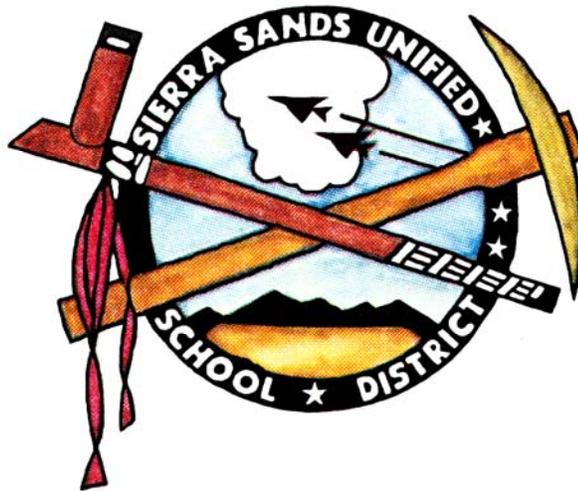


# Sierra Sands Unified School District



## 2011-2016 Technology Plan

113 W. Felspar Avenue  
Ridgecrest, California 93555

Approved by the Sierra Sands Unified School District Board of Education  
November 18, 2010

## TABLE OF CONTENTS

<b>Table of Contents</b>		<b>Page No.</b>
Section i	DISTRICT PROFILE and MISSION	4
Section 1	PLAN DURATION	5
Section 2	STAKEHOLDER INVOLVEMENT	5
Section 3	CURRICULUM COMPONENT	6
3a	Teachers' and students' current access to technology tools	6
3b	District's use of hardware and software to support teaching and learning	8
3c	District's curricular goals	10
3d	Using technology to improve teaching and learning by supporting the District curricular goals	10
3e	Student acquisition of technology and information literacy skills	14
3f	Appropriate and ethical use of technology in the classroom	20
3g	Internet safety	21
3h	Policy/practices that ensure equitable technology access for all students	23
3i	Technology use for efficient student record keeping and assessment	24
3j	Utilizing technology to improve two-way communication between home and school	24
3k	Monitoring of curriculum component	26
Section 4	PROFESSIONAL DEVELOPMENT COMPONENT	27
4a	Teachers' and administrators' current technology proficiencies and needs	27
4b	Plan for providing professional development opportunities	30
4c	Monitoring process for Professional Development Component	31
Section 5	INFRASTRUCTURE, HARDWARE, SUPPORT, SOFTWARE, SECURITY COMPONENT	32
5a	Description of the existing technology resources in the District	32
5b	Description of hardware, electronic learning resources, infrastructure, physical plant modifications, and technical support needed to support the technology plan	34
5c	Benchmarks for obtaining the needed resources	37
5d	Monitoring of achievement of benchmarks	39
Section 6	FUNDING AND BUDGET COMPONENT	39
6a	List of established and potential funding sources	39
6b	Estimated annual implementation costs for the term of the plan	40
6c	Description of the district's replacement policy for obsolete equipment	42
6d	Description of process to monitor funding, costs, and new funding opportunities	43
Section 7	MONITORING AND EVALUATION COMPONENT	43
7a	Process for evaluating plan's overall progress and impact on teaching and learning	43
7b	Schedule for evaluating the effect of plan implementation	46
7c	Process and frequency of communicating evaluation results to stakeholders	47
Section 8	COLLABORATION WITH ADULT LITERACY PROVIDERS	47
Section 9	RESEARCH	48
9a	Summary of relevant research and how it supports curriculum and professional development goals	48
9b	Innovative strategies for using technology to deliver rigorous academic courses and curricula	49
Appendix A	Education Technology Plan Benchmark Review- 2006-2011	51
Appendix B	EETT Plan Requirement (CDE)	56

