources.
June, ‘09	Students in grades 9 through 12 participate in classroom web based and/or distance learning.

<b>Implementation Plan/Activities</b>	<b>Responsible Position</b>	<b>Timeline</b>	<b>Monitoring And Evaluation Activities</b>
Staff development in multi-media technology	District Office	August – January 2007	CTAP2 records, on site training, Technology Camp
Staff research Internet resources (simulations, Digital Curriculum, Web Quest, Camp Internet, lessons, courses, etc.)	Computer Aide, Teachers	August– January 2007	Lesson plans
Students in grades 10-12 complete multi-media projects and/or simulations	Teachers	January – June 2007	Completed assignments
Students in grades 6-12 complete multi-media projects and/or simulations	Teachers	January – June 2008	Completed assignments
Students in grades 9-12 participate in classroom web based and/or distance learning.	Teachers	January – June 2009	Completed assignments

Identify current offerings and review student needs for additional courses	Asst.Supt and Tech. Coor,	June 2007-09	Annually review learning opportunities for student use, success and appropriateness in light of student data and demographics at site and district levels.
Collaborate with appropriate institutions to develop/expand/narrow current offerings.	Asst.Supt and Tech. Coor,	June 2007-09	

## 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.

<b>1. PLAN DURATION CRITERION</b>	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>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>3-4</b>	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.
<b>2. STAKEHOLDERS CRITERION</b> Corresponding EETT Requirement(s): 7 & 11 (Appendix F)	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>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>3</b>	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>4-5</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>6</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	<b>6-7</b>	The plan references other district documents that guide the curriculum	The plan does not reference district curriculum goals.

various district and site comprehensive planning documents.		and/or establish goals and standards.	
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>7-8</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>9-10</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>10-11</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 goals.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
g. List of clear goals and a specific implementation plan to utilize technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs.	<b>12-13</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>14</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>7, 8, 10, 11, 12, 13</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>33-35</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.
<b>4. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 5 & 12 (Appendix F)	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
a. Summary of the teachers' and <u>administrators'</u> current technology skills and needs for professional development.	<b>14-17</b>	The plan provides a clear summary of the teachers' and administrators' current technology skills and needs for professional development. The findings are summarized in the plan by discrete skills to facilitate providing professional development that meets the identified needs and plan goals.	Description of current level of staff expertise is too general or relates only to a limited segment of the district's teachers and administrators in the focus areas or does not relate to the focus areas, i.e., only the fourth grade teachers when grades four to eight are the focus grade levels.
b. List of clear goals and a specific implementation plan for providing professional development opportunities based on the needs assessment and the Curriculum Component goals, benchmarks, and timeline.	<b>17</b>	The plan delineates clear, specific and realistic goals for providing teachers and administrators with sustained, ongoing professional development necessary to implement the Curriculum Component of the plan. The implementation plan clearly supports accomplishing the goals.	The plan speaks only generally of professional development and is not specific enough to ensure that teachers and administrators will have the necessary training to implement the Curriculum Component.
c. List of benchmarks and a timeline for implementing planned strategies and activities.	<b>17-19</b>	The benchmarks and timeline are specific and realistic. Teachers and administrators implementing the plan can easily discern what steps will be taken, by whom, and when.	The benchmarks and timeline are either absent or so vague that it would be difficult to determine what steps will be taken, by whom, and when.
d. Description of the process that will be used to monitor whether the professional development goals are being met and	<b>33-35</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.

whether the planned professional development activities are being implemented in accordance with the benchmarks and timeline.			
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<b>5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 6 & 12 (Appendix F)	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
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.	<b>20-21</b>	The plan clearly <u>summarizes</u> the <u>technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support</u> proposed to support the implementation of the district’s Curriculum and Professional Development Components. The plan also includes the list of items to be acquired, which may be included as an appendix.	The plan includes a description or list of hardware, infrastructure and other technology necessary to implement the plan, but there doesn’t seem to be any real relationship between the activities in the Curriculum and Professional Development Components and the listed equipment. Future technical support needs have not been addressed or do not relate to the needs of the Curriculum and Professional Development Components.
b. Describe the existing hardware, Internet access, electronic learning resources, and technical support already in the district that could be used to support the Curriculum and Professional Development Components of the plan.	<b>21</b>	The plan clearly summarizes the existing technology hardware, electronic learning resources, networking and telecommunication infrastructure, and technical support to support the implementation of the Curriculum and Professional Development Components. The current level of technical support is clearly explained.	The inventory of equipment is so general that it is difficult to determine what must be acquired to implement the Curriculum and Professional Development Components. The summary of current technical support is missing or lacks sufficient detail.
c. List of clear benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and	<b>22-30</b>	The benchmarks and timeline are specific and realistic. Teachers and administrators implementing the plan can easily discern	The benchmarks and timeline are either absent or so vague that it would be difficult to determine what

technical support required to support the other plan components.		what needs to be acquired or repurposed, by whom, and when.	needs to be acquired or repurposed, by whom, and when.
d. Description of the process that will be used to monitor whether the goals and benchmarks are being reached within the specified time frame.	33-35	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.
<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.	30	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).	31-32	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.	28-30	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.	32	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.	32	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.
<b>* In this document, the term "resources" means funding, in-kind services, donations, or other items of value.</b>			

