

# MERCED CITY SCHOOL DISTRICT EDUCATION TECHNOLOGY PLAN

July 1, 2010 - June 30, 2015



County Name: Merced County Office of Education  
District Name: Merced City School District  
County and District Code: 24-65771  
District Phone Number: 209-385-6640

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**For the grant period ending June 30, 2015**

**IDENTIFYING INFORMATION:**

**CDS # 24-65748**

**Applicant Name: Merced City 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.

*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)*

During the last three years, the district has implemented a number of technologies to support student learning and increases in student achievement. The district has implemented READ 180 at every school site with students accessing this technology on a daily basis. Additionally, the district's new math adoption includes a variety of resources for both students and parents to support student learning. Some resources include: websites, practice assessments, teacher editions and planning. All programs were based on California Content Standards as well as meeting our particular students' special learning needs. Programs such as FASTT Math, WorldBook Online, ALEKS, Destiny, Microsoft Office and CaliforniaStreaming have been utilized to support student learning and the district is closely examining whether to continue to use these resources. The district continues to work diligently to provide instructional staff with the best technology tools and infrastructure possible for meeting the challenging needs of its diverse student population.

*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)*

For the programs mentioned above, the district has provided systematic professional development. The district provided staff with professional development on the use of our data management system (Data Director), which will allow staff to identify instructional needs. Training has been ongoing and provided in both formal and informal settings. With the launch of new instructional or student data programs, training has been made available to key users. In addition each site has a trained technician that can provide one-on-one tutorials. More recently, a cadre of in-house staff has launched a series of formal professional development opportunities for staff wishing to acquire basic skills or more advanced skills in a range of identified areas. Staff is acutely aware of the critical need to provide training so technology tools can be used to the maximum benefit to students.

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.

PRINTED NAME OF AUTHORIZED REPRESENTATIVE  
**RoseMary Parga Duran, Ed.D.**

TITLE OF AUTHORIZED REPRESENTATIVE  
**Superintendent**

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

\_\_\_\_\_

**For CDE Use Only**

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

Selected For Random Review:  
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## *District Summary*

The Merced City School District lies in the middle of the agriculturally rich San Joaquin Valley, the most productive agricultural area in the world. Located near the heart of the state, Merced is within a two-hour driving distance of Yosemite National Park with its spectacular waterfalls and miles of hiking trails and to the Pacific beaches and the lovely seaside communities of Monterey and Carmel.

The city of Merced, which has more than 80,000 residents, is known for its wide tree-lined streets, open spaces, 29 tree-shaded parks, and 12 miles of class-one bike paths. The Castle Air Museum and Courthouse Museum are some of the many activities enjoyed by local residents. Several major colleges and universities are located within easy commuting distance including California State University, Fresno; California State University, Stanislaus; Merced College, and University of California, Merced.

The Merced City School District is energetic and progressive. Thirteen hundred dedicated certificated and classified staff serve 10,800<sup>+</sup> students on a traditional schedule in thirteen K-5 elementary schools, all with state preschool classes, and four 6-8 middle schools. The district is also committed to the highest quality instructional program for all children. Parents, teachers, and administrators are involved in regular assessment of program quality and ongoing program development in order to address the needs of students and to ensure alignment with the rigorous California State Standards and Frameworks. Quality staff development is a high priority for the district.

Challenges to student learning include language barriers and a high poverty level. Of the 10,876 students enrolled, 56 percent are Hispanic, 21 percent are White, 12 percent are Asian, 8 percent are African American, and the remaining 3 percent represent students of other ethnicities. Approximately 74 percent of the students qualify for free or reduced price meals. English language learners comprise 27 percent of the student population. Correspondingly, the Home Language and CBEDS Surveys for students indicate that Spanish is the predominant primary home language for English Learners. The district student to teacher average is 24 students per teacher for K-5<sup>th</sup> grade classes and 30 students per teacher for grades sixth through eighth grade classes.

Every classroom from kindergarten through grade eight has a minimum of one teacher computer and at least three student computers with some classrooms having as many as ten. Each teacher has a "teacher station" available for classroom use for electronic attendance as well as lesson delivery support. Up to five, but a minimum of three, additional computers are in classrooms and available for student use. In addition each site has at least one mobile laptop lab that is shared amongst the classrooms throughout the year with school-wide wireless access. Six of the district's schools have permanently mounted LCD projectors in every classroom. Each elementary site has one computer lab, which provides students access to supplementing Reading/Language Arts programs to support language development. Each school's library

also has a minimum of four networked computers for student use. The use of technology in teaching and learning is significant in all classrooms with a strong emphasis upon utilizing technology to provide interventions for students struggling with math or reading/language arts content standards.

There are eighteen schools in the district, thirteen K-5<sup>th</sup> grade elementary schools, four middle schools serving students in grades six, seven and eight, and one community day school serving students K-8<sup>th</sup> grades. This plan is written to serve all schools in the district.

School	Total Enroll	Number of Teachers	Grades Served	2009 API Score	Number of Classified Staff	Number of Computers	Number of Students per Computer	# Classrooms with Internet
<b>Elementary</b>								
Givens	535	27	K-5	755	13	129	4.1	29
Reyes	612	31	K-5	721	23	141	4.3	33
Peterson	733	35	K-5	832	17	107	6.9	37
Wright	515	25	K-5	761	14	115	4.5	25
Stowell	464	25	K-5	704	15	59	7.9	21
Chenoweth	683	33	K-5	845	19	163	4.2	31
Franklin	494	28	K-5	757	19	75	6.6	29
Stefani	511	22	K-5	715	13	76	6.7	25
Fremont	548	27	K-5	746	20	142	3.9	27
Muir	500	26	K-5	769	22	140	3.6	26
Gracey	566	27	K-5	712	19	165	3.4	28
Burbank	581	28	K-5	749	19	102	5.7	33
Sheehy	535	28	K-5	740	23	136	3.9	31
<b>Middle Schools</b>								
Cruickshank	929	36	6-8	759	23	286	3.2	43
Hoover	800	34	6-8	703	31	251	25.8	31
Rivera	943	37	6-8	731	27	214	4.4	35
Tenaya	905	36	6-8	690	22	255	3.5	34
<b>ASAM</b>								
Community Day	22	3	K-8	-	2	5	4.4	3
<b>District Totals</b>	<b>10876</b>	<b>508</b>	<b>K-8</b>	<b>733</b>	<b>3341</b>	<b>2341</b>	<b>4.6</b>	<b>1165</b>

Our technology committee began reviewing our former research-based 2005-2010 Education Technology Plan in the spring of 2009. We assessed our achievements to date, discussed lessons learned, determined our new district vision for the next five-years, and developed strategies to get us there. Our revised tech plan envisions a 21<sup>st</sup> century teaching and learning environment grounded in the reality of our knowledge-based, Digital Age. Used as a tool, not an end in itself, technology will be an integral part of the way we work, teach, and learn. Students will use technology seamlessly, as an integral part of the learning process to enhance their critical thinking, problem solving skills, and communication skills. Educators will learn to use technology to create teachable moments, not just wait for them and to provide just-in-time learning interventions. District staff will use technology to facilitate effective and efficient organizational operations and decision-making within the district. Interactive communication and activities among home, school, and community will increase and improve student learning.

# **ACKNOWLEDGMENTS**

## **School Board of Trustees**

Mr. Darrell Cherf - President  
Dr. Susan Walsh - Clerk  
Mr. Adam Cox - Member  
Ms. Jessica Kazakos - Member  
Mr. Gene Stamm - Member

## **Superintendent**

RoseMary Parga Duran, Ed.D, Superintendent

## **Curriculum / Data Personnel**

Annie J. Dossetti - Director of Curriculum/Staff Development  
Dr. Tammie Calzadillas - Director of State and Federal Programs  
Lila Lesly – Curriculum Coordinator  
Laura Verduzco-Thurman – Department Secretary

## **Information Technology Staff**


Greg Blount - Director of Information Technology/YEP  
Mark Hendren - PC Support Technician  
Ber Lor - Network Support Technician  
John De LaCruz – Network Support Technician  
Adrian Rawlings - Networking Specialist  
Chan Saelee - Data Processing Specialist  
Renee Bunnell – Data Processing Specialist

## **Teachers**


Lilia Pangelina  
Sarah Morgan

## **Government Agencies**

CTAP Region 7, Ed Tech Coordinator – Brian Curwick  
Merced County Office of Education-John Magneson



The Merced City School District updated technology plan covers 5 years, from July 1, 2010 – June 30, 2015. It will serve as the primary tool to guide the district's acquisition, maintenance and integration of technology. Our Technology Committee will review all components and objectives set forth in this plan annually with a major review after 3 years. Any modifications identified through such review will be communicated to both the District Superintendent and School Board; the Technology committee will then work with the Superintendent to implement any required revisions and update the approved technology plan through addendums especially if they impact E-rate.



Our ongoing technology planning is guided by a collaborative vision of how technology can help students meet grade level academic content standards and reach the desired learning outcomes identified by our school district and its community. Annually in the fall, our education technology advisory group (eTAG) reviews the district's curriculum goals and current student achievement data and then determines how technology may be effectively and efficiently used to help students reach the academic goals for the year. Our eTAG is comprised of district and site representatives who are responsible for implementing the plan, including district curriculum, data, and information technology staff; site administrators, teachers, students, and parents as well as partners in higher education, community non-profit groups, and local businesses. The CTAP representative on our tech plan team offered technical assistance with: the data analysis and revision of our goals and objectives; professional development planning and implementation; EETT Formula Funding; E-rate; K12 Vouchers; compliance issues; hardware, software, and infrastructure.

eTAG meets quarterly to:

- Evaluate the status of the current technology plan and make adjustments if needed.
- Monitor progress on current technology projects.
- Gather and evaluate district technology data with regard to hardware, wiring, resources, professional development, and projects.
- Collect and analyze survey and technology data.
- Identify and update common technology needs and issues.

In addition to quarterly eTAG meetings, our district website and e-mail provides stakeholders with a mechanism for ongoing updates and input regarding the objectives, funding, budgets, and curricular guidelines contained within our technology plan.

## **Stakeholder Support of Tech Plan**

The following list identifies the variety of stakeholders that participated in our district's tech planning process.

### **District Curriculum Personnel**

The Superintendent, Assistant Superintendent, Educational Services, Director of State and Federal Programs, Curriculum Coordinator.

#### ***Development & Support Roles:***

Representatives on our Tech Plan team promote, direct, and facilitate the technology team's development of broad and inclusive goals and objectives for curriculum, resources, and operations that include technology. Our curriculum personnel integrate 21<sup>st</sup> century skills into the overall vision for student achievement and into every aspect of learning, teaching, and administrating. Curriculum personnel define and unpack clear and specific standards-aligned academic objectives by grade and subject; support research-based best practices and instructional programs; develop student assessment and data monitoring systems, monitor school performance, and make adjustments based on school performance.

### **District Technology Personnel**

Director of Information and Technology, Data Processing Specialist, Network Support Technician, PC Support Technician

#### ***Development & Support Roles:***

Representatives on our Tech Plan team provide overall coordination of the technology implementation and oversight team, funding resources, and the implementation of the goals and objectives set forth in this updated technology plan.

### **District Financial Personnel**

Chief Financial Officer and staff

#### ***Development & Support Roles:***

Representatives on our Tech Plan team provide coordination of technology funds and budget issues.

### **Site Administration**

Site Principals, Learning Directors and Assistant Principals

#### ***Development & Support Roles:***

Representatives on our Tech Plan team provide site-based updates on tech plan implementation and needs; monitor research-based best practices and instructional programs; provide input on how technology can better support the teaching of standards-aligned academic objectives.

### **Site Teachers and Library Media Teachers**

Teachers representation from our Elementary and Middle Schools

#### ***Development & Support Roles:***

Representatives on our Tech Plan team provide input on efforts and outcomes using research-based technology programs and practices to support the district curricular goals and academic content standards and improve teaching and learning.

### **Parents / Students**

Parents of children enrolled in our Elementary and Middles

#### ***Development & Support Roles:***

Representatives on our Tech Plan team provide input on the district and schools' efforts to integrate technology and 21<sup>st</sup> century skills in the standards-aligned curriculum. Parents and students advocate for equity in access to technology and the opportunity to master core subjects and 21<sup>st</sup> century skills.

### **Government Agencies**

The California Technology Assistance Project (CTAP) Region 7

#### ***Development & Support Roles:***

The CTAP representative on our tech plan team offered technical assistance with: the data analysis and revision of our goals and objectives; professional development planning and implementation; EETT Formula Funding; E-rate; K12 Vouchers; compliance issues; hardware, software, and infrastructure.

### **Community Groups & Businesses**

***Development & Support Roles:*** Representatives on our Tech Plan team offered assistance with the implementation of our tech plan objectives focused on improving technology equity, access, after school opportunities, and home-school-community communications.

### **Higher Education**

#### ***Development & Support Roles:***

Representatives on our Tech Plan team reviewed a draft of our tech plan and offered input on research-based best practices in the adoption and integration of technology by teachers and students.

Our District continues to solicit, expand, and sustain our partnerships with stakeholders to enhance the integration of educational technology into the curriculum. Our district recognizes that schools alone do not have the resources or expertise to keep pace with rapidly changing technology. We believe that these partnerships will help us serve the growing needs of an increasingly technical and global education system and society.

## Partners

Type of Partner	Names	Role in Plan Development	Role in Supporting the Plan
<b>Teachers</b>	Lilia Pangelina Sarah Morgan	Reviewed/edited/revise entire plan and assisted with the development of educational goals	Implementation support Implementation feedback
<b>Administrators</b>	Annie Dossetti Tammie Calzadillas Lila Lesly Laura Verduzco- Thurman	Reviewed entire plan and provided feedback on the development of educational goals	Ongoing monitoring Evaluation Funding Development
<b>Technology Support Staff</b>	Greg Blount	Assisted with development of infrastructure long-range planning for future needs of the district.	Technical support Evaluation Ongoing monitoring Support
<b>Parents</b>	School Site Councils	Reviewed plan and provided input on needs and desired outcomes.	Resource
<b>Government</b>	John Magneson Brian Curwick	Reviewed entire plan Reviewed entire plan and provided feedback on plan	Technical Information Support and Staff Development

## Vision/Mission

### **Vision**

It is the aim of the Merced City School District to provide a comprehensive, quality educational program that will meet the needs of its diverse student population. The District seeks to promote high self-esteem, academic achievement, and positive inter and intra personal skills in an atmosphere that is enthusiastic, challenging, supportive, respectful, and understanding of individual and cultural differences. The curriculum is presented through instruction that is child-centered, meaningful, activity or project based, and integrated across the subject areas. This instruction seeks to promote understanding of concepts, communication of ideas, problem solving, and higher level thinking skills.

Students and staff in the Merced City School District will use current technology as an integral part of the learning process. Students will utilize educationally appropriate technology to

enhance their thinking and problem solving skills, and will have access to multiple resources to locate, evaluate, process and communicate information. Staff will integrate information technologies into school life and model the use of technology. Used as a tool, not an end in itself, technology will be an integral part of the way we work, teach and learn. The district is dedicated to the acquisition and support of effective educational technology that provides teachers and students real-world contexts for learning, connections to larger learning communities and opportunities to individualize and apply learning.

Also to be included in the embracing of technology in schools are the applications for use in the business realm of district operations. The District seeks to teach all children as well as apply the available knowledge and resources to district and school site operations.

## **Mission**

The Mission of the Merced City School District, a community of diverse learners striving for higher achievement, is to ensure that every student excels academically, builds character, and is a productive member of our community; we will do this by delivering exceptional instruction of a well-rounded and relevant curriculum that incorporates innovative practices and partnerships with family and community in a safe learning environment.

## **Beliefs**

We believe that:

- Every human being is unique with unlimited potential;
- Treating individuals with respect and dignity elevates the human spirit;
- Everyone has inherent value and purpose;
- Mutual trust is essential to productive relationships;
- A challenging environment balanced with support enables individuals to thrive;
- Embracing diversity strengthens our community;
- Individuals have responsibility for their actions;
- Service to others strengthens the character of the individual, and the vitality of community.