Appendix C	Criteria for EETT-Funded Technology Plans- Requirements/Matrix	59
Appendix D	SSUSD EdTechProfile Data (10/10)	69
Appendix E	Sierra Sands Unified School District Acceptable Use Policy	73
Appendix F	CTAP Proficiencies Checklists	87
Appendix G	Research Bibliography	98
Appendix H	Certification Regarding Lobbying, Debarment, Suspension and Other Responsibility Matters, and Drug-Free Workplace Requirements	100

## **Sierra Sands Unified School District Technology Plan 2011-2016**

### **District Information**

County Name	Kern
District Name:	Sierra Sands Unified School District
CDS Code:	15-73742
District Phone Number:	760-499-1600
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### **Section i: District Profile and Mission**

Sierra Sands USD is a K-12 school district located in Eastern Kern County enrolling approximately 5,200 students. The district consists of seven elementary, two middle, and two high schools plus other services including adult education, preschool, after school programs and a strong career technical education curriculum. District schools range from 39-79% of their students qualifying for Free/Reduced price lunches. The graduation rate for the district is 92.8 (2007-2008) with Burroughs at 96.7% and Mesquite at 70.8%. The district is geographically isolated and located two hours away from metropolitan areas. The district is currently modernizing its facilities through a combination of voter approved Measure A funds and Proposition 1D grants. A viable district Technology Plan has been in place since 2001 and has served to guide our decision making. The board has encouraged the inclusion of technology into the instructional program and has actively supported and provided policy and available fiscal resources towards implementation of the plan. Equipment and software have been updated and standardized, technology support has been provided through formation and expansion of a Technology Department. Infrastructure needs continue to be analyzed and upgraded as needed. A comprehensive end of plan review of progress over the duration of the 2006-2011 Technology Plan may be found in Appendix B in this document.

#### **District Mission**

“We, the members of the Board of Education of the Sierra Sands Unified School District, are committed to providing the highest quality education to all K-12 students. We believe the school shares with the family, church, and community the responsibility for developing life-long learners who are responsible, productive citizens.”

#### **District Goals 2010-2013**

1. Provide an academic program aligned with the California State Standards that supports all students with an equal opportunity for educational growth and creativity while preparing them for a productive future.
2. Provide a variety of staff development opportunities and student programs, strategies, and interventions that maximize the likelihood for student success.
3. Provide safe, drug-free, well maintained, culturally sensitive, and adequately equipped schools to ensure a positive learning environment.
4. Opportunities for community input and involvement shall be emphasized through communication of goals, activities, and accomplishments in order to enrich the educational experience of all students.

An important element of this mission statement is support of the technology plan that creates, maintains, and perpetuates an environment where students, teachers, administrators, and the community integrate technology as a tool for learning. Enhancement of student learning through the use of technology is the responsibility of school sites and the district at large and is reflected in the district's Strategic Planning and Budget Development process, Single Plans for Student Achievement, and Local Education Agency Plan. **The overall goal of this technology plan is to support all students in meeting grade level standards, passing the California High School Exit Exam, and preparing for college and careers.**

### **Section 1: Plan Duration**

This plan will guide Sierra Sands Unified School District's use of technology for a five-year period from July 1, 2011, through June 30, 2016. It serves as Enhancing Education Through Technology (EETT) plan as well as the E-rate technology plan for the District. The plan is centered on applying technology to meet the District's strategic goals and aligning practices to leverage what technology is uniquely able to offer.

Sierra Sands Unified School District will make every effort to accomplish the goals set forth in this plan, subject to the District's annual budget and determinations made by the School Board and Superintendent on appropriate and available funding. Staff will review progress and make adjustments accordingly based on budgetary restrictions, policy decisions, and any other unforeseen factors on at least an annual basis. Should these budgeting forecasts change at any time because of budget restrictions, revised policy, changes in the Board's or the Superintendent's priorities, changed circumstances, or other similar factors, the goals identified in this plan and/or their implementation may be reviewed, modified, deleted and/or supplemented, as appropriate.