7. <b>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 <u>technology's impact on student learning and attainment of the district's curricular goals</u> , as well as classroom and school management, will be evaluated.	<b>33-35</b>	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.	<b>33-35</b>	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.	<b>33</b>	The plan describes a process to report the monitoring and evaluation results to persons responsible for implementing and modifying the plan, as well as to the plan stakeholders.	The plan does not provide a process for using the monitoring and evaluation results to improve the plan and/or disseminate the findings.

8. <b>EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS TO MAXIMIZE THE USE OF TECHNOLOGY CRITERION</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. If the district has <u>identified adult literacy providers</u> , there is a description of how the program will be developed in collaboration with those providers.	<b>35</b>	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.	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.

<b>9. EFFECTIVE, RESEARCHED-BASED METHODS, STRATEGIES, AND CRITERIA</b> Corresponding EETT Requirement(s): 4 & 9 (Appendix F)	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Not Adequately Addressed</b>
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.	<b>36-37</b>	The plan describes the relevant research behind the plan’s design for strategies and/or methods selected.	The description of the research behind the plan’s design for strategies and/or methods selected is unclear or missing.
b. Description of thorough and thoughtful examination of externally or locally developed education technology models and strategies.	<b>36</b>	The plan describes references to research literature that supports why or how the model improves student achievement.	No research is cited.
c. Description of development and utilization of innovative strategies for using technology to deliver rigorous academic courses and curricula, including distance-learning technologies (particularly in areas that would not otherwise have access to such courses or curricula due to geographical distances or insufficient resources).	<b>37</b>	The plan describes the process for development and utilization of strategies to use technology to deliver specialized or rigorous academic courses and curricula, including distance learning.	There is no plan to utilize technology to extend or supplement the district’s curriculum offerings

# Appendix I – Education Technology Plan Benchmark Review

California Department of Education  
Enhancing Education Through Technology (EETT)  
Education Technology Plan Benchmark Review  
EETT-F02BR (rev. 09/04)

EETT-F02BR

## Education Technology Plan Benchmark Review For the grant period ending June 30, 2006

### IDENTIFYING INFORMATION:

CDS # 31-66951

**Applicant Name: Western Placer Unified School District**

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

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

In general, the plan was a learning process for the district and most of the percentage expectations were established at a higher level than attained. Many of the activities outlined in the section were accomplished somewhat, but not to the degree that was expected in the plan. In this way, the plan was a guide toward appropriate activities that were approved by the district and the committee used the plan as a reference tool to ensure activities were integrated. An example of these activities includes CBM use and the integration of powerpoint into teacher lessons. For the next plan we have set realistic goals for ourselves.

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

This goal was closer met than the prior. The School Technology Trainers were a functioning committee and support for the sites. We referenced the plan often and professional development was offered on an individual, site, and district level. The introduction of programs like *Making the Grade* and *AimswEB* offered opportunities for practical hands-on training for teacher and administrators. CTAP was of great

assistance both through assessment and course offerings. Hundreds of hours were spent on CTAP assessment and specific course offerings based on the CTAP needs identified through the CTAP assessment. The district bought a block of CTAP courses each year and paid teachers to take courses online when their project was approved through our local mentor. This aspect of the plan will remain intact in the future.

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

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

Scott Leaman

\_\_\_\_\_  
PRINTED NAME OF AUTHORIZED REPRESENTATIVE

Assistant Superintendent of Educational Services

\_\_\_\_\_  
TITLE OF AUTHORIZED REPRESENTATIVE

11/29/05

\_\_\_\_\_  
SIGNATURE DATE

**For CDE Use Only**

**Date Added:** \_\_\_\_\_

**Selected For Random Review:**  
\_\_\_\_\_

**Comments:**

## Appendix A

### Hardware Desktop Computer Standards

This standard computer configuration was designed for use as a minimum classroom workstation or in a computer laboratory as a basic client workstation. This configuration assumes:

1) This system will be used as a basic teacher/student workstation. This system is not intended for advanced applications support such as 3D rendering, AutoCAD or multimedia development.

This system is capable of running any of the standard applications currently in use, or projected to be in use, for the next 5 years, in both classrooms and computer labs campus wide. This configuration is a cost effective solution.

The standard hardware in this configuration should be sufficient to allow software technology to advance without requiring hardware upgrades for at least 5 years into the future.