## **Parameters**

We will initiate no new program, or service, unless it is consistent with our mission and beliefs, benefits exceed costs, and provision is made for staff learning. All school plans will be consistent with the District Strategic Plan.

## **Objectives**

- Each student will meet, or exceed, established academic performance standards.
- Each student will demonstrate identified character traits that enrich the individual and community.

## **Strategies**

1. "Fully implement a district-wide user friendly system that monitors student performance and corresponding interventions to measure their effectiveness."
2. "We will design, implement and monitor ongoing, innovative targeted professional learning approaches in order to achieve our objectives."

3. "We will, in partnership with our community, develop a facilities plan that incorporates innovative design and common education specifications to optimize utilization of space and community resources, and provide exceptional learning environments district-wide."
4. "We will, in partnership with family and community, identify core character traits and develop action plans to teach and assess whether students demonstrate those traits."
5. "We will form a mutually beneficial academic partnership focusing on UC Merced, Merced College and the Merced Union High School District that will enable students to achieve academic excellence"

**Criteria 3. CURRICULUM-DRIVEN TECHNOLOGY GOALS**

**3a. Current Student and Teacher Technology Access**

Current access to technology varies at the eighteen different school sites dependent upon unique factors present at each site. During school hours ALL students at all sites, especially the 27% English learner population, staff and parents have access to the Internet and educational software through the Library Media Centers, classrooms, and computer labs; additional special consideration is offered to students in various programs such as After School Education, GATE, after school intervention programs and Special Education. The following technology resources are available at the eighteen school sites:

School Site	# Library Computers	Hours Available	# Instructional Lab Computers	Hours Available	Mobile Lab Computers	Hours Available	# Classroom Computers/Total Computers(DQ)	Hours Available
Givens	9	7:55-2:20	34	7:55-2:20	30	7:55-2:20	56/129	7:55-2:20
Reyes	4	7:00-2:30	30	7:00-2:30	-	-	107/141	7:00-2:30
Peterson	11	8:40-3:50	-	-	30	8:55-3:25	66/107	8:55-3:25
Wright	10	8:30-2:55	-	-	19	8:30-2:55	86/115	8:30-2:55
Stowell	8	7:15-2:45	25+	7:15-2:45	25	7:15-2:45	51/109	7:15-2:45
Chenoweth	7	8:15-3:30	24	8:00-3:00	-	-	132/163	8:45-3:10
Franklin	6	8:00-3:00	26	8:00-3:00	23	8:00-3:00	20/75	8:00-3:00
Stefani	4	8:10-3:15	35	8:30-3:15	2	8:10-3:15	35/76	8:25-2:55
Fremont	5	7:30-3:30	30+	8:00-3:00	25	8:00-3:00	82/142	8:00-3:00
Muir	8	8:00-3:00	-	-	20	8:00-3:00	118/140	8:00-3:00
Gracey	8	7:45-2:10	34	7:45-2:10	30	7:45-2:10	93/165	7:45-2:10
Burbank	12	8:00-4:00	20	8:00-4:00	30	8:00-4:00	40/102	8:00-4:00
Sheehy	9	7:15-3:00	-	7:15-3:00	-	7:15-3:00	127/136	7:15-3:00
Cruikshank	11	8:30-3:40	36	9:10-3:35	70	9:10-3:35	159/286	9:10-3:35
Hoover	15	8:00-4:00	-	-	50	8:00-4:00	186/251	8:00-4:00
Rivera	19	8:00-4:00	36	8:00-4:00	5	8:00-4:00	154/214	8:00-4:00
Tenaya	7	8:40-3:45	33	9:10-3:55	80	9:10-3:55	135/255	9:10-3:55
Community	-	-	-	-	-	-	5/5	8:55-4:00

In addition to the computers listed in the table above, students at some sites also have access to Alpha Smart keyboards for overnight checkout as well as classroom use. Approximately one-third of classroom teachers also have an LCD projector. Some the sites utilize digital cameras and digital camcorders to support student learning.

### 3b. Current Use of Hardware and Software to Support Teaching and Learning

All schools, classrooms and offices in the district are connected to the Internet with Internet service provided through the Merced County Office of Education with classrooms having hard wired as well as wireless connectivity. All teaching, administrative and office support staffs have personal email accounts. Technology is used to access standards based curriculum for teachers and students in all classrooms via on-line resources, site-specific software and archived lessons and activities. In addition, all teachers have one computer in their classrooms dedicated to administrative, record keeping and lesson planning tasks. Teachers have access to the district networked Aeries attendance program that is used for daily attendance reporting and for accessing student information. Comprehensive assessment and data collection programs: Aeries and Data Director are also available to all teachers on the district's local network.

Current use of technology for instruction in individual classrooms varies somewhat between the elementary and middle school sites as reported by recent results of informal site surveys.

Instructional Technology Usage		
Grade Level	Software	Times Per Week
PreK	<i>Waterford Early Reading Program</i>	5
K-5	<i>Eduplace.com</i>	3
K-5	<i>Math Journey</i>	1
K-5	<i>Kidworks Deluxe</i>	1
K-5	<i>Rosetta Stone</i>	2
K-5	<i>Lexia</i>	5
K-5	<i>Kidspiration</i>	2
K-5	<i>All The Right Type</i>	2
K-5	<i>Carnival Heroes</i>	2
6-8	<i>Inspiration</i>	2
6-8	<i>READ 180</i>	5
6-8	<i>FASTT MATH</i>	3
6-8	<i>Video Software-Tenaya TV</i>	5
6-8	<i>ALEKS</i>	5
K-8	<i>Follett Library Catalogue System &amp; online catalog</i>	5
K-8	<i>World Book Online</i>	5
K-8	<i>Microsoft Office</i>	5
K-8	<i>Internet Browsers</i>	5
K-8	<i>CaliforniaStreaming</i>	5
K-8	<i>AERIES</i>	5
K-8	<i>Data Director</i>	5
K-8	<i>Accelerated Reader</i>	2

Technology is used (i.e., READ 180 or Accelerated Reader computer assisted instruction programs) for reading and language arts on a daily basis at all school sites. In addition, the

middle school reports using technology in one or all curricular areas on a daily basis in classrooms as well as in lab settings.

Teachers (74%) have reported using a variety of technological resources in lessons that support students' learning. 35% use technological resources to create instructional materials at least 2-4 days a week, 24% deliver classroom instruction using technological resources at least 2-4 days a week, 9% communicate with colleagues 2-4 days per week via email. Of those who reported using technology 19% present lesson content using presentation software and ask students to complete assignments using word processing or publication software. Eight percent of teachers report using computer applications that generate data to assess and communicate student learning. The lowest level of use of technology by teachers was reported to be for videoconferencing.

Students in the elementary and middle schools reported using the electronic card catalog, word processing, and reading quizzes as the most frequent, independently used forms of technology at a minimum on a weekly basis and often up to 4 times a week. Technology tools for research and report development were used frequently throughout the district, at least on a weekly basis. Students at all levels reported preparing several presentations using different technology tools and software (i.e., Word, or Powerpoint). Accessibility to technology is made available in a lab setting on a scheduled, daily or weekly basis depending on grade level. All sites use technology in classrooms, computer labs, and libraries. The highest level of access to and use of technology varies from site to site. The elementary schools reported the highest level of access to be in the computer labs, where there were a number of student workstations with appropriate software applications, as well as, knowledgeable staff members whose presence directly affected student performance and success. The middle school reports highest level of access and use in the computer lab and Library Media Center (LMC). Extended hours before (both lab and LMC) and after school (LMC), number of available workstations with appropriate software applications, as well as, knowledgeable staff members were contributing factors.

### 3c. Curricular Goals Summary

Using the District's Strategic Plan and State Standards documents as guideposts the following section addresses our specific curriculum goals. The Merced City School District has adopted their specifically designed goals outlining what will bring our students successfully into this century. Identified as the top priorities are: 1) Meeting or exceeding the API/AYP growth targets, 2) Continue the focus on proven pedagogical practices to avoid need for later intervention, 3) Focus on "gap closure" within significant subgroups, 4) Systematically implement EL and Special Education support, 5) Continue after-school, summer school, and intervention programs and 6) Implement Middle School reforms to improve student achievement and graduation rate. The achievement of these goals is monitored through: STAR CST testing results, API calculations, California Standards Writing Assessment in 4<sup>th</sup> and 7<sup>th</sup> grades, CELDT test reports, as well as the District's quarterly Benchmark assessment regimen.

Over the span of the last District Technology Plan, students in the Merced City School District made significant academic achievement gains. The use of technology assisted instruction for

English learners as well as math and reading interventions for students performing at basic or below has had a positive impact on improving student performance. The district has committed many resources to the technology based interventions/supplements and continues to support updating and upgrading of these programs. All of the programs referred to in the goals section of this document are already in use and will continue to be used to assist students and teachers in meeting the state content standard benchmarks.

**Section 3d. List of Clear Goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to support teaching and learning by supporting the district curriculum goals.**

**Goal I: Improve Student Achievement and Close Student Achievement Gaps Utilizing Technology in the District’s Curriculum to Support Math and Reading/Language Arts**

<b>Objective 1 of 2:</b> By June 2015, 100% of all K-8 students including special education, English Learners, and GATE will be proficient or better with state grade level standards in English Language Arts.	<b>Evaluation Instrument(s) &amp; Data to be Collected</b>	<b>Frequency of Collection</b>  <b>Implementation and Activities</b>	<b>Program Modification Process and Responsible Person(s)</b>	<b>Funding Source</b>
<b>Year One:</b> 67.6% of all K-8 students will be proficient or better with state grade level standards in English Language Arts.	Grade level assessments	Quarterly Trimester Spring Summer	Teacher – reviews student progress and levels of implementation.	General Fund
<b>Year Two:</b> 78.4% of all K-8 students including special education, English Learners, and GATE will be proficient or better with state grade level standards in English Language Arts.	Annual STAR/CST test results in English/Language Arts	K-8 adopted textbook supplementary resources including publisher software and websites	District Informational Technology Director, site administrators and/or designee will analyze end of school year results annually and report to stakeholders annually in October to the Technology Committee.	Appropriate Categorical Funds
<b>Year Three:</b> 89.2% of K-8 students including special education, English Learners, and GATE will be proficient or better with state grade level standards in English Language Arts.	Percentage scoring proficient or above/ passing	K-8 CLRN reviewed software		
<b>Year Four:</b> 100% of all K-8 students including special education, English Learners, and GATE will be proficient or better with state grade level standards in English Language Arts.		K-8 California Streaming  K-8 Internet Resources		
<b>Year Five:</b> 100% of all K-8 students including special education, English Learners, and GATE will be proficient or better with state grade level standards in English Language Arts.		4-8 MS Office  K-8 Diagnostic Reading / Language Arts proficiency software		

**Goal I: Improve Student Achievement and Close Student Achievement Gaps Utilizing Technology in the District’s Curriculum to Support Math and Reading/Language Arts**

Objective 2 of 2: By June 2015, 100% of all K-8 students including special education, English Learners, and GATE will be proficient or better with state grade level standards in math.	Evaluation Instrument(s) & Data to be Collected	Frequency of Collection	Program Modification Process and Responsible Person(s)	Funding Source
		Implementation and Activities		
<b>Year One:</b> 68.5% of all K-8 students including special education, English Learners, and GATE will be proficient or better with state grade level standards in math.	Grade level assessments	Quarterly Trimester Spring	Teacher – reviews student progress and levels of implementation.	General Fund  Appropriate Categorical Funds
<b>Year Two:</b> 79% of all K-8 students including special education, English Learners, and GATE will be proficient or better with state grade level standards in math.	Annual STAR/CST test results in math	Summer	District Informational Technology Director, site administrators and/or designee will analyze end of school year results annually and report to stakeholders annually in October to the Technology Committee.	
<b>Year Three:</b> 89.5% of K-8 students including special education, English Learners, and GATE will be proficient or better with state grade level standards in math.	Percentage scoring proficient or above/ passing	K-8 Adopted Textbook supplementary resources including publisher software and websites		
<b>Year Four:</b> 100% of K-8 students including special education, English Learners, and GATE will be proficient or better with state grade level standards in math.	Curriculum-based state and district approved software and productivity software in use at each site.	K-8 CLRN reviewed software:  4-8 FASST Math  K-8 California Streaming  K-8 Internet Resources		
<b>Year Five:</b> 100% of all K-8 students including special education, English Learners, and GATE will be proficient or better with state grade level standards in math.		4-8 MS Office  2-8 Diagnostic math proficiency Software  4-8 ALEKS		

## **Goal I: Improve Student Achievement and Close Student Achievement Gaps Utilizing Technology in the District's Curriculum to Support Math and Reading/Language Arts**

### **Implementation Strategies / Timelines**

- 1) Beginning in the 2010-11 school year and continuing through the duration of the tech plan, the LEA will coordinate quarterly grade and / or subject area district collaboration meetings to develop and refine the district's ELA and math curriculum, communication of technology skills and aligned assessments.
- 2) Annually, the district and the school will invest the necessary time to identify and/ or review grade level essential standards and assessments based on CDE's latest CST Blueprints and released test questions.
- 3) Annually, purchase as needed state adopted instructional materials (K-8) and supplemental curriculum-based technology resources (adopted and/ or CLRN approved) and ensure they are being used with fidelity in the classroom during classroom visits by school administration.
- 4) Ongoing, the district will research, learn, and integrate research-based best practices and technology that support specific ELA and Math student achievement needs identified during data reviews of significant subgroup populations at the school.
- 5) Annually, the district and the schools will effectively allocate resources to overcome the school's identified barriers to student academic achievement.
- 6) Annually, support site-based selective teacher student ratio in key curricular areas identified as needing attention.
- 7) Annually, increase-learning opportunities in key curricular areas identified as needing attention.
- 8) During the 2010-11 school year, develop a reading and math intervention program for students in grades 5 to 8, inclusive, whose reading scores are Far below Basic and Below Basic in the CST performance level.
- 9) Annually, provide direct instruction at each grade level in reading and math.
- 10) Every school year, assess students periodically throughout the year with common grade level standards-aligned assessments to monitor student progress and provide immediate intervention support.
- 11) Annually, provide students with adequate learning support including, but not limited to, a standards-aligned curriculum, quality instructional materials, technology access and resources, support services, and supplies for every pupil.

### 3e. Student Acquisition of Technology and Information Literacy Skills

Goal 2: Student Acquisition of Technology and Information Literacy Skills				
Objective 1 of 2: By June 2015, 20% of all K-8 students including special education, English Learners, and GATE will be proficient or better with grade level NETS standards.	Evaluation Instrument(s) & Data to be Collected	Frequency of Collection	Program Modification Process and Responsible Person(s)	Funding Source
		Technology Resources		
<b>Year One:</b> 25% of all K-8 students including special education, English Learners, and GATE will be proficient or better with grade level NETS standards.	End of year performance indicator of NETS skills from integrated assignments	Quarterly Monthly	Teacher – reviews student progress and levels of implementation.	General Fund  Appropriate Categorical Funds
<b>Year Two:</b> 40% of all K-8 students including special education, English Learners, and GATE will be proficient or better with grade level NETS standards.	Percentage achieving grade level NETS standards	Adopted Textbook supplementary resources including publisher software and websites  CLRN reviewed software: California Streaming  Internet Resources  MS Office  Destiny	District Information Technology Director, Assistant Superintendent, Educational Services, site administrators, Curriculum Council, and/or designee will analyze end of school year results and report to stakeholders annually.	
<b>Year Three:</b> 65% of all K-8 students including special education, English Learners, and GATE will be proficient or better with grade level NETS standards.	Student EdTechProfile  Classroom observations by district/site administrators			
<b>Year Four:</b> 85% of all K-8 students including special education, English Learners, and GATE will be proficient or better with grade level NETS standards.				
<b>Year Five:</b> 100% of all K-8 students including special education, English Learners, and GATE will be proficient or better with grade level NETS standards.				

## **Goal 2: Student Acquisition of Technology & Information Literacy Skills**

### **Implementation Strategies / Timelines**

1. During the 2010-11 school year, a focus group of district teachers, librarians, and media assistants will research NETS resources and design scaffolded K-8 NETS curriculum.
2. By spring, 2012, Students will begin systematically learning the NETS skills including technology productivity tools and information literacy, as appropriate, during curricular assignments.
3. By spring 2013, begin administering annually the standards-aligned grade span NETS based on performance indicators for grades K-8.