### **Section 2: Stakeholder Descriptions**

Technology committee members, representing elementary, middle school, high school, and district levels, along with community representation, meets at least three times per year as a Technology Advisory Committee and provide input on needs of teachers, students, and sites in relationship to technology. Over the prior two years, in planning the revision of the technology plan, e-mail updates, sharing of resources and calls for input were also solicited from the Technology Advisory Committee and other interested parties. The EdTechProfile Student Technology Use Survey was administered to 157 students in October 2009 in order to provide student input. We recognize the continuing need for additional representatives and input from businesses, community members, parents, and additional adult literacy providers. These representatives will be added to the Technology Advisory Committee as an ongoing goal during the duration of this Technology Plan.

<b>Members of the Technology Advisory Committee/Tech. Plan Committee</b>		
<b>Name</b>	<b>Title</b>	<b>Affiliation</b>
Simon Austin	Teacher- CTAP Tech Mentor 3	Burroughs High School
Rose Bonaventura	Teacher- 3 <sup>rd</sup> grade	Pierce Elementary
Amanda Brannon	Project Clerk	Richmond Elementary
Susie Burgess	Dept Chair- English	Burroughs High School
Karla Christiansen	Teacher- 2 <sup>nd</sup> gr. CTAP Mentor 3	Las Flores Elementary
Heidi Costanzo-Miller	Teacher	James Monroe Middle
Marcia Dittler	Teacher	Burroughs High School
Rachel Ghilardi	Computer Paraprofessional	Richmond Elementary

Alice Gilmartin	Teacher	Murray Middle School
Bill Grisct	Teacher- 4 <sup>th</sup> grade	Gateway Elementary
Laura Hickle	Coordinator of Spec. Projects & Ed. Tech.- CTAP Tech Mentor 3	Sierra Sands USD
Angela Hulstrom	Counselor	Murray Middle School
Valerie Karnes	Dean of CTE/ Parent	Cerro Coso Community College
Mike Kennedy	Resource Specialist- Special Ed.	Inyokern Elementary
Shirley Kennedy	Asst. Supt. of Curr. & Inst.- Principal- Mesquite/Adult School	Sierra Sands USD
Debby Kurti	Computer Instructor	Cerro Coso Community College
Mary Little	Principal St Anns School	Community
Robyn Loftis	Teacher- 3 <sup>rd</sup> grade	Pierce Elementary
Joanne McClelland	Teacher	Murray Middle School
David McGowan	Network Manager	Sierra Sands USD
Michael McGuire	Teacher- 4 <sup>th</sup> grade	Faller Elementary
Donnie Morrison	Director of Technology	Sierra Sands USD
Rich Norton	Business Owner	Community
Dave Ostash	Principal	Burroughs High School
Sharlene Paxton	Librarian/ Teacher	Burroughs High School
Jeri Peterson	Teacher – 1 <sup>st</sup> grade	Richmond Elementary
Kirsti Smith	Principal	Murray Middle School
Mark Suorez	Teacher- 4 <sup>th</sup> grade	Faller Elementary
Diana Veneski	Teacher- English	Monroe Middle School
Kelly Bergens	CTAP Region 8	Kern County Supt of Schools
Stacey Stansberry	CTAP Region 8	Kern County Supt of Schools

### **Section 3: Curriculum Component**

#### **3a- Teachers' and Students' Current Access to Technology Tools During and Outside of School Hours**

As part of our planning process, hardware and software inventories were gathered for each site and entered into the annual state Technology Survey and the district equipment inventory. Site principals generally meet at least once a month to review the current status of curriculum, including technology, in the district. Teachers and administrators participate in EdTechProfile surveys yearly, and site administrators complete the annual Technology Survey. A complete technology benchmark review document is located in Appendix B.