<b>Equipment</b>	<b>Minimum for new purchases</b>	<b>Minimum to accept as a donation</b>
Processor	1.8Ghz Pentium Dual Core	2.8 GhzPentium P4
Memory	1 Gig	512 meg
Hard drive	80 Gig SATA	80 Gig
Removable Media	16x DVD +/- RW	32x CDRW
Operating System	Windows XP Pro SP2	Windows XP Pro SP2
Network Card	Ethernet 10/100	Ethernet 10/100
Monitor	17" LCD	15" LCD
Keyboard/Mouse	USB/Optical Scroll Mouse	USB

## Software Standards

The following chart shows the standard software that will be installed on new computers purchased for the district.

There are additional programs that will be installed at the school sites depending on where the computer is to be used. i.e.: Admin, teacher, student. The site technology committee at each site will determine these programs.

<b>Standard Software</b>	<b>Administration</b>	<b>Teacher</b>	<b>Student</b>
Microsoft Office Suite	MS Office Pro	MS Office Pro	MS Office Pro
Symantec Anti Virus	Corporate Edition	Corporate Edition	Corporate Edition
Operating System (OS)	XP Pro SP2	XP Pro SP2	XP Pro SP2
Student Information System	Aeries SIS		
Electronic Grade Book		Making the Grade (MTG)	

## Appendix B

# Technology Scope and Sequence

I = Introduce   R = Reinforce   IU = Independent User

- 1.) Use and understand basic computer related terms.
- 2.) Identify basic computer hardware components and peripheral devices.
- 3.) Demonstrate care and appropriate use of hardware.
- 4.) Use word processing program(s).
- 5.) Use spreadsheet program(s).
- 6.) Use database software.
- 7.) Use telecommunications/networking software.
- 8.) Use multimedia software.
- 9.) Use basic computer management skills.
- 10.) Demonstrate appropriate legal/ethical conduct.
- 11.) Use basic information management skills.
- 12.) Develop keyboarding skills.

### 1. Use and understand basic computer related terms

	1	2	3	4	5	6	7	8	9	10	11	12
a. Logon	I	I	R	IU	IU	IU	IU	IU	IU	IU	IU	IU
b. Curser	I	I	R	IU	IU	IU	IU	IU	IU	IU	IU	IU
c. Edit			I	R	R	IU	IU	IU	IU	IU	IU	IU
d. Word processor	I	I	R	R	IU	IU	IU	IU	IU	IU	IU	IU
e. Hardware	I	I	R	R	IU	IU	IU	IU	IU	IU	IU	IU
f. Software	I	I	R	R	IU	IU	IU	IU	IU	IU	IU	IU
g. Network	I	R	R	IU	IU	IU	IU	IU	IU	IU	IU	IU
h. Electronic mail (E-mail)				I	R	R	IU	IU	IU	IU	IU	IU
i. Menu	I	R	R	IU	IU	IU	IU	IU	IU	IU	IU	IU
j. Copyright				I	R	R	IU	IU	IU	IU	IU	IU
k. Software piracy				I	R	R	R	IU	IU	IU	IU	IU
l. Database					I	R	R	R	IU	IU	IU	IU
m. Internet				I	R	R	R	IU	IU	IU	IU	IU
n. Boolean search						I	R	R	IU	IU	IU	IU
o. Text						I	R	R	IU	IU	IU	IU
p. Graphic							I	R	R	R	IU	IU
q. File							I	R	R	R	IU	IU
r. Spread sheet								I	R	R	R	IU
s. Web page	I	R	R	R	R	IU	IU	IU	IU	IU	IU	IU

t. URL / web address	I	R	R	R	R	R	IU	IU	IU	IU	IU
u. Scroll / Drag / Click	I	I	R	R	R	R	R	IU	IU	IU	IU
v. Special keyboard keys: ESC, Shift, arrows, spacebar, backspace, Delete, Enter, Ctrl, etc...				I	R	R	IU	IU	IU	IU	IU
w. Multimedia					I	R	R	R	IU	IU	IU
x. Desktop publishing					I	R	R	R	R	IU	IU

**2. Identify basic computer hardware components and peripheral devices:**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
a. Keyboard and mouse	I	R	R	IU	IU	IU	IU	IU	IU	IU	IU	IU
b. Monitor	I	R	R	IU	IU	IU	IU	IU	IU	IU	IU	IU
c. Printer	I	R	R	IU	IU	IU	IU	IU	IU	IU	IU	IU
d. Hard drive		I	R	R	R	IU	IU	IU	IU	IU	IU	IU
e. Floppy drive			I	R	R	IU	IU	IU	IU	IU	IU	IU
f. Disk		I	R	R	R	IU	IU	IU	IU	IU	IU	IU
g. CD ROM	I	R	R	IU	IU	IU	IU	IU	IU	IU	IU	IU
h. Memory									I	IU	IU	IU
i. File server									I	R	R	IU