### **Goal 2: Digital Resources to be Integrated**

- Adopted Text Supplemental Tech resources including publisher software and websites
- CLRN and district approved curriculum software such as: Accelerated Math, FASTT Math, ALEKS Math, Accelerated Reader, and United Streaming
- Reporting platforms such as Aeries
- Library programs
- Microsoft Office and other productivity software
- No Cost / Low Cost - Internet Resources and services including:
  - a. Google
  - b. Yahoo
  - c. WorldBook Online
  - d. Merriam Webster Online Dictionary
  - e. Citation Maker
- Peripherals such as LCD projectors, digital cameras, video cameras, presentation devices and hand held devices and printers.

In addition to meeting mastery level established in the Technology and Information and Literacy Skills Matrix located in appendix A of this document, all students, K-8 will be proficient with grade level National Education Technology Standards (NETS) including information literacy.

**3f. District Goals for Student Appropriate and Ethical Use of Information Technology in the classroom.**

**Goal 3: All students in our district will be able to distinguish lawful from unlawful uses of copyrighted works, including the following topics: the concept and purpose of both copyright and fair use; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; and avoiding plagiarism.**

Appropriate & Ethical Use Objective	Annual Benchmarks	Instrument and Reviewers
By June 30, 2015 100% all K-8 students will be proficient in digital citizenship as measured by the annual CyberSmart survey as administered during the spring of every year.	Year 1: 100% in grades K-8 in 2010-11 Year 2: 100% in grades K-8 in 2011-12 Year 3: 100% in grades K-8 in 2012-13 Year 4: 100% in grades K-8 in 2013-14 Year 5: 100% in grades K-8 in 2014-15	Instrument: Adopted materials, CyberSmart web-based resources, and district revised Internet use policy. Reviewers: District Tech Director, Site Administrators & school site Tech Coordinators

**3g. District Goals and Plan for Internet Safety; Protecting Online Privacy and Avoiding Online Predators**

**Goal 4: All students in our district will be able to apply Internet safety rules, including how to protect their online privacy and avoid online predators when they are using the Internet.**

Internet Safety Use Objective	Annual Benchmarks	Instrument and Reviewers
By June 30, 2015, 100% of our students will have participated in learning activities that enable them to be digital citizens who are able to apply rules of digital etiquette that include computer ethics and cyber bullying; applying digital security skills to avoid inappropriate content, cyber predators, and protecting personal and private identity information.	Year 1: 45% of all district students in 2010-11 Year 2: 55% of all district students in 2011-12 Year 3: 65% of all district students in 2012-13 Year 4: 85% of all district students in 2013-14 Year 5: 100% of all district students in 2014-15	Instrument: Adopted materials, CyberSmart web-based resources, and district revised Internet use policy. Reviewers: District Tech Director, Site Administrators & school site Tech Coordinators

### **3h. District Policy and Practices Ensuring Equitable Technology Access**

The Merced City School District will provide all students and teachers with equal access to all of the school's technology to support achievement of academic standards in the classroom, district curricular goals, and ultimately for success in the workplace. The technology goals and objectives for student subgroups are the same as for all other students although the programs and methods for achieving the objectives may be adapted to best meet individual student needs. Students with an active Individualized Education Program (IEP) will have appropriate access to technology hardware, peripherals, and software including assistive technology as deemed appropriate and defined by the IEP site team and the students' IEP goals. English Learners will have appropriate access to technology hardware, peripherals, and software needed to support their English language acquisition as well as achievement of the academic standards.

The District's Local Education Agency Plan and Individual School Site Single Plans for Student Achievement are documents that establish coordinated goals and services to meet the diverse needs of the district's student population guiding the standards-based curriculum. Throughout kindergarten to eighth grade, the focus is reading, writing and mathematics. Technology will be used to assist students in meeting grade level standards in these areas. The district will ensure access to technology for all students by supporting the current levels of technology present in the classrooms while seeking ongoing funding to increase and enhance availability. Funding sources to support appropriate technology access to all students may include but is not limited to: district General Fund, Title I, Title II – EETT, Title III, EIA-LEP, E-Rate, Microsoft Settlement Funds and other district funding sources.

### **3i. District Goals for Using Technology to Make Student Record-Keeping and Assessments More Efficient and Supportive.**

The District currently has in place an expansive system which supports student record keeping and provides a multiplicity of student assessment information that is at the fingertips of all certificated staff. One system is tied to our Aeries attendance program which has the added features that houses three years of student STAR and CELDT test scores. The data management system Data Director contains quarterly Benchmark assessment results as well as scores from the District's Direct Writing Assessments. Our ongoing efforts in this area are to maintain our existing system, provide ongoing training and support to staff accessing the system and to continue to input new data as it becomes available. Additional lesson planning and instructional communications can be accessed on the district's local network.

**Goals for using technology to manage student data to improve instruction:**

**Goal 1: Teachers will meet on a bi-weekly basis to review student achievement data.**

**Goal 2: Teachers will be proficient users of the Aeries attendance program**

**Goal 3: Teachers will be proficient users of the networked Data Director assessment program**

**Goal 4: Teachers will be proficient users of databases and spreadsheets in order to better utilize and manipulate data available in the networked assessment programs.**

<b>Goal</b>	<b>Implementation Plan/Activities</b>	<b>Responsible Person (s)</b>	<b>Timeline</b>	<b>Monitoring &amp; Evaluation</b>
<b>1</b>	Grade levels will convene bi-weekly meetings & Site principals will meet with teachers for data discussions 3 xs per year.	Site Principals with support from Ed Services/C&I staff	Ongoing	Principals Report to Assistant Superintendent
<b>2 &amp; 3</b>	Additional training for new teachers and teachers struggling with Aeries and Data Director	District Data Analyst	Two times during the year & as needed	Meeting Agendas/Evaluation EdTech Survey
<b>4</b>	Training for Database and Spreadsheets	District IT Staff	Two times during the year	Meeting Agendas/Evaluation EdTech Survey

**3j. District Goals to Utilize Technology to Improve Two-Way Communication Between Home and School**

Merced City School District uses a variety of methods to enable parents to easily communicate with teachers and administrators. Voice mail and an auto-dialer system, ConnectEd, is in place for improving student attendance and communicating site events to parents in the home. The district maintains a website with each school having their own pages for current events and to help disseminate information relevant to parents in the community. Teachers and administrators also have email accounts that parents can access to communicate with school personnel. Telephone systems have been updated so that all teachers have access to outside lines from their classrooms that will enable all parents to more efficiently contact their child’s teacher.

The district is committed to making computers more accessible to students and parents. We fully realize that many of our parents cannot afford to purchase home computers. With this in mind efforts will continue to be made to acquire additional hardware at all sites; Alpha Smart Boards and laptop computers or netbooks that will be available for students to check out for home use. Also, efforts will continue to be made to have the school libraries and computer labs open after hours for student and parent access

**Goals to Utilize Technology to Improve Two-Way Communication Between Home and School**

Objectives	Measurement of Outcomes	Person Responsible for Monitoring
1) By June 30, 2015, 100% of staff will use voice mail. Year 1: 45% of staff will use voice mail in 2010-11 Year 2: 55% of staff will use voice mail in 2011-12 Year 3: 65% of staff will use voice mail in 2012-13 Year 4: 85% of staff will use voice mail in 2013-14 Year 5: 100% of staff will use voice mail in 2014-15	Parent and school staff feedback. ConnectEd log files	Site principals and Resource Teachers
2) By June 30, 2015, 100% of sites will update school website pages for current events and school information monthly. Year 1: 45% of all district sites will update websites monthly 2010-11 Year 2: 55% of all district sites will update websites monthly in 2011-12 Year 3: 65% of all district sites will update websites monthly in 2012-13 Year 4: 85% of all district sites will update websites monthly in 2013-14 Year 5: 100% of all district sites will update websites monthly in 2014-15	Website analytic software Website log files	Site principals and IT staff
3) By June 30, 2015, 100% of district teachers and administrators will have parent accessible e-mail addresses. Year 1: 45% of all district teachers and administrators will have parent accessible email in 2010-11 Year 2: 55% of all district teachers and administrators will have parent accessible email in 2011-12 Year 3: 65% of all district s teachers and administrators will have parent accessible email in 2012-13 Year 4: 85% of all district s teachers and administrators will have parent accessible email in 2013-14 Year 5: 100% of all district teachers and administrators will have parent accessible email in 2014-15	Outlook account information Parent handouts	Site principals and IT Staff

**3k. Describe the Process Used to Monitor Curriculum Goals, Objectives, and Benchmarks Including Roles and Responsibilities.**

Curriculum goals, objectives, activities and monitoring plans are incorporated into the tables presented in 3d-3i (See also section 7). In addition, the district’s Assistant Superintendent, Educational Services, Director of Information Technology and Support Services, school administrators, the Technology Plan Review Team will conduct ongoing formative data reviews. The team will meet quarterly to track the development and implementation of all tech plan activities and accomplishments. The Technology Plan Review Team will work in conjunction with the District Curriculum Council for reporting purposes. Modifications to our Tech Plan activities will be made as needed in order to insure that we meet or exceed our goals by June 2015. The Technology Plan Review Team will compile a mid-year tech plan implementation status report and distribute to stakeholders in February. Annual summative data analysis and needs assessments are conducted in late August / September after the state releases all relevant district data and schools complete early assessments of incoming students. The Technology Plan Review Team is responsible for an annual summative performance report to stakeholders.

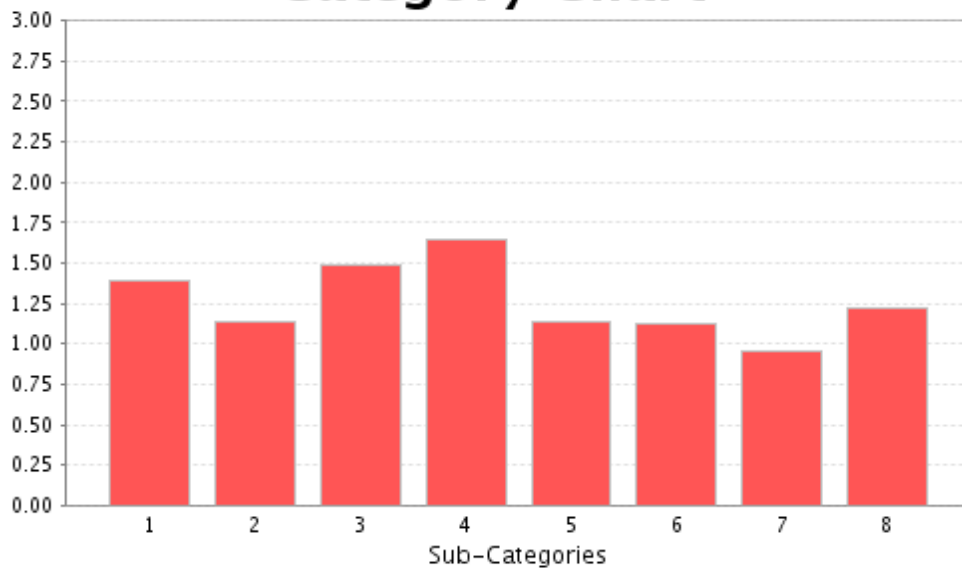
## Criteria 4. PROFESSIONAL DEVELOPMENT

### 4a. Teachers' and Administrators' Current Technology Proficiency and Integration Skills and Needs for Professional Development.

Merced City School District staff technology use and integration skills are varied. We are using the California Technology Assessment Profile and the Technology Use Survey to assess and track staff development needs. Using the survey, the following district technology proficiency chart was generated.

### CCTC Program Standard 9: Using Technology in the Classroom

#### Category Chart



**Note: Merced City Elementary District has 605 credentialed teachers; this chart represents the assessment summary for 459 teachers or 76%.**

MCSD realizes that without sufficient professional knowledge, the curricular goals and objectives will not be met. To this end, the major focus is training and support for administrators, teachers and staff in the practical use of technological tools that will improve standards-based instruction and school operations. MCSD recognizes the need to increase the proficiency of administrative personnel to insure successful implementation among teachers and support staff. Those in administration will be asked to carry out the vision by committing resources to technology-based staff development at the site level.

Over the course of the next five years, MCSD will focus staff development to cover not only the skills needed to implement our curricular goals but to improve the proficiencies of the EdTech Profile skills. Based on the data received from the survey, the biggest need for the majority of our users is in the areas of database and spreadsheet usage, and the integration of presentation software into the curriculum. The following chart provides specific information about the standards assessed in the chart above:

1	<b>Standard 9a (Includes 459 in calculation)</b> Each candidate considers the content to be taught and selects appropriate technological resources to support, manage, and enhance student learning in relation to prior experiences and level of academic accomplishment.
2	<b>Standard 9b (Includes 458 in calculation)</b> Each candidate analyzes best practices and research findings on the use of technology and designs lessons accordingly.
3	<b>Standard 9d (Includes 458 in calculation)</b> Each candidate uses computer applications to manage records and to communicate through printed media.
4	<b>Standard 9e (Includes 458 in calculation)</b> Each candidate interacts with others using email and is familiar with a variety of computer-based collaborative.
5	<b>Standard 9f (Includes 458 in calculation)</b> Each candidate examines a variety of current educational technologies and uses established selection criteria to evaluate materials, for example, multimedia, Internet resources, telecommunications, computer-assisted instruction, and productivity and presentation tools. (See California State guidelines and evaluations.)
6	<b>Standard 9g (Includes 458 in calculation)</b> Each candidate chooses software for its relevance, effectiveness, alignment with content standards, and value added to student learning.
7	<b>Standard 9h (Includes 458 in calculation)</b> Each candidate demonstrates competence in the use of electronic research tools and the ability to assess the authenticity, reliability, and bias of the data gathered.
8	<b>Standard 9i (Includes 458 in calculation)</b> Each candidate demonstrates knowledge of copyright issues and of privacy, security, safety issues and Acceptable Use Policies.

#### 4b. District Goals for Providing Professional Development Opportunities

Over the next five years, all certificated and classified staff will receive sufficient, on-going staff development training in order to become familiar with existing site technology, to integrate that technology into the instructional program, and to increase individual job productivity and effectiveness. The District Technology Committee working in collaboration with the District Educational Services and/or Professional Development Center staff will establish a comprehensive technology training program organized by level of proficiency as defined in EdTechProfile Technology Proficiencies for Teachers. Staff members will update their EdTechProfile information every 12 months or as required by specific grants and regulations. The data will be used for individual goal setting as well as for collective needs assessment and planning of future technology training at the site and district levels.

Formal training will be offered throughout the school year and summer vacations based on need and level of staff interest. Training sessions will be lead by district personnel, publishing companies of District adopted materials (e.g., Holt, Houghton Mifflin, McMillan McGraw Hill, Scholastic, etc.) and/or experts recommended by CTAP and other like agencies.

All technology-based staff development will be directed toward professional skills necessary to implement effective technology resources that support student success as described in the standards and expectancies for each curricular area. Special attention will be given to the use of technology tools for the development and achievement in reading and writing in the classroom. Technology resource use/access will be included as a component in addition to specific training for skills identified on the EdTechProfile survey. Staff working with students having needs beyond the baseline curriculum (e.g., special education, GATE, ELL) will also receive training on how to implement technology resources to best meet the needs of their students.

MCSD will use a variety of cost effective incentives to encourage staff development participation. Some incentives include: SB 472, AB 430, overtime, and/or use of specialized hardware or software.

The following outline summarizes the goals and objectives for staff development. Staff Development Goals 1 and 2 are specifically tied to the curriculum goals outlined previously in this plan. Staff Development goals reflect skills necessary for effective use of technology as a professional in education. Consideration of proficiency in the areas of communication and collaboration; planning, design and implementing learning experiences; and assessment and evaluation as described in the EdTechProfile Technology Proficiency for California Teachers document is embedded as an integral part of each goal.