All district classrooms are connected to the district network and the Internet through wired or wireless connections. Filtering, as required by Child Internet Protective Act (CIPA) and SSUSD board policy, is provided on all district connected computers. The Acceptable Use Policy is included in Appendix E and is scheduled to be updated. The district continues to apply for E-Rate funding discounts every year. This, and other funding opportunities, has helped to maintain and upgrade the network infrastructure at all sites. The current district Internet service provider is the Kern County Superintendent of Schools Office, and the district E-Rate reimbursement rate is 72%.

After reviewing the data, the Technology Advisory Committee found the following regarding current access:

- Teachers and students (K-12) have access to a wide variety of technology equipment that includes video recorders, televisions, DVD/VCRs, computers, printers, scanners, and cameras at school. Classrooms have access to basic technology including at least one computer, and all library/media centers have technology available to students and teachers.
- Several schools that have undergone modernization have seen significant increases in infrastructure and technology (interactive whiteboards/ data projectors) available in the classroom. There has been an increase in the number of teachers with document cameras within the classroom.
- According to the EdTechProfile (10/10- Appendix D), 100% of teacher respondents indicate that computers/scanners/printers are available, they have Internet, and most have ready access to e-mail. Access to hand held electronic devices (i.e. PDAs, student response systems) and school provided video and digital cameras are still problematic.
- A web-based data analysis and warehousing system (Edusoft) is available to all teachers. Multiple years of data are available and can be analyzed in a variety of ways. In addition, teachers can create classroom assessments tied to standards, receive data and track student performance. Quarterly benchmarks, by course or grade level, are also maintained in Edusoft.
- All schools have at least one computer lab with a computer paraprofessional/library media specialist/computer teacher to assist teachers and maintain the lab, except for one elementary which has a lab but no specific computer lab support person. Burroughs has a certificated teacher serving as a librarian.
- All schools and remote sites have full network connectivity. All sites have a 50 MB, or higher, connection back to the District Office, except Rand, which is connected through a 1.5 MB T1 connection. This is ample bandwidth for Rand as there are only 5-6 computers at this site. Bandwidth out to the internet is currently 40 MB and provides ample bandwidth for the district's needs at this time. This is monitored and analyzed every year to ensure we are providing sufficient bandwidth to all sites.
- Some groups, such as special education, may have additional access to assistive and non-assistive technologies. Thirty-six percent of teachers now report using assistive technologies in the classroom in contrast to 2% in 2006.
- Socio-economically disadvantaged and English Language Learner students may have additional technology at Title I schools due to additional funding but more limited access at home due to limited family resources.
- At-risk students have additional access to technology through extended learning days for interventions. Availability of interventions has increased and is available for students in grades K-12 and ranges from early intervention on reading readiness up to English/language arts and math remediation for CAHSEE Intensive Intervention for high school students.
- Technology access is provided for the three afterschool programs and the one before school program (ASES).
- The learning resource center at Cerro Coso Community College is available to high school and adult students. The Kern County Library has increased availability to computers and the Internet. However, access within the community to technology at libraries, community centers, or other public facilities continues to be extremely limited for students, adult learners, and community members.

- There is currently a lack of on-line courses for enrichment, remediation, and credit recovery in SSUSD.
- Our community has undergone a shift from a highly technical workforce to a more diversified workforce with a range of educational backgrounds and needs. Due to military Base Realignment and Closure (BRAC) our community may increase in size over the next five to ten years. We will need to plan for technology needs (hardware, software, infrastructure, new classrooms) in the growth planning efforts.
- There continues to be a slow increase in our community of English Language Learners (ELL) and their parents. English Language Learners may have extremely limited access to technology at home, and parents may have Adult Literacy needs. Grants have been applied for and received to meet ELL student and parent literacy needs.
- EdTechProfile survey results for teachers (10/10) indicate that 11% rate themselves at the Beginning level and only 34% rate themselves as Proficient in “Computer Knowledge and Skills.” This is a slight improvement over four years ago, but still has major implications. If all students are going to have equal access to technologically relevant instruction and tools, their teachers must have comparable skills. Professional development must be designed to meet teachers’ needs and current skill levels. Additional data from the EdTechProfile is available in Appendix D.