**3. Demonstrate care and appropriate use of hardware**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
a. Demonstrate appropriate care and use of keyboard and mouse	I	R	R	IU	IU	IU	IU	IU	IU	IU	IU	IU
b. Demonstrate appropriate care and use of computer disk	I	R	R	IU	IU	IU	IU	IU	IU	IU	IU	IU
c. Demonstrate appropriate care and use of CD ROM	I	R	R	IU	IU	IU	IU	IU	IU	IU	IU	IU
d. Demonstrate ability to properly turn computer on/off independently	I	R	R	IU	IU	IU	IU	IU	IU	IU	IU	IU
e. Demonstrate appropriate care and use of printer	I	R	R	R	R	R	R	R	R	IU	IU	IU
f. Demonstrate use of special keys: ESC, Shift, arrow keys, spacebar, Delete, Enter, etc...	I	R	IU	IU	IU	IU	IU	IU	IU	IU	IU	IU

**4. Use word processing program(s)**

**I. Create and save a new document**

a. Identify intended use				I	R	R	IU	IU	IU	IU	IU	IU
b. Use Save and Save As				I	R	R	IU	IU	IU	IU	IU	IU

**II. Open, view and print documents**

a. Use Print Preview				I	R	R	IU	IU	IU	IU	IU	IU
b. Print entire file or selected parts				I	R	R	IU	IU	IU	IU	IU	IU

**III. Format documents**

a. Justify text				I	R	R	IU	IU	IU	IU	IU	IU
b. Select font style and size				I	R	R	IU	IU	IU	IU	IU	IU
c. Line spacing					I	R	IU	IU	IU	IU	IU	IU
d. Select page orientation							I	R	R	IU	IU	IU
e. Adjust Margins								I	R	IU	IU	IU
f. Set tabs									I	R	R	IU
g. Indent										I	R	R

h. Use headers, footers, pagination I R R R IU IU

**IV. Edit text**

a. Change font style and size I R R R IU IU IU IU IU IU

b. Cut, copy, paste, and delete text I R R R IU IU IU IU IU IU

c. Using spell check I R R IU IU IU IU IU IU IU

d. Use thesaurus I R IU IU IU IU

e. Use find and replace feature I R R IU IU IU

**V. Use desktop publishing techniques**

a. Columns I R R IU IU IU IU

b. Tables I R R R R R

c. Insert graphics I R IU IU IU IU IU IU IU IU

**VI. Use a word processor in a real world context to:**

a. Write stories or poems I R R R R R R IU IU IU IU

b. Type reports I R R R R R IU IU IU IU

c. Generate letters I I I R R R IU IU IU IU

d. Add entries to a bibliography I R R R R R R R R IU

e. Create a resume I R R R R

**5. Use spreadsheet program(s)**

1 2 3 4 5 6 7 8 9 10 11 12

**I. Create and save spreadsheets**

a. Identify intended use I I R R R IU IU IU

b. Specify data organization I I R R R IU IU IU

c. Determine columns and rows I I R R R IU IU IU

d. Set cell attributes I I R R R IU IU IU

e. Create simple calculation formulas I I R R R IU IU IU

f. Enter and edit data I I R R R IU IU IU

**II. Retrieve data**

a. Sort data I I R R R IU IU IU

b. Create chart(s) I I R R R IU IU IU

c. Print spreadsheets I I R R R IU IU IU

**III. Edit data**

a. Insert column or row I I R R R IU IU IU

b. Delete column or row I I R R R IU IU IU

c. Use fill down / across I I R R R IU IU IU

d. Save updated spreadsheet I I R R R IU IU IU

**IV. Generate graphs from spreadsheets**

a. Determine and create appropriate type of graph I I R R R IU IU IU

b. Incorporate graphs in word processing I I R R R IU IU IU

**6. Use database program(s)**

1 2 3 4 5 6 7 8 9 10 11 12

**I. Create and save databases**

a. Identify intended use I R R R IU

b. Specify data organization I R R R IU

c. Name fields I R R R IU

d. Set field attributes I R R R IU

e. Enter data in consistent form I R R R IU

f. Edit data as needed I R R R IU

**II. Retrieve data**

a. Sort I R R R IU

- b. Search for specific data by field I R R R IU
- c. Create and print reports I R R R IU

**III. Edit data**

- a. Add records to a file I R R R IU
- b. Add fields to a record I R R R IU
- c. Delete records from a database file I R R R IU
- d. Delete a field from a record I R R R IU
- e. Save updated records I R R R IU
- f. Determine appearance of page I R R R IU
- g. Insert headers / footers I R R R IU
- h. Print report I R R R IU