**4b. District Goals for Providing Professional Development Opportunities**

**Goal I: Improve Student Achievement and Close Student Achievement Gaps Utilizing Technology in the District's Curriculum to Support Math and Reading/Language Arts**

Objective 1 of 2: By June 2015, 100% of all credentialed staff will be trained to learn and share best practices including the use of technology to align standards-based instruction and quarterly assessments to support math and Reading / Language Arts.	Evaluation Instrument(s) & Data to be Collected	Frequency of Collection	Program Modification Process and Responsible Person(s)	Funding Source
<b>Year One:</b> 70% of all credentialed staff will be trained to learn and share best practices including the use of technology to align standards-based instruction and quarterly assessments to support math and Reading / Language Arts.	Grade/subject level district and site professional development and collaboration meeting times / agendas / participation records and outcomes.	Quarterly Spring Summer	Site Principals will coordinate grade and / or subject area district collaboration meetings to develop and refine the district's ELA and math curriculum, communication of technology skills and aligned assessments	General Fund
<b>Year Two:</b> 80% of all credentialed staff will be trained to learn and share best practices including the use of technology to align standards-based instruction and quarterly assessments to support math and Reading / Language Arts...	% of teachers participating  Teachers' use of standards-aligned learning objectives, instructional and intervention time, research based programs and practices.		Ongoing Classroom Monitoring by site admin./ principal	Appropriate Categorical Funds
<b>Year Three:</b> 90% of all credentialed staff will be trained to learn and share best practices including the use of technology to align standards-based instruction and quarterly assessments to support math and Reading / Language Arts.	Annual Site Academic Software Survey  Curriculum-based state and district approved software and productivity software in use at each site.			
<b>Year Four:</b> 100% of all credentialed staff will be trained to learn and share best practices including the use of technology to align standards-based instruction and quarterly assessments to support math and Reading / Language Arts.	Annual CDE EdTech Profile online tech proficiency survey ( www.edtechprofile.org )			
<b>Year Five:</b> 100% of all credentialed staff will be trained to learn and share best practices including the use of technology to align standards-based instruction and quarterly assessments to support math and Reading / Language Arts.				

## **Goal I: Improve Student Achievement and Close Student Achievement Gaps Utilizing Technology in the District's Curriculum to Support Math and Reading/Language Arts**

### **Implementation Strategies / Timelines and Activities**

- 1) Beginning in the 2010-11 school year and continuing through the duration of the tech plan, the LEA will coordinate quarterly grade and / or subject area district collaboration meetings to develop and refine the district's ELA and math curriculum, communication of technology skills and aligned assessments.
- 2) Annually, the district and the school will invest the necessary time to identify and/ or review grade level essential standards and assessments based on CDE's latest CST Blueprints and released test questions.
- 3) Annually, purchase as needed state adopted instructional materials (K-8) and supplemental curriculum-based technology resources (adopted and/ or CLRN approved) and ensure they are being used with fidelity in the classroom during classroom visits by school administration.
- 4) Ongoing, the district will research, learn, and integrate research-based best practices and technology that support specific ELA and Math student achievement needs identified during data reviews of significant subgroup populations at the school.
- 5) Annually, increase-learning opportunities in key curricular areas identified as needing attention.
- 6) Annually, provide professional development on adopted curriculum and technology resources such as SB 472 (formerly AB 466) for teachers, AB 430 (formerly AB 75) training for site administrators.
- 7) Beginning in fall 2010 and every year thereafter, provide systematic professional development and learning community collaboration time for site administration and teachers to align standards-based instruction and quarterly assessments horizontally and vertically through grade levels in the district, review data, learn and share best practices including the use of technology.
- 8) By fall 2010, design and distribute an annual site academic software usage survey.
- 9) By fall 2010, create and distribute a matrix of CLRN approved E/LA curriculum and intervention software that is supported by the district.
- 10) Beginning in the fall 2010 and annually thereafter, provide professional development on district/ CLRN approved curriculum software and online resources as needed.
- 11) Annually, continue to leverage grant, district, school, site council, and community resources to increase access to technology resources, hardware, and peripherals for students and teachers.
- 12) Annually, continue to provide technology productivity and integration training as needed.
- 13) Ongoing district support and professional development opportunities on the integration of ELA and math standards across the curriculum

**Goal 2: Student Acquisition of Technology and Information Literacy Skills**

Objective 1 of 1: By June 2015, 100% of K-8 teachers will be trained in the integration of the student National Educational Technology Standards (NETS) grade levels skills in their curriculum.	Evaluation Instrument(s) & Data to be Collected	Frequency of Collection	Program Modification Process and Responsible Person(s)	Funding Source
		Implementation and Activities		
<b>Year One:</b> 25% of K-8 teachers will be trained in the integration of the student NETS grade levels skills in their curriculum.	End of year performance indicator of NETS skills from integrated assignments  Percentage achieving grade level NETS standards  Student EdTechProfile  Classroom observations by district/site administrators	Quarterly Monthly	Teacher – reviews student progress and levels of implementation.  District Information Technology Director, Assistant Superintendent, Educational Services, site administrators, Curriculum Council, and/or designee will analyze end of school year results and report to stakeholders annually.	General Fund  Appropriate Categorical Funds
<b>Year Two:</b> 40% of K-8 teachers will be trained in the integration of the student NETS grade levels skills in their curriculum.		Adopted Textbook supplementary resources including publisher software and websites will be presented to teachers in trainings  CLRN reviewed software: and California Streaming will be utilized to support student learning  Internet Resources  MS Office  Destiny		
<b>Year Three:</b> 65% of K-8 teachers will be trained in the integration of the student NETS grade levels skills in their curriculum.				
<b>Year Four:</b> 85% of K-8 teachers will be trained in the integration of the student NETS grade levels skills in their curriculum.				
<b>Year Five:</b> 100% of K-8 teachers will be trained in the integration of the student NETS grade levels skills in their curriculum.				

**Goal 3: All students in our district will be able to distinguish lawful from unlawful uses of copyrighted works, including the following topics: the concept and purpose of both copyright and fair use; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; and avoiding plagiarism.**

**Goal 4: All students in our district will be able to apply Internet safety rules, including how to protect their online privacy and avoid online predators when they are using the Internet.**

Objective 1 of 1: By June 2015, 100% of K-8 teachers will be trained in the implementation of CyberSmart curriculum to address: copyright and fair use; lawful and unlawful downloading, plagiarism, Internet safety, online privacy, and online predators.	Evaluation Instrument(s) & Data to be Collected	Frequency of Collection	Program Modification Process and Responsible Person(s)	Funding Source
		Implementation and Activities		
<b>Year One:</b> 70% of K-8 teachers will be trained in the implementation of CyberSmart curriculum to address: copyright and fair use; lawful and unlawful downloading, plagiarism, Internet safety, online privacy, and online predators.	End of year performance indicator of CyberSmart assignments	Monthly Quarterly Yearly	Site Administrators classroom observations	General Fund
<b>Year Two:</b> 80% of K-8 teachers will be trained in the implementation of CyberSmart curriculum to address: copyright and fair use; lawful and unlawful downloading, plagiarism, Internet safety, online privacy, and online predators.	Percentage of teachers implementing CyberSmart	CyberSmart Curriculum training will be provided on a yearly basis to teachers including how to access additional resources on Cyber Safety  Internet Resources will be provided to teachers from the ISTE recommended list of websites	District Technology Director, Assistant Superintendent, Educational Services, site administrators, Curriculum Council, and Media Center/Teacher Librarians will analyze end of school year results and report to stakeholders annually.	Appropriate Categorical Funds
<b>Year Three:</b> 65% of K-8 teachers will be trained in the integration of the student NETS grade levels skills in their curriculum to address: copyright and fair use; lawful and unlawful downloading, plagiarism, Internet safety, online privacy, and online predators.	Classroom observations by district/site administrators			
<b>Year Four:</b> 85% of K-8 teachers will be trained in the integration of the student NETS grade levels skills in their curriculum to address: copyright and fair use; lawful and unlawful downloading, plagiarism, Internet safety, online privacy, and online predators.				
<b>Year Five:</b> 100% of K-8 teachers will be trained in the integration of the student NETS grade levels skills in their curriculum to address: copyright and fair use; lawful and unlawful downloading, plagiarism, Internet safety, online privacy, and online predators.				

**Goal 3 & 4: Evaluation Instrument(s) & Data**

### **Ethical Use of Technology (Copyright) and Internet Safety Implementation Strategies/Timelines**

1. By fall 2010, all teachers will be offered professional development opportunities on the Ethical Use of Technology and Internet Safety for students aligned to the NETS student standard # 5: Digital Citizenship, offered through CTAP or the equivalent.
2. During the 2010-2011 school year, a focus group of district teachers will develop a scaffolded, articulated K- 8<sup>th</sup> grade NETs technology integration curriculum aligned to NETS standard # 5: Digital Citizenship. Curriculum results will be reviewed annually by the Curriculum Council and modified as necessary.
3. By fall 2010, roll-out a revised acceptable use policy (AUP) for students addressing internet safety, cyber bullying, and plagiarism.
4. Beginning in the fall 2011 and then annually thereafter, all K-8<sup>th</sup> grade students will begin systematically learning grade level NETS standard # 5: Digital Citizenship skills during curricular assignments.
5. Grade level performance indicator reviews will be conducted at the end of each school year.

### **Digital Resources to be Integrated**

1. Adopted Text Supplemental Tech resources including publisher software and websites.
2. CLRN and district approved curriculum software and/ or free Digital Citizenship internet resources
3. Microsoft Office Professional Suite and other productivity software.
4. Peripherals such as LCD projectors, digital cameras, video cameras, printers, presentation boards (SMART boards), document cameras (ELMO), and other hand-held devices.

**Goal 5: Merced City School District teachers and administrators will use technology to improve two-way communication between home, school and community.**

Implementation Plan Objectives	Responsible Position	Timeline	Evaluation & Monitoring
Objective 1 of 1: 100% of certified administrative staff will use the district's phone messaging system and their site web page to enhance school-to-home communication.	Director of Information Technology  Assistant Superintendent of Educational Services	Ongoing as new staff are hired.  Returning staff have previously received training	Teacher/participant evaluation and needs assessment of training session.
Objective 1 of 2: 100% of certified administrative staff will work with site staff to develop new strategies to extend/expand communication between school and home.	Director of Technology  Assistant Superintendent of Educational Services, LMS Lab Teacher	Ongoing as new staff are hired.  Returning staff have previously received training	Teacher/participant evaluation and documentation of additional communication venues.

The attainment of the Education Technology professional development goals will be met with a three-tiered approach based on teachers' individual technology training needs.

- Annual proficiency training will be provided on NET skills including skills development in: general computer knowledge; CyberSmart curriculum, Internet; email; word processing; presentation software and spreadsheet and database.
- Annually as needed the district will offer professional proficiency training on integrating NETS students standards in K-8 math and ELA curriculum (including information literacy, copyright, and cyber safety); curriculum-based software; adopted textbook supplemental electronic resources; online resources and job productivity and assessment tools.

The professional development goals will provide teachers and administrators with sustained ongoing professional development necessary to implement the curriculum components of this plan. It lists the specific goals, objectives, and benchmarks. It also includes who will lead the development and when this will take place. These goals were developed based upon the district Student Learning Outcomes Matrix, Curriculum Driven Technology Goals, EdTechProfile Technology Proficiencies for Teacher Standards, portfolio assessments and the legislated requirements for new teachers.

#### 4c. Ongoing Monitoring for Continuous Improvement

The processes that will be used to monitor the Professional Development Goals are included with tables in 4b. In addition, the district's Assistant Superintendent, Educational Services, Director of Information Technology and Support Services, Curriculum Coordinator, school administrators, the Technology Plan Review Team will conduct ongoing formative data reviews. The team will meet quarterly to track the development and implementation of all tech plan activities and accomplishments. The Technology Plan Review Team may work in conjunction with the District Curriculum Council for reporting purposes. Modifications to our Tech Plan activities will be made as needed in order to ensure that we meet or exceed our goals by June 2015. The Technology Plan Review Team will compile a mid-year tech plan implementation status report and distribute to stakeholders in February. Annual summative data analysis and needs assessments are conducted in late August / September after the state releases all relevant district data and schools complete early assessments of incoming students. The Technology Plan Review Team is responsible for an annual summative performance report to stakeholders.

**Criteria 5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT AND SOFTWARE**

**5a & b. Hardware, Internet Access, Electronic Learning Resources and Tech Support that exist and is needed by Teachers, Students, and Administrators to Support the implementation of the Curriculum and Professional Development Components**

The Merced City School District has been involved in applying for E-rate discounts through the Schools and Libraries Division (SLD) of the Universal Service Administrative Company (USAC) for the past thirteen years. Applications for E-rate discounts have been filed on a yearly basis to fund Basic Telecommunication Services, Internet Access, and Internal Connections as defined under E-rate's eligible list policy. Over the past thirteen years the district has received E-rate discounts for:

<b>TELECOMMUNICATIONS</b>	<b>INTERNET ACCESS</b>	<b>INTERNAL CONNECTIONS</b>
<ul style="list-style-type: none"> <li>* IP Phone System Upgrade</li> <li>* Basic Telephone Service</li> <li>* Nextel Wireless service</li> <li>* Broadband Internet Wireless Access</li> </ul>	<ul style="list-style-type: none"> <li>* Internet Service Provider (ISP) charges.</li> <li>* Networking Equipment</li> <li>* Data Service; T1, Wireless and Fiber optics.</li> </ul>	<ul style="list-style-type: none"> <li>* Enhanced Cabling and Conduit</li> </ul>

In addition to the support provided by the E-rate programs and other grants, the district has embraced the responsibility to support the implementation of the Curriculum and Professional Development Goals through meeting infrastructure, hardware and software needs.

Currently the schools in the Merced City School District have 2,341 instructional computers available for students for library, classroom or lab instruction. This translates to having one computer for every 4.6 students in the district. All of the instructional computers have filtered access to the Internet as well as local network access. Every teacher has a PC computer station, a classroom telephone and access to a networked printer.

The local area network (LAN) at all school sites consists of multimode optical fiber cable, which serves as the backbone for each LAN. Extra pairs of multimode fiber cable are unused at each fiber installation or run, thereby supporting future upgrade needs. Twisted-pair copper cabling, rated as category 5 (CAT5) or category 6 (CAT6) are installed from the wiring closets to the desktop in every classroom and office. Every classroom also has wireless access.

Servers are located throughout the district. Centralized servers at our district office host DNS, internal and external web sites, active directory, email, backup, student system, content filter, antivirus, remote access, phone and paging applications. Other servers at the school sites and at the district office host network shares, shared applications and printer shares. Our servers run on a wide range of hardware. Older servers have Pentium II processors, 40 gigabytes of hard drive space and 512 megabytes of ram, running on Windows Server 2000. More recent servers have

dual quad core Xeon processors with terabytes of hard drive space and 8 gigabytes of ram, running 64 bit Windows Server 2003 R2. We also have servers running specialized versions of Linux.

The district has a vigorous infrastructure and extensive end user hardware, enough to adequately meet the goals and objectives in section 3. There is always a need to either upgrade or enhance the existing equipment to maintain its functionality in meeting ever-expanding operating system and software technology advances.

The MCSD Hardware & Software Summary Chart (See page 50-51) aligns resources necessary to support the activities in the curriculum and staff development components of the plan. The chart indicates technical resources required by each school in order to meet specific Curricular and Staff Development goals and objectives. Existing technology that meets the requirements are also identified.

The **Timeline** column indicates the period in which the technology would likely be purchased and implemented. The **Required Purchase of Technology** column indicates a budgeted dollar amount to be spent in order for the technology to meet the needs of the goals and objectives. Amounts that extend for more than a one-year period may include maintenance and upgrades of newly purchased and/or existing technology.

Where the same technology component is required to meet multiple goals/objectives it is noted with an "\*" to show that it will be required in more than one goal or objective.

Each of the curricular and staff development goals depends heavily on a robust, cost-effective and flexible hardware and network infrastructure. The wide-area network supporting every user and application needs to provide as much bandwidth as possible while being as inexpensive as possible. We feel moving to a fiber-based WAN with no recurring service charges meets those criteria. This allows for support of all curricular-based software applications, distance learning tools, hand-held and portable devices such as PDAs, laptops and any foreseeable technology. Desktop computers should be available in classrooms at ratios that fit the needs of teachers and students.