### **3b- Current Use of Hardware/Software to Support Teaching and Learning**

For almost 10 years now, the district has utilized a standard Student Information System (SIS), AERIES, for all schools. In the summer of 2006, AERIES was converted from a separate database system to a district wide centralized database system utilizing SQL. Data regarding student records, attendance, grades, test data and scheduling is used by office staff and teachers. District administrators use this program to maintain discipline records, as well as other student information. Teachers are using the ABI system to take attendance and keep grades. Standardization of the SIS code tables and data entry procedures has been a priority over the last several years and district staff will continue to maintain, evaluate and update these procedures as needed. There are no plans at this time to change Student Information Systems and the district will continue to monitor its use and effectiveness to ensure that all stakeholders are benefiting from this system. Test data is also warehoused in Edusoft which provides easier access to state tests and benchmarking for teachers, administrators and program managers. Tracking student enrollment and success in college as well as career placement has always been a challenge for our district. Tracking E2 data for Perkins CTE reporting is accomplished through telephone calls, which are laborious and do not utilize current technology to simplify the gathering of this data. In order to ensure that students are college and career ready this data will be collected in a more systematic manner, for even more students, and used to modify instruction as needed.

Technology is being used in both lab settings and classrooms. *Research, (i.e., Project Child of the Institute for School Innovation, <http://www.ifsi.org/child.htm>, and the West Virginia Study from the Milken Family Foundation, <http://www.mff.org/>) shows that 30 to 40 minutes per week in a computer lab does not produce the desired academic results; therefore, technology should be placed where research has shown it will have the most impact on student learning—in the classroom.* On the EdTech Profile, teachers report that one third of the technology tools are in computer labs, 1/3 in library media centers and 1/3 in classrooms. This breakdown has remained consistent since 2001. At the elementary level, some students are doing research utilizing books, CD/DVDs and the Internet. Lab settings are often used for drill and practice and word

processing. Most students have 30 to 45 minutes per week of computer instruction. Elementary student use of the Internet has increased and many elementary classrooms now have interactive whiteboards, data projectors, and document cameras. At the middle schools, Internet use has increased due to infrastructure improvement but is often still being done at home or in lab settings. Access is greater at the high school through computers in the labs, classrooms, library, and other settings.

Technology is used most often to support language arts and math goals and standards through writing experiences and programs such as Microsoft Office and Renaissance Place (Accelerated Reader and Accelerated Math). Some authentic materials, to a lesser degree, are used for enhancing social studies and science on a weekly basis (26%). Career Technical Education/ROP courses use a variety of current technology including CAD, computer numeric controlled machines (CNC), video technology, computer alignment machines, and graphic design programs. Thirty-two to 46 % of the teachers report that they never have students use computers and peripherals for tasks such as research using the Internet or CD-ROMs, creating reports, or demonstrations/simulations. This is an improvement over the 40 to 76% reported in 2006. (Appendix D). SSUSD continues to see an increase in the use of technology by new teachers who participate in teacher training courses emphasizing technology CCTC program standards as well as by experienced teachers who have participated in professional development courses. Other usage data provided by the EdTechProfile includes:

- Many teachers have a lack of understanding or vision for the integration of technology and curriculum. Teachers are becoming more comfortable with using the technology tools available to them. Over 93% use computers, internet, and email at least weekly, 94% communicate with colleagues via email, and 88% manage grades and attendance. However, when assessed on using technology tools to deliver instruction only 58% do so weekly, 62% communicate with parents, 43% access model lesson plans and best practices and only 36% use technology to gather information for planning purposes. (Appendix D)
- As reported by their teachers, students use technology less than their teachers in the classroom. Thirty-eight percent use computers for reinforcement and practice weekly, 13-15% for word processing and research and only 6-11% use technology each week for correspondence, graphically presenting information, creating reports and analyzing data or solving problems. The results of a middle school student survey indicate that only 35% use a computer at school to look up information and only 20% use a computer at school weekly to do schoolwork or projects. (Student Technology Survey 10/09)

Over the last five years much of the software used in the district has been standardized. Software being used addresses the California State Standards and is research-based. New textbook adoptions have a strong technology strand. Volume discounts have helped us stretch our limited funds. Standardization helps focus professional development and assists our technology support department to provide timely and knowledgeable support. Many of our districtwide programs have been converted, or are being considered for conversion, to web-based application.