**7. Use telecommunications / networking program(s)**

1 2 3 4 5 6 7 8 9 10 11 12

- a. Logon using numbers/names I I R R R R
- b. Save files to appropriate location I R R R R IU IU IU IU IU
- c. Use multiple storage drives (A:\; C:\; \\server\share) I R R R IU IU IU IU IU
- d. Locate files in a directory I R R R R IU IU IU IU
- e. Use web browser I R IU IU IU IU IU IU IU
- 1. Copy and enter a URL/web address I R IU IU IU IU IU IU IU
- 2. Use hyperlinks I R IU IU IU IU IU IU IU
- 3. Use navigational tools: back, forward, etc... I I R R R IU IU IU IU IU IU IU
- 4. Use pull down menus I I R IU IU IU IU IU IU IU
- 5. Transfer information/graphics from internet to local computer R R IU IU IU IU IU IU IU

**8. Use multimedia software**

1 2 3 4 5 6 7 8 9 10 11 12

- a. Use graphic tools: pencil, eraser, etc... I R R IU IU IU IU IU IU IU IU
- b. Change colors and patterns of tools I R R IU IU IU IU IU IU IU IU
- c. Edit graphics I I R IU IU IU IU IU IU IU
- d. Incorporate audio and video into project I I R IU IU IU IU IU IU IU
- e. Create links between slides I I R IU IU IU IU IU IU IU
- f. Move slides I R R IU IU IU IU IU IU IU
- g. Incorporate text from outside sources into project I R R R IU IU IU IU
- h. Incorporate clip art, digital pictures, and graphics from outside source into project I R R R IU IU IU IU
- I. Create PowerPoint presentations I I R R R R R R IU

**9. Demonstrate basic computer management skills**

1 2 3 4 5 6 7 8 9 10 11 12

- a. Demonstrate ability to access and exit software I R R IU IU IU IU IU IU IU IU
- b. Demonstrate ability to use disk utilities (format, copy, delete, save, etc...) I I R R IU IU
- c. Demonstrate ability to manage files (save, retrieve) I R R IU IU IU IU IU IU IU
- d. Demonstrate ability to organize files I R IU IU IU IU IU IU

**10. Demonstrate appropriate legal/ethical conduct**

	1	2	3	4	5	6	7	8	9	10	11	12
a. Demonstrate responsible use of computers	I	R	R	R	R	R	R	R	R	R	R	R
b. Demonstrate appropriate computer etiquette	I	R	R	R	R	R	R	R	R	R	R	R
c. Respect the privacy of all users through use of security rules outline in WPUSD AUP.				I	R	R	R	R	R	R	R	R
d. Obey copyright laws					I	R	R	R	R	R	R	R
e. Cite electronic sources appropriately					I	R	IU	IU	IU	IU	IU	IU

**11. Demonstrate basic information management skills**

	1	2	3	4	5	6	7	8	9	10	11	12
<b>I. Search</b>												
a. Conduct keyword search						I	R	R	IU	IU	IU	IU
b. Conduct simple Boolean search							I	R	R	IU	IU	IU
c. Conduct complex Boolean search								I	R	R	IU	IU
d. Conduct categorical search				I	I	R	R	R	IU	IU	IU	IU
e. Search online reference resources				I	I	I	I	I	R	R	IU	IU
<b>II. Library catalog</b>												
a. Access catalog from search station using Mandarin software									I	R	R	IU
b. Access Library Catalog										I	I	R
c. Access catalog via title/subject/author/keyword											I	R
<b>III. Evaluation/Assessment</b>												
a. Select information appropriate to problem/user												
b. Assess validity of website												

**12. Keyboarding**

	1	2	3	4	5	6	7	8	9	10	11	12
a. Touch type (30wpm)	I	R	R	R	R	R	IU	IU	IU	IU	IU	IU

## Appendix B

# Scope and Sequence Grade Level Breakdown

For details pertaining to this document please refer to the WPUSD Technology Scope and Sequence (TSS)

## GRADE 1 WPUSD TECHNOLOGY SCOPE AND SEQUENCE BREAKDOWN

The following Technology Skills are **introduced** in first grade with an emphasis on introducing basic computer operation and responsible use.

**Terminology:** (TSS - 1)

- Logon Menu Hardware
- Cursor Web Page Drag
- Word Processor Scroll Network
- Software Click

**Hardware and Peripheral Devices:** (TSS - 2/3)

- Care and appropriate use of:
  - Keyboard Mouse Computer On/Off
  - Monitor Printer Special Keyboard Keys
  - CD ROM Computer Disks

**Telecommunications/Networking:** (TSS - 7)

Navigational Tools: Back, Forward, Home, Bookmarks, etc.

**Multimedia:** (TSS - 8) (Such as MS Paint)

Graphic Tools: Pencil, eraser, paint can, line/shape tools, etc.