## MCSD Hardware & Software Summary Chart

The following chart represents the hardware and software in 4 middle schools needed to meet the curriculum and staff development goals.

School	Goal	Hardware & Software Required To Meet Objective	Timeline	Required Purchase of Technology
<b>Middle Schools</b> Cruickshank Middle Tenaya Middle Hoover Middle Rivera Middle	CG.1 SDG.1	- Online library catalog software - Internet access to school library catalog system - Reading comprehension assessment tool - Writing/Publishing Software - Library Media Center with 5 networked workstations* - A better than 10 to 1 student to computer ratio in each core classroom * - Electronic Interactive Presentation System	In Place In Place In Place In Place In Place 2010-2012 2010-2015 2010-2012	\$40,000/yr \$10,000/yr \$14,000/yr \$5,000/yr
	CG.1 SDG.1	- Electronic reading (e-book) software/hardware - Electronic encyclopedia - Filtered access to student research sites on the Internet - Age appropriate document publishing & information research tools - On-line video available to each classroom in large screen format*	In Place In Place In Place In Place	\$3,000/yr (ER)
	CG.2/Obj.3, SDG.2/Obj.1-.3	- Age appropriate writing, multimedia & publishing software - Age appropriate web publishing & graphics editing software - Digital still & motion cameras, scanners, CD burner - Workgroup software with access to local & wide area networks - Access to web hosting services & web servers within the district	In Place 2010-2011 2010-2011 In Place In Place	\$20,000 \$120,000 (ER)
	CG.3/Obj.3 SDG.3/Obj.1-.3	- Skill/Concept – based software - Spreadsheets & Database software - Word processing & presentation software - Handheld data collection devices & software	In Place In Place In Place 2010-2012	\$120,000
	SDG.4/Obj.1 SDG.5/Obj.1-2 SDG.6/Obj.1-3	- 1 to1 ratio for all FTE Teachers - Web access available to all FTE Teacher workstations - Staff development computer lab facilities for group training complete with well maintained workstations, projection system, web access, handheld devices & appropriate curricular and administrative software - Voice over IP	In Place In Place 2010-2011 In Place	(ER) \$5,000/yr (ER)

- \*Required for multiple goals and objectives.
- (ER) E-Rate funded

The chart below represents hardware and software among 12, K-5, elementary sites needed to meet curriculum and staff development goals.

School	Goal & Objective ID*	Hardware & Software Required To Meet Objective	Timeline	Required Purchase of Technology
All Elementary Schools (K-5)	CG.1/Obj.1, SDG.1/Obj.1	<ul style="list-style-type: none"> <li>- Phonics-based Software</li> <li>- Electronic Interactive Presentation System</li> <li>- Distributed Video Media Over Network Infrastructure</li> </ul>	In Place 2010-2015 2010-2015	\$30,000/yr \$5,000/yr
	CG.1/Obj.2 SDG.1/Obj.2-3d	<ul style="list-style-type: none"> <li>- Online library catalog software</li> <li>- Internet access to school library catalog system</li> <li>- Reading comprehension assessment tool</li> <li>- Writing/Publishing Software</li> <li>- Library Media Center with 5 networked workstations *</li> <li>- A better than 10 to 1 ratio in each core classroom *</li> </ul>	In Place In Place In Place In Place 2010-2011 2010-2011	\$20,000/yr \$20,000/yr \$5,000/yr \$2,000/yr \$1,500/yr
	CG.1/Obj.4, SDG.1/Obj.4	<ul style="list-style-type: none"> <li>- Electronic reading (e-book) software</li> <li>- Electronic encyclopedia</li> <li>- Filtered access to student research sites on the Internet</li> <li>- Age appropriate document publishing &amp; information research tools</li> <li>- Laser &amp;/or Digital video available at each workstation through the local or wide area network</li> <li>- On-line video available to each classroom in large screen format*</li> </ul>	2010-2011 2005-2010 2005-2010 2005-2008 2005-2010	\$30,000 (ER) \$3,000/yr (ER)
	CG.2/Obj.1-2, SDG.2/Obj.1-2	<ul style="list-style-type: none"> <li>- Age appropriate writing, multimedia &amp; publishing software</li> <li>- Age appropriate web publishing &amp; graphics editing software</li> <li>- Digital still &amp; motion cameras, scanners, CD burner</li> <li>- Workgroup software with access to local &amp; wide area networks</li> <li>- Access to web hosting services &amp; web servers within the district</li> </ul>	In Place 2005-2010 2005-2010 In Place In Place	\$30,000 \$350,000 (ER)
	CG.3/Obj.1-2 SDG.3/Obj.1-3	<ul style="list-style-type: none"> <li>- Skill/Concept – based software</li> <li>- Spreadsheets &amp; Database software</li> <li>- Word processing &amp; presentation software</li> <li>- Handheld data collection devices &amp; software</li> </ul>	In Place In Place In Place 2010-2015	\$480,000 (ER)
	SDG.4/Obj.1 SDG.5/Obj.1-2 SDG.6/Obj.1-3	<ul style="list-style-type: none"> <li>- 1 to1 ratio for all FTE Teachers</li> <li>- Web access available to all FTE Teacher workstations</li> <li>- Staff development computer lab facilities for group training complete with well maintained workstations, projection system, web access, handheld devices &amp; appropriate curricular and administrative software</li> <li>-Voice over IP</li> </ul>	In Place In Place 2010-2015 In Place	\$50,000 (ER)

• \*Required for multiple goals and objectives.

• (ER) E-Rate funded

### **General Specifications for Computers and printers**

Future PC purchases at Merced City School district will be equivalent to Intel Core 2 Duo class PC or better. Laptop computers will be equivalent to Intel Core 2 Duo or better. The Apple computer purchases will be Intel Core 2 Duo iMac's. The computer market is in constant change. At this time all classrooms and administrative areas are equipped with at least 1.8 GHz Pentium PCs or better with 256 MB of RAM and CD-ROMS, 80 GB hard-drives. All computers purchased within the past year have been 2.66 GHz Intel Core 2 Duo or better with 4GB of RAM, DVD (8X)/CD-ROM (48X) Combo Drive and 80GB of hard-drive space. Currently, all computers purchased in the District within the last three months are equivalent to 2.66 GHz Intel Core 2 Duo with 4GB of RAM, DVD (8X)/CD-ROM (48X) Combo Drive & 80GB hard-drives.

The Information Technology Department will evaluate the hardware specifications for desktops at least every 6 months with his staff and outside vendors. Other hardware (peripheral's and internal components) are evaluated by the I.T. Department as the market and the District's needs demand.

The Information Technology Department will establish a minimum standard of supportability for computer hardware. The minimum standard guidelines will allow school sites to budget for obsolescence of equipment, plan to move the obsolete equipment to surplus (pending board approval) and offer it for sale at large. Equipment not purchased through the community sale is disposed.

### **Baseline Network Requirements**

#### **District Wide-Area Network**

The Merced City School District network is built around a hub-and-spoke wide area network topology and supports all campus networks at each school site as well as local area networks at each administrative site. The wide-area network is built on three pairs of gigabit fiber for which the district currently pays nothing. The Cisco Catalyst 6000 core switch and outlying switches provide sufficient POE bandwidth to support computer applications and VOIP applications. This configuration allows for maximum bandwidth for all students and administrative functions at a minimum of cost. If the bandwidth requirements exceed 1 gigabit, the district can increase the capacity of each pair to 10 gigabit by replacing some or all of the network equipment as needed. The cost change is incremental but the network performance would be 10-fold. This infrastructure allows for growth in bandwidth capacity over time without ongoing service costs or a complete rebuilding of the infrastructure.

The district office will continue to act as the "hub" of the wide-area network.

Each school campus in the district has a 100-base-T fiber backbone providing Ethernet connectivity to each classroom, the library and other core campus facilities.

## **Servers:**

Most servers at school and administrative sites are running Windows 2000 or later. A few specialized servers run Linux. There is at least one server for each elementary and at least two for each middle school to provide network authentication, name resolution, file sharing & printing as well as web and client-server applications for students, administrators and staff. The district office houses the web servers, email servers, network controllers, data warehouse servers and backup servers. All servers are backed up to Network Attached Storage (NAS) servers over the fiber based wide area network.

## **School wiring**

### **Campus - Local Area Networks**

All schools have Category 5 network cabling to serve local area networks (LANs) within each building. Each building is attached through a gigabit fiber connection to a main distribution frame (MDF) from its own intermediate distribution frame (IDF) on campus. These MDF's connect via gigabit fiber to the district office. From there they connect to the internet at over 50 megabit on average. Campuses support at least 100 megabit Ethernet with some schools utilizing gigabit switched Ethernet.

## **Wireless**

All elementary and middle school classrooms and two district facilities have wireless access connecting each room to the District network and to the Internet.

## **Usage**

All teachers can currently log on to any district networked computers and can access their own files from networked file servers anywhere in the district. All laptops in the district have wireless capability and have the ability to accomplish accessing information utilizing the wireless access points within the district. Security will be established for all stored files so that only those who need access to the information can get it. File security will be centrally managed by the Information Technology Department.

All district staff currently have access to district email through any computer in the district once they log in. They also have access to district email from the internet through the district's web-based email server. All educators and administrators have access to email through any computer, from the web, from their district supplied PDA or from any wireless laptop in the district.

## Current and Future Computers/Thin Clients

School	Total Enroll	Computers Now	Computers to be Acquired by 2015	Connected To Internet Now	Connected to Internet by 2012
<b>Elementary</b>					
Givens	535	129	By 6/15: 30	129	29
Reyes	612	141	By 6/15: 45	141	33
Peterson	733	107	By 6/15: 45	107	37
Wright	515	115	By 6/15: 45	115	25
Stowell	464	59	By 6/15: 30	59	21
Chenoweth	683	163	By 6/15: 60	163	31
Franklin	494	75	By 6/15: 30	75	29
Stefani	511	76	By 6/15: 45	76	25
Fremont	548	142	By 6/15: 45	142	27
Muir	500	140	By 6/15: 45	140	26
Gracey	566	165	By 6/15: 45	165	28
Burbank	581	102	By 6/15: 60	102	33
Sheehy	535	136	By 6/15: 60	136	31
<b>Middle Schools</b>					
Cruickshank	929	286	By 6/15: 100	286	43
Hoover	800	251	By 6/15: 100	251	31
Rivera	943	214	By 6/15: 100	214	35
Tenaya	905	255	By 6/15: 100	255	34
ASAM			By 6/15: 100		
Community Day	22	5	By 6/15: 10	5	3
<b>District Totals</b>	<b>10876</b>	<b>2341</b>	<b>1,095</b>	<b>2341</b>	<b>1165</b>

## Current and Future Classroom Peripheral Hardware All Schools

School	Standard Site Hardware Now	Site Hardware to be Acquired by 2015
<b>K-5 Schools</b>	1 networked Printer per building 4 Digital Cameras School-wide 3 LCD Projectors 1 Scanner	1 LCD projector and Remote tablet per classroom 5 Document Cameras 1 Interactive White Board or LCD TV per classroom 5 Digital Video Cameras
<b>Middle Schools</b>	1 Printer per Building 10 Digital Cameras School-wide 3 LCD Projectors 2 Scanners	1 LCD projector and Remote tablet per classroom 10 Document Cameras 5 Digital Video Cameras 1 Interactive White Board or LCD TV per classroom

## Current and Future Infrastructure

School	Current Infrastructure	Infrastructure Upgrades by 2015
<p><b>K-5 Sites</b></p> <p><b>Middle Schools</b></p>	<ul style="list-style-type: none"> <li>* LAN multimode optical fiber cabling for connectivity to DO (1997)</li> <li>* Twisted-pair CAT5 for classroom connectivity (1998) 6 Drops/classroom</li> <li>* Added 2-4 CAT6 Cabling drops per Classrooms and repair all CAT5 termination failures (2008)</li> <li>* New Applications Server (2008)</li> <li>* DNS Server (2008)</li> <li>* Cisco Catalyst 4000's Switches (2008)</li> <li>* IP Telephony System Installed (2000)</li> <li>* Wireless Access -1200/1100 - in each Classroom (2007)</li> <li>* IPTV Delivery system in every classroom (2005)</li> <li>* Upgrade 6500 Main Switch (2008)</li> <li>* New Conduit and CAT 6 to portables (2008)</li> <li>* Upgraded raceway and Panduit molding in classes (2008)</li> <li>* Upgraded to fiber to all IDF boxes and switches (2008)</li> <li>* Upgraded switches to inline powered, minimum of 48 ports</li> <li>* Upgraded IP Phones to Spec 5 software version (2008)</li> <li>* Acquired Wireless LAN Controller</li> </ul>	<p>2013: Replace/upgrade CAT5 cabling with CAT6</p> <ul style="list-style-type: none"> <li>* Upgrade/Replace Servers as needed:                             <ul style="list-style-type: none"> <li>Dynamic Host Configuration Protocol (DHCP)</li> <li>Domain Name Service (DNS)</li> <li>E-mail</li> <li>Firewall or Proxy</li> </ul> </li> <li>* New Gig Blade for LMS 6500 switch</li> </ul>

**5c. District Goal for Benchmarks and Timeline for Obtaining Needed Hardware Infrastructure, Learning Resources, and Technical Support**

**Goal 1: All sites will meet the recommended equipment standards**

Upgrade all sites to meet the stated equipment standards. Provide ongoing maintenance of the current equipment so classrooms do not fall below the standard.

<b>Recommended Equipment Standards</b>	
<b>K-5 School Level</b>	Computer Lab: 32 PC computer stations, 1 teacher station and Laser Printer Library: 10 PC computer stations; networked, color laser printer
<b>6-8 School Level</b>	Computer Lab: 32 Thin Client computer stations, 1 teacher station and Laser Printer Library: 32 Thin Client stations; 4 networked, color laser printer
<b>K-8 Classroom Level</b>	3 Networked Student Computers per classroom 1 Printer per building wing Appropriate Furniture for Student Stations 1 Teacher Station IPTV with dedicated computer in each classroom 1 Telephone Digital Cameras, at least 1 per 10 classes 1 Scanner per site 1 LDC projector and Remote Tablet per classroom

**Goal 2: All sites will adhere to equipment standards when purchasing new equipment**

**General Specs for Computers and Printers**

Future PC purchases at Merced City School district will be equivalent to Intel Core 2 Duo class PC or better. Laptop computers will be equivalent to Intel Core 2 Duo or better. The Apple computer purchases will be Intel Core 2 Duo iMac's. The computer market is in constant change. At this time all classrooms and administrative areas are equipped with at least 1.8 GHz Pentium PCs or better with 256 MB of RAM and CD-ROMS, 80 GB hard-drives. All computers purchased within the past year have been 2.66 GHz Intel Core 2 Duo or better with 4GB of

RAM, DVD (8X)/CD-ROM (48X) Combo Drive and 80GB of hard-drive space. Currently, all computers purchased in the District within the last three months are equivalent to 2.66 GHz Intel Core 2 Duo with 4GB of RAM, DVD (8X)/CD-ROM (48X) Combo Drive & 80GB hard-drives.

Every classroom will be connected to a black and white laser printer with a color laser printer available to all for special projects. The district technology committee, in collaboration with the District Information Technology Director, shall review standards for minimum hardware requirements on a yearly basis. In addition, all campuses will have copiers/scanners/printers for local printing that is larger than a typical classroom printer can handle. And each campus will have access electronically to the District Print Shop to send large and specialized print jobs on a regular or as needed basis. The cost accounting for this printing will be an integral part of the technology of the printing environment.

All computer purchase orders will be routed through the District Information Technology Director to ensure compliance with purchasing standards.

**Goal 3: Technical support will be adequate to maintain a high level of implementation of the Curriculum Applications and Professional Development**

<b>Technical Support</b>		
<b>What We Have</b>	<b>In Addition to What We Have, What We Need</b>	<b>Timeline for Upgrading Service</b>
<ul style="list-style-type: none"> <li>* District PC Support Tech (1)</li> <li>* District Level Network Specialist, Full-time (1)</li> <li>* District Level Data Processing Specialists, Full-time (2)</li> <li>* Network Support Techs, Full-time (2)</li> <li>* District IT Director, Full-time</li> </ul>	<p>Additional District PC Support Tech, Full-time (1)</p>	<p>By June 2015</p>

At present, with well over 2,400 computers district-wide, the ratio of technical support personnel to computers is approximately 233 to 1. District staff finds that this standard is manageable but needs to be monitored regularly to insure repair/maintenance response times are adequate for optimal system functioning. The District Information Technology Director will review response times annually and modify/secure additional services as needs indicate.