The district libraries are using a standardized software program (Destiny by Follett Software) for circulation and catalog automation. Destiny is a web-based application that all district Librarians and students use to lookup, check out, and inventory all library books.

**3c- District’s Curricular Goals**

Sierra Sands Unified School District is dedicated to meeting the needs of all students, including special needs, at-risk, English language learners, and other special populations. The SSUSD Board has established goals (see Section 1- pages 4 and 5). In order to accomplish those goals the district will focus on the following

- Each school will increase English Language Art and math percent proficiency by 5% yearly, as measured each spring on the CST.
- A district support plan will be developed using information generated by each site’s Academic Program Survey.
- In order to be able to provide a strong curricular program, the district will maintain fiscal solvency, as measured by positive certification for multi-year projections and yearly unqualified audits.
- The district will proactively position itself in order to implement relevant aspects of state and federal reform initiatives (i.e. Core Standards, ESEA reauthorization).

A Local Education Agency Plan (LEAP) has been developed under the auspices of “No Child Left Behind” guidelines and requirements. This plan is updated and taken to the governing board on a yearly basis. Each school has a comprehensive Single Plan for Student Achievement updated yearly. Technology needs are incorporated in the SPSA and LEAP. All textbook adoptions are standards based, and how the adoptions integrate technology is taken into consideration during the adoption cycle. Technology goals are also woven into WASC documents.

The use of information/educational technology is part of our ongoing school improvement and accreditation plans. Technology proficiencies will be taught as embedded skills and viewed as an integral element of curriculum delivery.

**3d- Using Technology to Improve Teaching and Learning**

<b>Goal 1:</b> All teachers and instructional staff will increase their use of effective, integrated technology into all curricular areas in order to improve instruction and learning and effectively support students in meeting district and state academic content standards.					
<b>Objective</b>	<b>Benchmark</b>				
	<b>June 30, 2012</b>	<b>June 30, 2013</b>	<b>June 30, 2014</b>	<b>June 30, 2015</b>	<b>June 30, 2016</b>
<u>Objective 1a.</u> District data will show an increase each year toward meeting established API (5 points) and AYP (5 %) goals as reported on the Accountability Program Reporting (APR). Current benchmarks- AYP 54.5 API= 775	District AYP will be 59.5% and District overall API will be 780	District AYP will be 64.5% and District overall API will be 785	District AYP will be 69.5% and District overall API will be 790	District AYP will be 74.5% and District overall API will be 795	District AYP will be 79.5% and District overall API will be 800