Change colors and patterns of tools

**Management Skills:** (TSS - 9)

- Access and Exit Software Applications

**Ethics:** (TSS - 10)

- Responsible use of computers
- Appropriate computer etiquette

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## GRADE 2 SCCS TECHNOLOGY SCOPE AND SEQUENCE BREAKDOWN

The following Technology Skills are **introduced** in second grade with an emphasis on beginning word processing.

**Terminology:** (TSS - 1)

Edit

Internet

URL/Web Address

**Hardware and Peripheral Devices:** (TSS - 2)

Hard Drive

Disk

**Word Processing:** (TSS - 6)

- Write Stories or Poems
- 

**GRADE 3 SCCS TECHNOLOGY SCOPE AND SEQUENCE BREAKDOWN**

The following Technology Skills are **introduced** in third grade with an emphasis on successful use of word processing software, online library catalog, and beginning keyboarding.

**Terminology:** (TSS - 1)

- Copyright, Graphic, Text, Software Piracy, File

**Hardware and Peripheral Devices:** (TSS - 2/3)

Floppy Drive

Special Keyboard Keys: ESC, Shift, Arrow, etc.

**Word Processing:** (TSS - 4)

**Create and Save a New Document:** Identify intended use, Use Save and Save As

**Open, View and Print Documents:** Use print preview, Print entire file or selected parts

**Format Documents:** Justify text, Select font, style and size

**Edit Text:** Change font, style and size, Cut, copy, paste, and delete, Use spellchecker

**Use Desktop Publishing Techniques:** Insert graphics

**Use a Word Processor:** Type Report and add entries to a bibliography, Generate letters

**Telecommunications/Networking:** (TSS - 7)

- Save files to appropriate location
- Use pull-down menus from the web browse

**Computer Management:** (TSS - 9)

- Saving and retrieving

**Ethics:** (TSS - 10)

- Respect privacy of users as spelled out in WPUSD AUP Policy online

**Information Management:** (TSS - 11)

- Search: Conduct categorical search and Search online reference resources
- Library Catalog: Access catalog from search station using Mandarin software and Access catalog via title, subject, author, keyword
- Evaluation/Assessment: Select information appropriate to problem/user

**Keyboarding:** (TSS - 12)

- Touch Type (30wpm)

**Independent User:**

Upon completion of 3<sup>rd</sup> grade, students will be independent Users of the following:

- Special Keyboard Keys

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## **GRADE 4 SCCS TECHNOLOGY SCOPE AND SEQUENCE BREAKDOWN**

At the fourth grade level, students are focusing most of their attention in three areas: Telecommunications, Multimedia, and Information Management. In the area of Telecommunications, students are introduced to the many features of a web browser such as Internet Explorer. Fourth grade is the first year in which students explore multimedia software such as PowerPoint. In the area of Information Management, students build on the skills they were introduced to in third grade, with an emphasis on evaluating web sites. In the area of Word Processing, students are practicing skills they have been introduced to in earlier grades.

The following Technology Skills are **introduced** in fourth grade:

**Terminology** (TSS - 1):

- E-mail
- Database
- Special keyboard keys: ESC, Shift, arrows, spacebar, backspace, delete, enter, alt, ctrl, etc.
- Multimedia
- Desktop publishing

**Word Processing** (i.e. MS word) (4):

- Formatting: line spacing
- Generate a letter in a real context

### **Telecommunications/Networking (TSS - 7):**

- Use multiple storage devices (a:\, c:\ and e:\, Zip Drives, etc)
- Locate files in a directory
- Use a web browser (Internet Explorer):
- Copy and enter a URL, Use hyperlinks, Use browser tools (back, forward, reload, etc.), Use pull-down menus, Save internet information to desktop or disk

### **Multimedia (i.e. PowerPoint) (TSS - 8):**

- Edit graphics
- Incorporate video/audio
- Create links between slides
- Move slides
- Create slide shows

### **Ethics (TSS - 10):**

- Respect privacy of users as spelled out in WPUUSD AUP

### **Information Management (TSS - 11):**

- Perform a categorical search
- Access school's library catalog using title/subject/author/keyword searching (Mandarin)
- Select information appropriate to the problem/user
- Assess validity of web site

By the end of Fourth Grade, students should be **Independent Users** of most of the skills of identification of computer components (TSS Skills Area 2), and skills of proper care/use of computer hardware (TSS Skills Area 3) and the use of graphics tools in multimedia software (ie: Paint & PowerPoint) (TSS Skills Area 8).

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## **GRADE 5 SCCS TECHNOLOGY SCOPE AND SEQUENCE BREAKDOWN**

A major skill introduced in Fifth Grade is the use of spreadsheet programs. In addition, students are beginning more advanced techniques of searching on the World Wide Web (Information Management), and are using more sophisticated skills in developing multimedia projects.