**Goal 4: Supporting software for teaching, learning and assessment will be available**

In addition, servers housed in the District Server Room, provide staff with networked access to the Aeries attendance program, Follett Library program, and designated storage for lesson plans and related information. Designated staff also has access to web-based student achievement information via Data Director systems.

<b>Recommended Software Standards</b>	
<b>Student Computer Stations</b>	
<b>Grades K-2</b>	Keyboarding Program, Word Processing Program, Encyclopedia & Current Web Browser
<b>Grades 3-8</b>	<i>Items in Grades K-2 Plus: Office 2003 or 2007</i>
<b>Staff Computer Stations</b>	PC operating system Windows XP or above, Microsoft Office 2003 or 2007, FrontPage - Version 2000 or above, Aeries, Accelerated Reader, Waterford, Data Director

**5d. Description of the process to be used to monitor achievement of goals is included under each goal narrative.**

<b>Activity or Benchmark</b>	<b>Start Date</b>	<b>Projected Completion Date</b>	<b>Target Audience</b>	<b>Person Responsible</b>
Maintain, repair and replace equipment	Year One	Ongoing through 2015	K-8 students, teachers and administrators	District IT Staff Site IT Staff Site IRT's
Coordinate all technology purchases	Year One	Ongoing through 2015	Administrators	District IT Staff District Business Staff
Provide technical support during school hours	Year One	Ongoing through 2015	K-8 Students and staff	IRT's Site IT Staff District IT Staff
Provide technical support outside of school hours	Year One	Ongoing through 2015	Staff	District IT Staff
Provide professional development	Year One	Ongoing through 2015	Teachers, Support personnel and administrators	IT Staff Technology Director

## **Criteria 6. FUNDING AND BUDGET**

The Merced City School District has actively pursued funding resources to support its participation in all phases of technology. Some of the funds we have accessed in the past are; E-Rate, EETT funds, State English Learner Intensive Literacy Program (ELILP) grant with a significant instructional technology strand, and Technology Learning Challenge grant monies over multiple years. In addition, the district provides in-kind support from various Categorical program funding sources, including paying a portion of staff development costs and release time for site staff. The district will continue to aggressively pursue grants, but we cannot be certain which grants will be available to fund the items mentioned in the Budget Forms. Economic conditions in California and the nation may continue to impact K-12 education budgets and grants through the duration of our five year tech plan. Therefore, our established and potential funding sources to implement our Ed. Technology Plan may be impacted as well.

The district already has a full-time Level I Network Engineer and an eight hour technician. In addition, the five-year plan includes the district regularly providing staff development for curriculum-integrated technology, and literacy training, as part of their plan to provide in-kind services. The Budget Form shows a breakdown of cost estimates and the total cost of ownership for the duration of the plan. In order to meet the Curriculum Goals found in the plan, a variety of equipment and software must continue to be maintained at the sites.

### **6a. Established and Potential Funding Sources**

Established funding sources the district is now accessing to move forward with technology implementation in the district are; E-Rate participation to defray some of the costs of maintaining and expanding the infrastructure of our system and monies from; the District General Fund, Title I, Title II, Title III-LEP, EIA-LEP, and State Lottery for hardware, software and other non-E-Ratable purchases.

Potential new funding sources include additional K12 Vouchers, ongoing EETT Formula funds, grants, in-kind services and donations, special State and Federal grants as well as Foundation Grants. The district is an active member of the county sponsored "A-Team" that serve as a conduit for current information about funding opportunities and potential funding sources that are related to technology. We have staff that are members of the State's listserv for "For New Grant Opportunities in the State."

The district participates in all programs they can access to help defray the cost of technology in the district. E-Rate has brought nearly 6 million dollars of technology infrastructure into the district that would have otherwise been unattainable. The district also participates in the California Teleconnect program, utilizes CMAS when it presents a cost savings and always "shops" for the best deal when acquiring anything from a new replacement keyboard to switches and servers. Because of an emphasis on participating in a wide range of grant opportunities and spending wisely the district is able to support a state-of-the-art infrastructure with comparable end-user equipment.

## 6b. Estimated Costs to Implement Five-Year Plan

Following is an overview of the proposed annual budget for technology for the next five years.

Funding Category	Description	2010-11	2011-12	2012-13	2013-14	2014-15	ERateable
1000 + 3000 Certificated Staff Salaries and Benefits	Costs for subs and stipends for staff Tech training	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	No
2000 + 3000 Classified Staff Salaries and Benefits	District Level Support	495,000	495,000	495,000	495,000	495,000	No
	Site Level Support	15,000	16,000	17,000	18,000	19,000	No
4000 Materials and Supplies	Misc. supplies and materials, upgrades to RAM, new computers, new servers and other Non-ERateable items	24,000	24,000	50,000	50,000	50,000	No
5000 Services, Operating Expenses, and Travel	Tech Travel & Training	2,000	4,000	4,000	4,000	4,000	No
	Maintenance & support contracts, Data Director, Aeries, Web Hosting, Auto Dialing System	20,000	20,000	20,000	20,000	20,000	Some, Yes
Annual Total		\$566,000	\$569,000	\$596,000	\$597,000	\$598,000	
5-Year Total Cost =							\$2,926,000

## 6c. District Replacement Policy for Obsolete Equipment

Currently, obsolete equipment is replaced on an as needed basis. The district determines how obsolete equipment is replaced as the need arises in supporting the activities in the curriculum and professional development components of our Technology Use Plan. Obsolete computers are salvaged for parts and/or taken to be recycled.

Decisions on what to do with older equipment can depend on a particular budget, type of application, projects requirements, awarded grants or funding, and any combination of many other variables. Generally however, older equipment will fall into one of three categories:

**Upgradeable** – This type of equipment, although old and outdated, can still be brought up to acceptable standards by upgrading existing parts and/or addition of new parts to accomplish all that the equipment is intended to support at a reasonable cost. Typically this is a computer purchased with the previous 1 to 5 years.

**Hand me down** – Although this type of equipment, especially that that has been recently purchased, has failed to support its current tasks, it can still be utilized in other ways in the district.

**Obsolete** – A computer is considered obsolete if it meets the following requirements:

- The computer is more than 5 years old
- The equipment cannot support the latest browser and anti-virus software
- The cost for upgrading the computer is high relative to the cost of purchasing a similar new computer (approximately 40% of the cost of the new computer).

**6d. District’s Educational Technology Budget and Funding Monitoring Process**

The district distributes categorical program funds in a site-based management system. Site principals develop their school budgets with input from their staff and parents. The Superintendent and District Information Technology Director work collaboratively to guide site principals and Chief Fiscal Officer in required and recommended technology needs for each fiscal budget development cycle. The Chief Fiscal Officer then provides principals with additional guidance for budget planning and development for technology.

The Superintendent, Chief Financial Officer, and Director of Information Technology will monitor and evaluate progress of the technology plan as described in the Funding and Budget component goals and benchmarks. Adjustments to the plan will be made as needed or when additional funding becomes available. These adjustments will be relayed to site administrators.

**Criteria 7. MONITORING AND EVALUATION**

**7a. The Process for Evaluating the Plan’s Overall Progress and Impact on Teaching and Learning**

TASK	J	A	S	O	N	D	J	F	M	A	M	J	RESPONSIBLE
Plan Monitoring: Infrastructure and Hardware needs				X				X			X		Director of State and Federal Programs Technology Committee
Plan Monitoring: Program and Training		X				X		X			X		Director of State and Federal Programs Technology Committee
Budget Monitoring			X				X			X			Chief Fiscal Officer Superintendent
Budget Development & Approval													Superintendent School Board

The evaluation of progress towards curricular goals is embedded throughout this plan. Each strand has an evaluation component. The evaluation information will have a direct effect on the focus of staff development needs and will require continuous updates. Assistant Superintendent, Educational Services, Curriculum Coordinator, Site Principals, Intervention Teacher/Coaches, Technology Committee, and teachers will monitor the results of student benchmark assessments to evaluate student's progress in reaching curricular goals as described in the curriculum component goals and benchmarks.

**7b. Schedule for Evaluating the Effects of Plan Implementation**

<b>TASK</b>	<b>J</b>	<b>A</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>RESPONSIBLE</b>
<b>Curriculum Effectiveness Monitoring: Language Arts &amp; Math Benchmark Assessments</b>					X			X			X		Assistant Superintendent, Educational Services Director of State and Federal Programs Teachers Principals Site Intervention Teacher/Coaches Coordinators
<b>Curriculum Effectiveness Monitoring: Intervention Program Assessments</b>		X		X		X			X		X		Assistant Superintendent, Educational Services Director of State and Federal Programs Teachers Principals Site Intervention Teacher/Coaches
<b>Staff Development</b>					X						X		Assistant Superintendent, Educational Services Technology Director
<b>Plan Modification</b>			X									X	Technology Committee Superintendent School Board

**7c. How the Information Obtained Through the Monitoring and Evaluation will be Communicated to Technology Plan Stakeholders.**

Information gathered from the variety of monitoring and assessment systems will be analyzed by instructional staff, program staff and other stakeholders. The District staff has been trained and has been heavily engaged and successful with the assessment/program modification loop for eight years. Their level of expertise will continue to play an important role in providing appropriate technology based services to students and staff. An important part of analysis is to make recommendations for future adjustments to programs or delivery. Staff reviewing data is sophisticated to the point that they are very proficient at identifying specific needs and making

recommendations for adjustments. As recommendations are made, at significant benchmarks identified in the above chart, instructional staff will collaborate with program staff and significant stakeholders to revise/modify existing plans to meet any newly identified needs.

<b>TASK</b>	<b>J</b>	<b>A</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>RESPONSIBLE</b>
<b>Curriculum Modification and Revisions to Stakeholders</b>					X			X			X		Assistant Superintendent, Educational Services Director of State and Federal Programs Teachers Principals Site Intervention Teacher/Coaches Coordinators
<b>Curriculum Intervention Modifications and Revisions to Stakeholders</b>		X		X		X			X		X		Assistant Superintendent, Educational Services Director of State and Federal Programs Teachers Principals Site Intervention Teacher/Coaches
<b>Staff Development Modifications and Revisions to Stakeholders</b>					X						X		Assistant Superintendent, Educational Services Information Technology Director
<b>Plan Modification and Revisions to Community</b>			X									X	Technology Committee Superintendent School Board

**Criteria 8. ADULT LITERACY**

Adults currently have access to technology through several existing programs. The Region Occupational Program (ROP) offers a variety of computer and adult literacy training opportunities such as Computer Repair and Maintenance. These free classes are open to all adult residents of Merced. Classes are offered in the evenings at our local high school as well as the Merced County Office of Education. This flexible training program provides citizens within the community with career guidance, hands-on training and job placement assistance to help ensure success.

Another successful program, implemented by the Merced City School District, is the Community Based English Tutoring Program (CBET) which was originally funded through Proposition 227 and is being continued with district funds. The district offers the program that includes a computer lab that participants can access during the day, after school or evenings. The CBET program uses the Ellis (Compass Learning) to introduce parents to English acquisition utilizing

technology. Parents learn computer skills and information literacy as a byproduct of acquiring and/or improving their English.

At scheduled times, through the work of our librarians and computer lab technicians, parents are able to use the computers in the schools after regular school hours when accompanied by their children. The district is exploring funding sources to expand library and computer lab hours and services to reach even more parents and their children after regular school hours.

Our local community college, Merced College, offers Adult Computer Literacy Courses to adults in our community. Participants must be eighteen years old to take advantage of these courses. Courses offered include Computer Applications, Introduction to Computer Studies and Technology, and Microcomputer Operating Systems. These tend to be a combination of lecture and hands-on lab classes.

The district will continue to work closely with Merced College, University of California, Merced, Merced County Office of Education, the local high school and the schools themselves to assess and to determine the needs of the adults in the community. Possible assistance could be provided in the areas of sharing facilities, sharing ideas of curriculum integration, pursuing funding sources together, offering technology professional development opportunities, and/or providing online access.



#### 9a. Summary of Relevant Research and How it Supports this Plan

Our technology plan lists clear goals and strategies for integrating technology into the curriculum to improve student learning in the core learning areas of English/ Language Arts and Math. The learning objectives are based on the California State Academic Content Standards and the CDE's Essential Program Components (EPCs) for school success. The following relevant research was examined and integrated into our plan. The research emphasizes best practices for technology integration in the curriculum, and important factors that contribute to successful staff development.

Our philosophy is that the use of technology should be integrated into the curriculum at all levels in order to improve student achievement. Technology should not be a separate content taught for its own sake. Technology improves student performances when the application directly supports the curriculum objectives being assessed. Alignment of project or lesson content with state content standards is an important first step in infusing technology into the curricula.

*A survey of 465 teachers in California resulted in 92% affirming that the starting point in infusing technology into the curriculum is having information about the specific content of a program or use of an application that aligns with state-adopted curriculum*

*standards. A number of respondents indicated that an online resource that profiles electronic learning resources with the specific skills and knowledge in areas that align with the content standards would facilitate the selection of programs enabling the integration of technology with the curriculum (Cradler & Beuthel, 2001)*

*In an ACOT study student engagement remained highest when technology use was integrated into the larger curricular framework, rather than being an “add-on” to an already full curriculum (Sandholz et al, 1997).*

*Research suggests that when technology is integrated into the larger instructional framework, students will gain both technical expertise and content knowledge (Silverstain et al, 2000)*

*Moreover, using technology within the curricular framework can enhance important skills valued in the workplace, such as locating and accessing information, organizing and displaying data, and creating persuasive arguments (Sandholtz et al, 1997; “Critical Issue,” 1999)*

Technology skills are not taught in isolation. Staff development has, and will continue to emphasize the use of technology as a powerful teaching and learning tool that engages students while addressing content standards within the curricular, instructional framework and adopted curriculum.

*The Learning Return On Our Educational Technology Investment: A Review of Findings from Research, WestED (Ringstaff and Kelley, June 2002)* is an extensive report that examines many studies related to educational technology and school reform. Several key factors are identified as crucial elements for successfully using technology:

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

These key research-based elements are integrated in Sections 3-5 of our Technology Plan.

Our revised education technology plan 2010-2015 includes all the research-based best practices integrated in the EETT technology plan research-based requirements for formula and competitive grant applications for Title II, Part D, and No Child Left Behind.

The Becker report describes a number of aspects of the professional engagement of American teachers. It also examines relationships between professional engagement and teaching practice, including instruction involving computer use. It defines professional engagement as a teacher making effort to affect the teaching that occurs in classrooms other than his or her own. It measured professional engagement by (1) the frequency that a teacher had informal substantive communications with other teachers at their school, (2) the frequency and breadth of professional interactions with teachers at other schools, and (3) the breadth of involvement in specific peer

leadership activities mentoring, workshop and conference presentations, and teaching courses and writing in publications for educators.

*Becker, J.H., and Riel, M.M. (2000). Teacher professional engagement and constructivist-compatible computer use, center for research on information technology and organizations. Retrieved September 23, 2002, online*  
[http://www.crito.uci.edu/tlc/findings/report\\_7/startpage.html](http://www.crito.uci.edu/tlc/findings/report_7/startpage.html)

Our education technology plan is consistent with the Becker research in the following ways: (1) teachers collaborate with various staff to produce and practice technology integrated technology activities. (2) teachers are provided with the opportunity to attend sessions every semester both online and face-to-face that cover basic-to-advanced use of technology; and (3) our key (technology proficient) teachers and paraprofessionals are involved in leadership activities such as coaching, facilitating, and modeling the effective use of instructional technology.

Current research will continue to be incorporated in our tech plan as appropriate to ensure that our education technology program is consistent with current scientifically-based research regarding technology, teaching, and learning. All electronic learning resources purchased will be CLRN reviewed and/ or SBE approved and evaluated for its ability to support our curricular goals.