<u>Objective 1b.</u> - The percent of teachers using technology to deliver classroom instruction (daily up to 4 days per week as reported on EdTechProfile) will increase 8% yearly (Benchmark 58%)	66% of teachers will use technology daily to 4 times per week	74% of teachers will use technology daily to 4 times per week	82% of teachers will use technology daily to 4 times per week	90% of teachers will use technology daily to 4 times per week	98% of teachers will use technology daily to 4 times per week
<u>Objective 1c.</u> - The percent of teachers gathering information for planning purposes (daily up to 4 days per week as reported on EdTechProfile) will increase 8% yearly (Benchmark 36%)	44% of teachers will use technology in gathering information for planning purposes	52% of teachers will use technology in gathering information for planning purposes	60% of teachers will use technology in gathering information for planning purposes	68% of teachers will use technology in gathering information for planning purposes	76% of teachers will use technology in gathering information for planning purposes
<u>Objective 1d.</u> - The percent of teachers accessing model lessons and best practices (daily up to 4 days per week as reported on EdTechProfile) will increase 8% yearly (Benchmark 43%)	51% of teachers will use technology to access model lessons and best practices	59% of teachers will use technology to access model lessons and best practices	67% of teachers will use technology to access model lessons and best practices	75% of teachers will use technology to access model lessons and best practices	83% of teachers will use technology to access model lessons and best practices
<b>Goal 2:</b> Instruction at all grade levels and schools will be coordinated and formalized to provide technology rich, focused, articulated, and standards-based instruction necessary to enable students to pass the California High School Exit Exam and be college and career ready.					
<b>Objective</b>	<b>Benchmark</b>				
	<b>June 30, 2012</b>	<b>June 30, 2013</b>	<b>June 30, 2014</b>	<b>June 30, 2015</b>	<b>June 30, 2016</b>
<u>Objective 2a-</u> Students passing the CAHSEE ELA (combined 10 <sup>th</sup> grade) will increase 1% yearly as reported by the CDE (benchmark 84% in 09-10)	85% of 10 <sup>th</sup> grade students will pass CAHSEE ELA	86% of 10 <sup>th</sup> grade students will pass CAHSEE ELA	87% of 10 <sup>th</sup> grade students will pass CAHSEE ELA	88% of 10 <sup>th</sup> grade students will pass CAHSEE ELA	89% of 10 <sup>th</sup> grade students will pass CAHSEE ELA
<u>Objective 2b-</u> Students passing the CAHSEE Math	83% of 10 <sup>th</sup> grade students will	84% of 10 <sup>th</sup> grade students will	85% of 10 <sup>th</sup> grade students will	86% of 10 <sup>th</sup> grade students will	87% of 10 <sup>th</sup> grade students will

(combined 10 <sup>th</sup> grade) will increase 1% yearly as reported by the CDE (benchmark 82% in 09-10)	pass CAHSEE Math	pass CAHSEE Math	pass CAHSEE Math	pass CAHSEE Math	pass CAHSEE Math
<u>Objective 2c-</u> Data collection mechanisms to track student activities after graduation will be established. Student success (careers and college readiness) as measure by graduates who are UC/CSUC will increase by 2% each year. (2008-2009 benchmark is currently 18.8%)	District will identify data management options for tracking student career and college activities after HS. The Alumni section of Edline will be activated 20.8% UC/CSU ready	District will implement data management options for tracking student career and college activities after HS 22.8% UC/CSU ready	District will determine benchmark data based on prior year results and continue implementation 24.8% UC/CSU ready	District will identify additional strategies to increase student career and college success after HS. Continue tracking. 26.8% UC/CSU ready	District will identify additional strategies to increase student career and college success after HS. Continue tracking 28.8% UC/CSU ready
<u>Objective 2d-</u> On-line high school course options for students will be actively pursued with the intent of establishing a pilot program no later than 2012-2013	District will collect information about successful on-line programs, including costs and attendance compliance.	At least two on-line HS courses will be available for student enrollment as a pilot	Options for student part day enrollment in on-line courses will be made available and two additional courses will be offered.	Part and full day enrollment in on-line high school programs will be available for student enrollment	Program will be expanded as finances and student interests permit

**Implementation:** All goals are ultimately focused on helping ALL students meet performance objectives through a strong instructional program that utilizes technology to meet student needs. Technology must be part of our delivery strategies in order to meet the needs of our students. Technology provides access to different teaching methods, a means to discover more effective strategies, and a way to motivate and involve students. Effectively weaving technology into the curriculum requires purposeful planning, high quality professional development, a well-designed infrastructure, sufficient funding, and carefully designed monitoring and evaluation tools and strategies.