The following Technology Skills are **introduced** in fifth grade

### **Terminology (TSS - 1):**

- Boolean Search and Spreadsheet

### **Word Processing (i.e. MS Word) (TSS - 4):**

- Generate letters in real context

### **Spreadsheet** (i.e. MS Excel) (TSS - 5):

- Identify use
- Specify data organization
- Determine columns and rows and set cell attributes
- Create simple calculation formulas (+, -, X, /)
- Enter and edit and sort data
- Create charts
- Print spreadsheet
- Insert/delete column or row
- Use fill down/across
- Save updated spreadsheet
- Determine and create appropriate graph and incorporate graphs into word processing

### **Telecommunications/Networking** (TSS - 7):

- Transfer information from internet to desktop or disk

### **Multimedia** (i.e. PowerPoint) (TSS - 8):

- Edit graphics
- Incorporate audio & video into project
- Create links between slides
- Incorporate text from outside sources
- Incorporate clip art, digital pictures, and graphics from outside sources
- Create slide show

### **Information Management** (TSS - 11):

- Perform keyword search (Web search, etc.)
- Search online reference resources (World Book Online, etc.)
- Access library catalog via title/subject/author/keyword (Mandarin)
- Assess validity of websites

By the end of Fifth Grade, students are expected to be **independent users of** most of the skills in the first three areas spelled out in the Scope & Sequence: Terminology, Identification of Computer Components, and Proper Use and Care of Computer Hardware. In addition, students are expected to be independent users of most of the skills involved in using a web browser such as Internet Explorer.

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## **GRADE 6 SCCS TECHNOLOGY SCOPE AND SEQUENCE BREAKDOWN**

Sixth Grade is a time for students to reinforce computer skills introduced in earlier grades. Still, there are three areas in which students are introduced to new skills: students begin to use more sophisticated tools while working in Spreadsheets; students are completing more complex searches on the internet in the area of Information Management; and students are beginning to organize their own files in the area of Computer Management.

The following Technology Skills are to be **introduced** in sixth grade:

**Word processing** (TSS - 4):

- Select page orientation
- Create columns

**Spreadsheets** (TSS - 5):

- Identify use
- Specify data organization
- Determine columns and rows
- Set cell attributes
- Create simple calculation formulas
- Enter and edit data
- Sort data
- Create charts
- Print spreadsheet
- Insert column or row
- Delete column or row
- Use fill down/across
- Save updated spreadsheet
- Determine and create appropriate graph
- Incorporate graphs into word processing

**Multimedia** (PowerPoint) (TSS - 8):

- a. Create Slide Show presentation

**Computer management** (TSS - 9):

- Demonstrate ability to organize files

**Information management** (TSS - 11):

- a. Conduct simple Boolean search (on Mandarin or with search engine)
- b. Conduct complex Boolean search (on Mandarin or with search engine)
- c. Search online reference sources (World Book Online, etc.)

In Sixth Grade, students are expected to be independent users of most of the skills in the following areas: Terminology, Identification of Computer Components, Proper Use of Computers, Word Processing, and use of a web browser such as Internet Explorer (Telecommunications).

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## **GRADES 7 & 8 SCCS TECHNOLOGY SCOPE AND SEQUENCE BREAKDOWN**

**Incoming:**

Students should be independent users of the following skills prior to entering the seventh grade.

- Use and understand basic computer related terms except database, Boolean search, spreadsheet, URL, scroll, drag, click, multimedia, and desktop publishing. (TSS - 1)
- Identify basic computer hardware components and peripheral devices. (TSS - 2)
- Demonstrate care and appropriate use of hardware except a printer. (TSS - 3)
- Use a word processing program except for certain aspects of formatting and editing. (TSS - 4)
- Use a web browser. (TSS - 7)
- Use multimedia software except incorporating text and graphics from outside sources and creating animation and slide shows. (TSS - 8)

### **Reinforcing:**

The following skills **have been introduced** in elementary school and need to be reinforced but not independent users.

- Use and understand the following basic computer terms: spreadsheet and desktop publishing. (TSS - 1)
- Demonstrate care and appropriate use of a printer. (TSS - 3)
- Using a spreadsheet program. (TSS - 7)
- Demonstrate appropriate legal/ethical conduct. (TSS - 10)

### **Introducing:**

The following skills **need to be introduced**.

- Creating margins, setting tabs, and using headers, footers, and pagination. (TSS - 4)
- Use a thesaurus and the find and replace feature. (TSS - 4)
- Use database programs. (TSS - 6)
- Create advanced slide show presentations. (TSS - 8)
- Demonstrate ability to use disk utilities. (TSS - 9)
- Search online reference resources. (TSS - 11)
- Access union catalog/public library. (TSS - 11)

### **Outgoing:**

Your students should be considered independent users with the following skills when they arrive at high school.