Consistent with this research, the Merced City School District has already been in the process of carefully analyzing learning resources and lessons for alignment with California content standards and selects nothing that does not match our clearly charted standards aligned curriculum. District assessments have been designed/selected to accurately and completely reflect the full range of academic and performance skills students are expected to achieve. Through ongoing data collection from these carefully selected/developed assessments and ongoing thorough analysis, the Merced City School District will continue to monitor its attainment of the goals and objectives of the ETP, and will report results annually to the superintendent, the school board, and the public. Equity of access to all of our students is an integral part of the school's programs as well as this plan. The district is dedicated to ensuring all students of any special needs population are afforded the same access to all components of the curriculum whether it is in the realm of technology or any other curriculum aspect.

Our curricular goals and professional development goals are guided by effective instruction research. According to Marzano, R., Pickering, D., and Pollock, J. (2001) in *Classroom Instruction that Works: Research-based Strategies for Increasing Student Achievement*, there are a variety of instructional strategies with proven success in improving student achievement. The research-based strategies include: 1) identifying similarities and differences; 2) summarizing and note-taking; 3) reinforcing effort and providing recognition; 4) homework and practice; 5) nonlinguistic representations; 6) cooperative learning; 7) setting objectives and providing feedback; 8) generating and testing hypotheses; and 9) cues, questions, and advance organizers.

As noted in our plan for meeting our curricular goals for all students, a variety of instructional strategies and technologies will be used to assist students in acquiring literacy skills in all content areas. As described in the research, the uses of nonlinguistic representations such as graphic organizers are effective tools for supporting understanding of key concepts, and graphic representations are highly effective tools for supporting new concepts and vocabulary.

Simulation software allows students to generate and test hypotheses quickly and efficiently. Using presentation software to organize information, coupled with using a printed copy of the presentation to assist in note-taking skills, helps students to better identify key concepts and summarize critical information. Consistent with the research our curricular and staff development goals will include the use of image and schema based software, the use of simulation software, and PowerPoint handouts to guide students in note taking.

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

Integration within the curriculum framework strengthens information literacy skills "Moreover, 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 according the authors of "Critical issue: Using technology to improve student achievement" (1999). In addition, "Integrated learning programs should be considered as a supplement for the systematic development of basic academic skills but should not replace project-based activities that are designed to teach students the relevance and application of the basic skills as they are mastered."

Mann, D., Shakeshaft, C., Becker, J., & Kottkamp, R. (1998).

In a meta analysis of research on improving student achievement, the "...results of over 300 studies of technology use, allow the authors to conclude that teacher training was the most significant factor influencing the effective use of educational technology to improve student achievement. Specifically, the report states that students of teachers with more than ten hours of training significantly outperformed students of teachers with five or fewer training hours" (Sivin-Kachala, J., & Bialo, E., 2000). Training plays a role in whether teachers will use technology to support instruction in the classroom. According to statistics from the National Center for Educational Statistics (2000), "66% of teachers who received more than 32 hours of technology related training felt well to very well prepared to use technology in their classrooms. The percentage who felt well to very well prepared to use technology dropped to 34% for those who received from 9 to 32 hours and to 24% for those who received less than 9 hours of technology-related professional development."

#### **9b. District's Plans to Use Technology to Extend or Supplement the District's Rigorous Academic Courses and Curriculum.**

We are committed to exploring avenues for offering our students access to specialized curricula via technology. As noted in the curriculum sections of this plan we have heavily invested in technology based instruction with an added emphasis on the power and success of technology-based intervention programs for emerging readers as well as students struggling to meet standards in math and Reading/Language Arts content areas. The menu of services being offered to students during and after school that are technology based include; Waterford Early Reading,

READ 180, ALEKS, FASTT Math, CaliforniaStreaming, Moodle, WorldBook Online to name a few.

As for Distance Learning opportunities, we currently have access to Merced County Office of Education "METV" network that offers a wide variety of programs that are broadcast to schools and the community and delivered through wireless cable transmission and through land based cable companies. METV provides live on-air assistance on week day afternoons for students that need assistance with mathematics homework through the station's Homework Hotline. Students can call a toll free number and watch their problems being solved on live television. All METV programming aligns with content standards or supports early and adult education.

The district schools also have access to high quality standards aligned resources, also developed by the Merced County Office of Education. Some specific programming that supports the California High School Exit Examination and K-5 Language Arts and Math standards is through a Digital Learning Solutions Suite that includes Digital Math, Digital Math Spanish, MathQuiz, and Digital English. In addition they have included a Standards Based Resource Guide that provides educators with access to resources that support the teaching of specific standards. Merced County Office of Education has also developed an online Textbook Resource Guide that provides teachers with access to resources that support adopted K-8 textbooks for Language Arts.

Information Literacy is the foundation for learning in our contemporary environment of continuous technological change. According to Christine Bruce (2002), as information and communication technologies develop rapidly, and the information environment becomes increasingly complex, educators are recognizing the need for learners to engage with the information environment as part of their formal learning processes. Information Literacy is generally seen by educators as being pivotal to the pursuit of lifelong learning, and central to achieving both personal empowerment and economic development.

# **VI. APPENDICES**

# **Appendix A**

## Grade Level Technology and Information Literacy Skills Matrix

## A. Grade Level Technology and Information Literacy Skills Matrix

	<b>Keyboarding</b>	<b>Writing Tools</b>	<b>Information Tools</b>	<b>Numeric Tools</b>	<b>Multimedia Tools</b>	<b>Curriculum Tools</b>
<b>K</b>	Introduction to the keyboard as students learn the alphabet	Stamp and/or type letters as students learn the alphabet			Create one page of a class multimedia project using one or more media (e.g., draw a picture)	Use software independently and collaboratively to support learning across the curriculum
<b>O N E</b>	Learn and use the basic function keys: Return, Space Bar, Delete, Shift, Command & Option Keys	Type a very short story or describe a picture in a sentence or phrases and save on their own		Use simple programs such as Graph Club to record and graph data	Create at least one page of class multimedia projects and include a picture from a digital camera	Use software independently and collaboratively to support learning across the curriculum
<b>T W O</b>	Begin introducing Home Row keys and two handed typing	Type in longer projects with several sentences or paragraphs. Begin editing and revising on-line	Navigate independently through the Internet to locate resources	Use simple programs such as Graph Club to record and graph data	Create a page or pages for multimedia projects that contain several different media	Use software independently and collaboratively to support learning across the curriculum
<b>T H R E E</b>	All students should learn keyboarding skills and work for speed and accuracy	Create and edit a published product	Navigate independently through the Internet to locate resources	Use simple programs such as Graph Club to record and graph data	Create simple multimedia project individually or collaboratively which contains linked ideas	Use appropriate software independently and collaboratively to support the learning across the curriculum
<b>F O U R</b>	Continue to work for speed (Goal=20 gross WPM) and accuracy	Publish a document using an accepted format (e.g., a friendly letter)	Navigate the Internet using WWW search engines. Choose a printer on the LAN	Use a simple spreadsheet such as the Cruncher to solve simple problems	Create multimedia projects that appropriately use increasing number of media links between key ideas	Use appropriate software independently and collaboratively to support learning across the curriculum
<b>F I V E</b>	Continue to work for speed (Goal=25 gross WPM) and accuracy	Publish a document that utilizes information imported from other sources. Know several different formats	Locate information quickly on the Internet and log in to a shared folder on a file server or computer on the LAN	Use a simple spreadsheet such as the Cruncher to solve simple problem	Create multimedia projects that appropriately use increasing number of media links between key ideas	Use appropriate software independently and collaboratively to support learning across the curriculum
<b>S I X</b>	Continue to work for speed (Goal=30 gross WPM) and accuracy	Publish a variety of documents and use basic word processing editing skills to revise work	Locate information quickly on the Internet and log in to a shared folder on a file server or computer on the WAN	Use a simple spreadsheet such as the Cruncher to solve simple problem	Create multimedia projects using a variety of tools and media with increasingly sophisticated linking of ideas	Use appropriate software independently and collaboratively to support learning across the curriculum
<b>E I G H T</b>	Use appropriate keyboarding skills at all times	Publish a document which incorporates correct page design and uses standard formatting tools (tabs, margin settings, headers, footers)	Create a simple World Wide Web page that includes at least one graphic, text and a link to another Internet site	Create a spreadsheet that allows students to predict and analyze a scenario. Represent findings visually and present to others	Create a variety of cross curricular multimedia projects which students present to others in the school and community	Use appropriate software independently and collaboratively to support learning across the curriculum

# Appendix B

## Internet Acceptable Use Contract

## Merced City School District

### **Internet Acceptable Use Contract**

Students are responsible for good behavior on school computer networks. Communications on the network are public in nature. General school rules for behavior and communications apply. Students are expected to be polite and to use appropriate language at all times.

The network is provided for students to conduct research and communicate with others. The District's computer network shall be used only for purposes related to education. Commercial, political and/or personal use unrelated to an educational purpose is prohibited. Access to network services is provided only to students who agree to act in a considerate and responsible manner. Parent permission is required. Access is a privilege, not a right.

The District reserves the right to monitor network communications for improper use. Persons using the computer network shall have no expectation of privacy with respect to any files or communications.

During school, teachers of younger students will guide them in accessing appropriate materials. Students shall not access, post, submit, publish or display any material that is threatening, obscene, disruptive, or sexually explicit, or which could be construed as harassment or disparagement of others based on their race, national origin, sex sexual orientation, age, disability, religion, or political belief.

The following activities are prohibited:

1. Sending or displaying offensive messages or pictures.
2. Harassing, threatening, insulting, or attacking others.
3. Trespassing in other's folders, work or files.
4. Employing the network for commercial purposes.
5. Damaging computers, computer systems, or computer networks.
6. Revealing of your personal address or phone numbers or those of other students or adults.
7. Using obscene language.
8. Violating copyright laws.
9. Using passwords of others.
10. Intentionally wasting resources.

### **No Warranties**

The District makes no warranties of any kind for the service it is providing. The District will not be responsible for any damages a user suffers. This includes loss of data resulting from delays, no-deliveries, miss-deliveries, or service interruptions caused by the District's negligence or by the user's errors or omissions.

Use of any information obtained via the Internet is at the user's own risk. The District specifically denies any responsibility for the accuracy, suitability or quality of information obtained through its services. All users need to consider the source of any information they obtain and consider how valid that information may be.

### **Encounter of Controversial Material**

Users may encounter controversial material in which users, parents, or teachers may consider inappropriate or offensive. It is the user's responsibility not to initiate access to such material.

### **Sanctions**

1. Violations may result in a loss of access.
2. Additional disciplinary action may be taken at the site level in accordance with existing policies regarding inappropriate language or behavior.
3. When applicable, criminal misconduct may be reported to law enforcement agencies.

The principal or designee shall determine whether or not a user has violated any term of this contract. The decision of the principal shall be final.

I understand and will abide by the provisions and conditions of this contract. I understand that any violations of the above provisions may result in disciplinary action. I also agree to report any misuse of the information system to the administrator.

Student's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Parent's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Teacher's Signature: \_\_\_\_\_

Parent's Phone No. \_\_\_\_\_

## Districto Escolar Unificado de Merced

### Contrato de Uso Aceptable de Internet (la Red)

La Red es para que los estudiantes estudien y se comuniquen con otros estudiantes por la computadora. La Red será utilizada solamente para la educación. Acceso a los servicios de la Red es solamente para los estudiantes que están de acuerdo en usarla en una forma responsable y considerada. Los estudiantes necesitan permiso de sus padres. El acceso de la Red es un privilegio, no un derecho.

Los estudiantes son responsables de mostrar buena conducta cuando usan las computadoras. La comunicación entre uno y otras personas por la Red no es privada. Las reglas de escuela aplican al comportamiento y la comunicación por computadora. Esperamos que los estudiantes siempre sean corteses y utilicen lenguaje apropiado.

Los administradores pueden revisar los documentos y comunicaciones entre estudiantes para mantener la integridad del sistema y asegurarse que los estudiantes están usando el sistema con responsabilidad. Personas que usen el sistema no deben asumir que los documentos siempre serán privados.

Durante la escuela, los maestros guiarán a los estudiantes para usar el material apropiado. Los estudiantes no deben utilizar material que es considerado ofensivo, amenazas o discriminación sobre su raza, sexo, edad, inhabilidad, religión o creencia política.

Lo siguiente es prohibido:

- |                                                                 |                                                                             |
|-----------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1. Mandar o poner mensajes o dibujos ofensivos.                 | 6. Usar lenguaje ofensivo.                                                  |
| 2. Molestar, amenazar, insultar o atacar a otros.               | 7. Violación de las leyes de copiar.                                        |
| 3. Destruir documentos importantes intencionalmente.            | 8. Usar la Red para negocios.                                               |
| 4. Dañar computadoras, sistemas, o cadena de comunicación.      | 9. Usar palabras secretas de otros.                                         |
| 5. Entrar a documentos, trabajos o archivos de otros personales | 10. Revelar su dirección o números de teléfono de estudiantes o de adultos. |

#### **No Garantías.**

El Distrito no hace ninguna garantía de ninguna clase para el servicio que está proporcionando. El Distrito no será responsable de ningún daño que un utilizador sufre. Esto incluye la pérdida de documentos, o las interrupciones del servicio causadas por la negligencia del Distrito o por los errores del estudiante.

El uso de cualquier información obtenida por la Red esta en propio riesgo del utilizador. El Distrito niega específicamente cualquier responsabilidad de la exactitud o de la calidad de la información obtenida con sus servicios. Todos los estudiantes necesitan considerar la fuente de cualquier información que obtengan y considerar que valido la información puede ser.

#### **Encuentro del material polémico.**

Los estudiantes pueden encontrar el material polémico en el cual los estudiantes, los padres, o los profesores pueden considerar inadecuado o ofensivo. Es la responsabilidad del estudiante no iniciar el acceso a tal material.

#### **Sanciones**

1. El violar una de las reglas mencionadas puede resultar en pérdida de acceso al servicio de computadoras.
2. Más acciones disciplinarias pueden ser tomadas en acuerdo con las reglas que usan por comportamiento y lenguaje inapropiado.
3. Cuando sea apropiado, acciones criminales serán reportados a las agencias de leyes.

El director se determinará si un estudiante ha violado este contrato. La decisión del director es final.

Yo, entiendo y seguiré las provisiones y las condiciones de este contrato. Entiendo que cualquier violación de las provisiones antedichas puede dar lugar a la acción disciplinaria. También estoy de acuerdo reportar cualquier uso incorrecto al director.

Firma del Estudiante: \_\_\_\_\_

Fecha: \_\_\_\_\_

Firma de los Padres: \_\_\_\_\_

Fecha: \_\_\_\_\_

Firma del Maestro/Maestra: \_\_\_\_\_

Teléfono de Padres: \_\_\_\_\_

# Appendix C

## Technology Plan Criteria

**Appendix C:**  
**Enhancing Education Through Technology Formula Grant Program**  
**Criteria for EETT-Funded Education Technology Plans**

1. PLAN DURATION CRITERION	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
<b>The plan should guide the district's use of education technology for the next three to five years. (For a new plan, can include technology plan development in the first year)</b>	Cover page	The technology plan describes the districts use of education technology for the next three to five years. (For new plan, description of technology plan development in the first year is acceptable). Specific start and end dates are recorded (7/1/xx to 6/30/xx).	The plan is less than three years or more than five years in length.  Plan duration is 2008-11.

2. STAKEHOLDERS CRITERION Corresponding EETT Requirement(s): 7 and 11 (Appendix D).	Page in District Plan	Example of Adequately Addressed	Not Adequately Addressed
<b>Description of how a variety of stakeholders from within the school district and the community-at-large participated in the planning process.</b>	1-4	The planning team consisted of representatives who will implement the plan. If a variety of stakeholders did not assist with the development of the plan, a description of why they were not involved is included.	Little evidence is included that shows that the district actively sought participation from a variety of stakeholders.