- Use and understand the following computer related terms: database, Boolean search, spreadsheet, URL, scroll/drag/click, and multimedia. (TSS - 1)
- Use the following word processing skills: select page orientation, create margins, using thesaurus, creating columns, and using a word processor in a real world context to write stories or poems, type reports, and generate letters. (TSS - 4)
- Use the following networking skills: save files to appropriate location, use multiple storage drives, and locate files in a directory. (TSS - 7)

- Use the following multimedia skills: incorporate text from outside sources into a project and incorporate a variety of graphics from outside sources into a project. (TSS - 8)
- Demonstrate the ability to organize files. (TSS - 9)
- Demonstrate the following basic information management skills: conduct a key word, a Boolean search, or a categorical search. (TSS - 11)
- Touch type at 30 wpm. (TSS - 12)

## GRADES 9 - 12 SCCS TECHNOLOGY SCOPE AND SEQUENCE BREAKDOWN

### Incoming:

Prior to ninth grade students should be independent users of the following skills. For further explanation refer to appropriate section of attached WPUSD Technology Scope and Sequence (TSS).

- Use and understand basic computer related terms. (TSS - 1)
- Identify basic computer hardware components and peripheral devices except file server and RAM. (TSS - 2)
- Demonstrate care and appropriate use of hardware except a printer. (TSS - 3)
- Use the following word processing skills: create and save a new document, open/view/print documents, select page orientation, create margins, use thesaurus, create columns, and use a word processor in a real world context to write stories or poems, type reports, and generate letters. (TSS - 4)
- Use a web browser. (TSS - 5)
- Use the following networking skills: save files to appropriate location, use multiple storage drives, and locate files in a directory. (TSS - 7)
- Use the following multimedia skills: incorporate text from outside sources into a project and incorporate a variety of graphics from outside sources into a project. (TSS - 8)
- Demonstrate the ability to organize files. (TSS - 9)
- Demonstrate the following basic information management skills: conduct a key word, a Boolean search, or a categorical search. (TSS - 11)
- Touch type at 30 wpm. (TSS - 12)

### Reinforcing:

The following skills **have been introduced** prior to ninth grade and **need to be reinforced** and students need to be **independent users** prior to graduation.

- Use and understand the following basic computer terms: spreadsheet and desktop publishing. (TSS - 1)
- Identify these computer components: file server and RAM. (TSS - 2)
- Demonstrate care and appropriate use of a printer. (TSS - 3)
- Use word processing skills to format documents: set tabs, use headers/footers/pagination, use find & replace feature, create tables, add entries to a bibliography, create a resume. (TSS - 4)
- Use a spreadsheet program(s). (TSS - 5)

- Use database program(s). (TSS - 6)
- Use multimedia software to create animation and slide show. (TSS - 8)
- Demonstrate ability to use disk utilities to format, copy, delete, create backup, and save files. (TSS - 9)
- Demonstrate appropriate legal/ethical conduct. (TSS - 10)
- Search online reference resources. (TSS - 11)
- Access union catalog/public library. (TSS - 11)

## Appendix D

### Glossary

alternative input device	Input devices include the keyboard, mouse, scanner, and other devices for specific disabilities.
CD-ROM (R, RW)	An Acronym for Compact Disc-Read Only Memory. R-recordable media, RW-recordable and rewriteable media.
database	Electronic list of information that can be quickly sorted and searched.
DVD	An Acronym for Digital Video Device
Frame Relay	Frame Relay is a telecommunications service designed for cost-efficient data transmission between LAN's (Local Area Networks) and end-points in a WAN (Wide Area Network), as well as for high speed Internet access.
ISP	Internet Service Provider. A local, regional, or nationwide company from which you purchase access to the Internet.
LAN	A Local Area Network is comprised of two or more computers, which share resources, such as printers and software.
multimedia	More than one form of media. Graphics, text, sound, and motion integrated together.
Optical Fiber	Optical fiber (or "fiber optic") is a transmission medium associated with the transmission of information as light pulses along a glass or plastic wire or fiber. Optical fiber carries a lot more information than copper wire and is usually not subject to electromagnetic interference and the need to retransmit signals.
PDA	Personal Digital Assistant devices such as Palm, Handspring, Ipaq.
PowerPoint	An example of a multimedia authoring program.
scanner	A device to convert documents and pictures into electronic media.
server	A computer that is accessed by other computers (clients) to share resources. The server is usually the most powerful computer in a LAN.
T1	High speed connection with a transmission rate of 1.54 Megabytes per second.
telecommunications	Communicating with other computers over LAN's and WAN's
WAN	Wide Area Network. A network that interconnects geographically-distributed computers or LANs via dedicated data circuits using Frame Relay or other data communications technologies.