## Enhancing Education Through Technology Formula Grant Program Criteria for EETT Funded Education Technology Plans

<b>3. CURRICULUM COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 1, 2, 3, 8, 10, and 12 (Appendix D).	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
<b>a. Description of teachers' and students' current access to technology tools both during the school day and outside of school hours.</b>	6	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>b. Description of the district's current use of hardware and software to support teaching and learning.</b>	7-8	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.
<b>c. Summary of the district's curricular goals that are supported by this tech plan.</b>	8-9	The plan summarizes the district's curricular goals that are supported by the plan and referenced in district document(s).	The plan does not summarize district curricular goals.
<b>d. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to improve teaching and learning by supporting the district curricular goals.</b>	10-12	The plan delineates clear goals, measurable objectives, annual benchmarks, and a clear implementation plan for using technology to support the district's curriculum goals and academic content standards to improve learning.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
<b>e. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire the technology skills and information literacy skills needed to succeed in the classroom and the workplace.</b>	13-14	The plan delineates clear goal(s), measurable objective(s), annual benchmarks, and an implementation plan detailing how and when students will acquire technology skills and information literacy skills.	The plan suggests how students will acquire technology skills, but is not specific enough to determine what action needs to be taken to accomplish the goals.

## Enhancing Education Through Technology Formula Grant Program Criteria for EETT Funded Education Technology Plans

<p>f. <b>List of goals and an implementation plan that describe how the district will address the appropriate and ethical use of information technology in the classroom so that students can distinguish lawful from unlawful uses of copyrighted works, including the following topics: the concept and purpose of both copyright and fair use; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; and avoiding plagiarism (AB 307, optional in 2007-08 tech plan, required in all tech plans 2008-09 and after)</b></p>	<p>15</p>	<p>The plan describes or delineates clear goals outlining how students will learn about the concept, purpose, and significance of the ethical use of information technology including copyright, fair use, plagiarism and the implications of illegal file sharing and/or downloading (as stated in AB 307).</p>	<p>The plan suggests that students will be educated in the ethical use of the Internet, but is not specific enough to determine what actions will be taken to accomplish the goals.</p>
<p>g. <b>List of goals and an implementation plan that describe how the district will address Internet safety, including how to protect online privacy and avoid online predators.(AB 307, optional in 2007-08 tech plan, required in all tech plans 2008-09 and after)</b></p>	<p>15</p>	<p>The plan describes or delineates clear goals outlining how students will be educated about Internet safety (as stated in AB 307).</p>	<p>The plan suggests Internet safety education but is not specific enough to determine what actions will be taken to accomplish the goals.</p>
<p>h. <b>Description of or goals about the district policy or practices that ensure equitable technology access for all students.</b></p>	<p>16</p>	<p>The plan describes the policy or delineates clear goals and measurable objectives about the policy or practices that ensure equitable technology access for all students. The policy or practices clearly support accomplishing the plan's goals.</p>	<p>The plan does not describe policies or goals that result in equitable technology access for all students. Suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.</p>

## Enhancing Education Through Technology Formula Grant Program Criteria for EETT Funded Education Technology Plans

<p><b>i. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs.</b></p>	<p><b>16-17</b></p>	<p>The plan delineates clear goal(s), measurable objective(s), annual benchmarks, and an implementation plan for using technology to support the district's student record keeping and assessment efforts.</p>	<p>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.</p>
<p><b>j. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to improve two-way communication between home and school.</b></p>	<p><b>17-18</b></p>	<p>The plan delineates clear goal(s), measurable objective(s), annual benchmarks, and an implementation plan for using technology to improve two-way communication between home and school.</p>	<p>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.</p>
<p><b>k. Describe the process that will be used to monitor the Curricular Component (Section 3d-3j) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.</b></p>	<p><b>18</b></p>	<p>The monitoring process, roles, and responsibilities are described in sufficient detail.</p>	<p>The monitoring process either is absent, or lacks detail regarding procedures, roles, and responsibilities.</p>

## Enhancing Education Through Technology Formula Grant Program Criteria for EETT Funded Education Technology Plans

<b>4. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 5 and 12 (Appendix D).	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
<b>a. Summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development.</b>	<b>19-20</b>	The plan provides a clear summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development. The findings are summarized in the plan by discrete skills that include CTC Standard 9 and 16 proficiencies.	Description of current level of staff expertise is too general or relates only to a limited segment of the district's teachers and administrators in the focus areas or does not relate to the focus areas, i.e., only the fourth grade teachers when grades four to eight are the focus grade levels.
<b>b. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing professional development opportunities based on your district needs assessment data (4a) and the Curriculum Component objectives (Sections 3d through 3j) of the plan.</b>	<b>21-27</b>	The plan delineates clear goal(s), measurable objective(s), annual benchmarks, and an implementation plan for providing teachers and administrators with sustained, ongoing professional development necessary to reach the Curriculum Component objectives (sections 3d through 3j) of the plan.	The plan speaks only generally of professional development and is not specific enough to ensure that teachers and administrators will have the necessary training to implement the Curriculum Component.
<b>c. Describe the process that will be used to monitor the Professional Development (Section 4b) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.</b>	<b>28</b>	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.

## Enhancing Education Through Technology Formula Grant Program Criteria for EETT Funded Education Technology Plans

<b>5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 6 and 12 (Appendix D).	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. <b>Describe the existing hardware, Internet access, electronic learning resources, and technical support already in the district that will be used to support the Curriculum and Professional Development Components (Sections 3 &amp; 4) of the plan.</b>	29-36	The plan clearly summarizes the existing technology hardware, electronic learning resources, networking and telecommunication infrastructure, and technical support to support the implementation of the Curriculum and Professional Development Components.	The inventory of equipment is so general that it is difficult to determine what must be acquired to implement the Curriculum and Professional Development Components. The summary of current technical support is missing or lacks sufficient detail.
b. <b>Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed by the district's teachers, students, and administrators to support the activities in the Curriculum and Professional Development Components of the plan.</b>	29-36	The plan provides a clear summary and list of the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support the district will need to support the implementation of the district's Curriculum and Professional Development Components.	The plan includes a description or list of hardware, infrastructure, and other technology necessary to implement the plan, but there doesn't seem to be any real relationship between the activities in the Curriculum and Professional Development Components and the listed equipment. Future technical support needs have not been addressed or do not relate to the needs of the Curriculum and Professional Development Components.

**Enhancing Education Through Technology Formula Grant Program  
Criteria for EETT Funded Education Technology Plans**

<p>c. <b>List of clear annual benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components as identified in Section 5b.</b></p>	<p><b>37-39</b></p>	<p>The annual benchmarks and timeline are specific and realistic. Teachers and administrators implementing the plan can easily discern what needs to be acquired or repurposed, by whom, and when.</p>	<p>The annual benchmarks and timeline are either absent or so vague that it would be difficult to determine what needs to be acquired or repurposed, by whom, and when.</p>
<p>d. <b>Describe the process that will be used to monitor Section 5b &amp; the annual benchmarks and timeline of activities including roles and responsibilities.</b></p>	<p><b>39</b></p>	<p>The monitoring process, roles, and responsibilities are described in sufficient detail.</p>	<p>The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.</p>

## Enhancing Education Through Technology Formula Grant Program Criteria for EETT Funded Education Technology Plans

6. <b>FUNDING AND BUDGET COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 7 & 13, (Appendix D)	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
<b>a. List established and potential funding sources.</b>	40	The plan clearly describes resources that are available or could be obtained to implement the plan.	Resources to implement the plan are not clearly identified or are so general as to be useless.
<b>b. Estimate annual implementation costs for the term of the plan.</b>	41	Cost estimates are reasonable and address the total cost of ownership, including the costs to implement the curricular, professional development, infrastructure, hardware, technical support, and electronic learning resource needs identified in the plan.	Cost estimates are unrealistic, lacking, or are not sufficiently detailed to determine if the total cost of ownership is addressed.
<b>c. Describe the district's replacement policy for obsolete equipment.</b>	41-42	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.
<b>d. Describe the process that will be used to monitor Ed Tech funding, implementation costs and new funding opportunities and to adjust budgets as necessary.</b>	42	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.

## Enhancing Education Through Technology Formula Grant Program Criteria for EETT Funded Education Technology Plans

<b>7. MONITORING AND EVALUATION COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 11 (Appendix D).	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
<b>a. Describe the process for evaluating the plan's overall progress and impact on teaching and learning.</b>	43	The plan describes the process for evaluation using the goals and benchmarks of each component as the indicators of success.	No provision for an evaluation is included in the plan. How success is determined is not defined. The evaluation is defined, but the process to conduct the evaluation is missing.
<b>b. Schedule for evaluating the effect of plan implementation.</b>	43	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.
<b>c. Describe the process and frequency of communicating evaluation results to tech plan stakeholders.</b>	43	The plan describes the process and frequency of communicating evaluation results to tech plan stakeholders.	The plan does not provide a process for using the monitoring and evaluation results to improve the plan and/or disseminate the findings.

## Enhancing Education Through Technology Formula Grant Program Criteria for EETT Funded Education Technology Plans

<b>8. EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS TO MAXIMIZE THE USE OF TECHNOLOGY CRITERION</b> Corresponding EETT Requirement(s): 11 (Appendix D).	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
<b>If the district has identified adult literacy providers, describe how the program will be developed in collaboration with them. (If no adult literacy providers are indicated, describe the process used to identify adult literacy providers or potential future outreach efforts.)</b>	<b>44</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 or potential future outreach efforts.	There is no evidence that the plan has been, or will be developed in collaboration with adult literacy service providers, to maximize the use of technology.

**Enhancing Education Through Technology Formula Grant Program  
Criteria for EETT Funded Education Technology Plans**

<b>9. EFFECTIVE, RESEARCHED-BASED METHODS, STRATEGIES, AND CRITERIA</b> Corresponding EETT Requirement(s): 4 and 9 (Appendix D).	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Not Adequately Addressed</b>
<b>a. Summarize the relevant research and describe how it supports the plan's curricular and professional development goals.</b>	<b>45-48</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>b. Describe the district's plans to use technology to extend or supplement the district's curriculum with rigorous academic courses and curricula, including distance-learning technologies.</b>	<b>48-49</b>	The plan describes the process the district will use to extend or supplement the district's curriculum with rigorous academic courses and curricula, including distance learning opportunities (particularly in areas that would not otherwise have access to such courses or curricula due to geographical distances or insufficient resources).	There is no plan to use technology to extend or supplement the district's curriculum offerings.

Submitted By: Annie Dossetti

Signature: \_\_\_\_\_

Date: September, 2009

**California Department of Education (CDE)  
E-rate Supplemental Budget Analysis for EETT Technology Plan**

**Recommendation:** Complete an E-rate supplemental budget analysis annually and retain it locally with your state-approved EETT technology plan for audit purposes.

Use this form to develop a required supplemental budget analysis when using an EETT technology plan as an E-rate acceptable plan.

Paragraph 59 of the Schools and Libraries Fifth Order, states that the Universal Service Administrative Company (USAC) has:

“been treating technology plans approved under the [United States] Department of Education’s Enhancing Education Through Technology (EETT) as acceptable technology plans subject to one qualification. Consistent with the [Federal Communications] Commission requirement that program applicants demonstrate that they have the necessary resources required to utilize E-rate discounts, **USAC has required that the EETT technology plans be supplemented by an analysis that indicates that the applicant is aware of and will be able to secure the financial resources it will need to achieve its technology aims**, including technology training, software, and other elements outside the coverage of the Commission’s support program.”

**PART 1: Identification, Certification, and Signatures**

<b>E-rate Year:</b>	July 1, 2010 - June 30, 2011 Year 14	
<b>School District or Local Educational Agency (LEA):</b>	Merced City School District	
<b>CDS Code Number:</b>	24-65748	
<b>Authorized E-rate Contact:</b>	Greg Blount	
<b>Authorized E-rate Contact’s Signature:</b>		Date: 09/05/09
<b>Certification:</b>	I acknowledge that the school district or LEA named above is aware of and will work to secure the financial resources listed on the following pages in addition to E-rate discounts. These resources are needed to achieve the technology aims stated in our EETT technology plan and include technology training, hardware, software, and other elements outside the coverage of E-rate discounts.	
<b>District Superintendent’s Name:</b>	RoseMary Parga Duran Ed. D.	
<b>District Superintendent’s Signature:</b>		Date:

**E-rate Supplemental Budget Analysis for EETT Technology Plan For Local Use**

<b>PART 2: E-rate Eligible Services Requested and Identified in EETT Technology Plan:</b>
<b>Description of Specific E-rate Service(s):</b> Telephone service & internet access (DSL).

<b>PART 3: EETT Technology Plan Goal(s) That Will Be Addressed by the E-rate Service(s) Described in Part 2:</b>	
<b>EETT Technology Plan Goal(s) addressed by E-rate:</b>	<i>Page in Plan</i>
All goals in Section 3 & 4	Pages

<b>PART 4: Description of Level/Amount of Service Change</b>			
Describe current level/amount of service:	Describe new level after E-rate request is filled:	Budget amount for district's share (for each charge involved in the service):	Planned budget source or line item for each amount:
2-Local phone 2-Long Distance 1 Data Line (DSL)	Same Same Same	\$594.00 \$320.00 \$1,355.00	General Funds

**PART 5: Analysis of Non E-rate Eligible Resources**

**Required to Meet EETT Technology Plan Goals**

This budget analysis indicates that the E-rate applicant is aware of and will work to secure the financial resources it will need to achieve its technology aims, including technology training, software, and other elements outside the coverage of E-rate support. The EETT technology plan is supported with documents that describe how the applicant will be able to secure these financial resources, including resources pertaining to: (a) infrastructure; (b) hardware; (c) software; (d) professional development; (e) retrofitting; and (f) maintenance, needed to achieve the applicant's technology plan. This supplemental budget analysis must be kept with the E-rate documentation at the applicant's site.

Check the current SLD/USAC Eligible Services List at:  
<http://www.universalservice.org/sl/applicants/step06/>

Part 5 a				
Infrastructure required to achieve EETT Technology Plan:				
Total Budgeted \$:	E-rate eligible amount	Non-E-rate eligible amount	Source of funds: (Non E-rate Eligible Portion)	Description Major Items to be purchased, and/or refer to page number in tech plan.
\$2269	\$ \$2269	\$2269	General Funds	No purchase – ongoing annual services. See Part 4 and Tech Plan Sections 5 and

## E-rate Supplemental Budget Analysis for EETT Technology Plan (continued)

Part 5 b				
Hardware required to achieve EETT Technology Plan:				
Total Budgeted \$:	E-rate eligible amount	Non E-rate eligible amount	Source of funds: (Non E-rate Eligible Portion)	Description of Major Items to be purchased, and/or refer to page number in tech plan.
\$5500	\$: %:	\$5500 100%	Donations and grants	4 computers in year one if funding becomes available – 2009-2010
Part 5 c				
Software required to achieve EETT Technology Plan:				
Total Budgeted \$:	E-rate eligible amount	Non-E-rate eligible amount	Source of funds: (Non E-rate Eligible Portion)	Description Major Items to be purchased, and/or refer to page number in tech plan.
\$1000	\$:NONE %:	\$:NONE %:	Donations and grants	Cost of productivity software bundled with new computers
Part 5 d				
Professional development required to achieve EETT Technology Plan:				
Total Budgeted \$:	Source of funds:	Number of Staff:	Description of Training: Reference page in technology plan.	Services or Contracts to be purchased, and/or refer to page number in tech plan.
\$3500	State Grants for PD and other local grants	5	Pages 14-22	CTAP Region 7 Merced County Office of Ed Conferences
Part 5 e				
Retrofitting required to achieve EETT Technology Plan:				
Total Budgeted \$:	E-rate eligible amount	Non E-rate eligible amount	Source of funds: (Non E-rate Eligible Portion)	Description Major Items and/or Services/Contracts to be purchased, and/or refer to page number in tech plan.
NONE	\$: %:	\$: %:	NONE	Inside-wiring: NONE Construction: NONE
Part 5 f				
Maintenance required to achieve EETT Technology Plan:				
Total Budgeted \$:	E-rate eligible amount	Non E-rate eligible amount	Source of funds: (Non E-rate Eligible Portion)	Description Major Services/Contracts to be purchased, and/or refer to page number in tech plan.
\$408.00	\$ NONE %:	\$ 408.00 %:	General Funds	Section 5 – page 24