**Activities-**

- At least 70% of teaching staff will complete the EdTechProfile survey by March each year.
- The EdTechProfile Student Survey will be administered to students in grades 5, 8 and 11(to ensure representation from all levels).
- The Curriculum and Instruction, Special Projects and Technology departments will work

together to plan trainings that highlight strategies on integrating technology into the curriculum and fully implementing technology components of adopted and supplementary materials

- Edline will be utilized as an avenue for sharing teacher resources electronically and will be updated at least quarterly. A teacher committee will be formed to standardize the format.
- Single School Plans and the LEA Plan will be update yearly and evaluated on technology components and strategies
- Textbook adoptions will be analyzed and given weight for technology integration strands
- Identify and purchase additional standards aligned software
- Support teachers, through release time and stipends, in creating high quality technology based lessons that can be locally implemented
- Teachers skilled in integration of technology in the classroom will be identified and developed as in district PD providers and coaches
- Highlight student and teacher technology use through showcases
- Involve library/ media and computer support personnel in professional development activities focusing on the core curriculum, standards, and CAHSEE
- Additional technology purchases (see Sections 5 and 6) will be made as site, district, and grants funding allows
- Research data management systems will be developed that will allow the district to closely track college attendance/success and career placement, beyond the requirements of Perkins Core Indicators.

#### **Evaluation Instruments, Procedures, and Responsibility:**

1a- District progress in meeting API and AYP targets will be monitored and reported out to the public and school board at least yearly each September (Asst. Supt of Curriculum and Coordinator of Special Projects).

1b, c and d- At least 70% of the teachers and administrators will complete the EdTechProfile by March of each year and selected groups of students will complete the Student Survey. Progress towards benchmark goals will be reported out to stakeholders. Site administrators will validate teacher technology uses in classroom observations. Agendas of District trainings will be kept and annually analyzed for technology integration strategies. Successful technology strategies, posted on Edline and other locations, will be highlighted during staff development sessions, and technology advisory meetings. Lesson plans from the web or other resources that integrate technology into the curriculum will be evaluated and posted on the Edline.

The Asst. Supt, Coordinator, and Director will track the number of lessons posted and the number of lessons downloaded and viewed to ensure progress and effectiveness.

2a and 2b- Student progress in passing CAHSEE and available curricula and interventions will be monitored by the Asst. Supt of Curriculum. Data will be collected yearly and compared to the established benchmarks.

2c- The Coordinator of Special Projects will lead the data management process, focusing on our capacity to warehouse data and monitor student outcomes after high school graduation

#### **Responsibility for Implementation:**

**Students-** Show academic improvement yearly, be present and motivated, use technology to improve learning, take EdTechProfile Student Survey in 5th, 8th and 11th grade, as applicable

**Teachers-** Take or update EdTechProfile yearly by March, participate in professional development, integrate learned technology skills in lesson design, determine student need for intervention and provide appropriate assignments and interventions, use data to make instructional decisions

**Site Administrators-** Include goals in Single Plans, ensure completion of the EdTechProfile, make decisions based upon available data, model technology use, monitor classroom instruction on an on-

going basis, ensure scheduling of technology/ labs provides equitable access, devote site personnel and fiscal resources

**District Administration-** Include goals, objectives and benchmarks in district committee agendas, provide professional development, monitor implementation of district programs, identify best practices, disseminate results and resources, monitor plan progress and track participation, seek out and identify funding, and leverage available resources

**District Technology Director-** Assess resources, provide adequate network bandwidth, ensure timely technology support, investigate and recommend technology resources to meet identified needs.

**Technology Advisory Committee members-** provide timely input and advocate for site needs

### **3e- Student Acquisition of Technology and Information Literacy Skills**

Development and implementation of grade span technology proficiency standards tied to curricular and state standards will ensure that all students graduate from Sierra Sands with the necessary skills to excel in the workplace. Models for technology proficiencies and information literacy skills are available through a variety of sources, including NETS•S <http://www.iste.org/standards/nets-for-students/nets-student-standards-2007.aspx>. The NETS•S technology standards for students include the following skills:

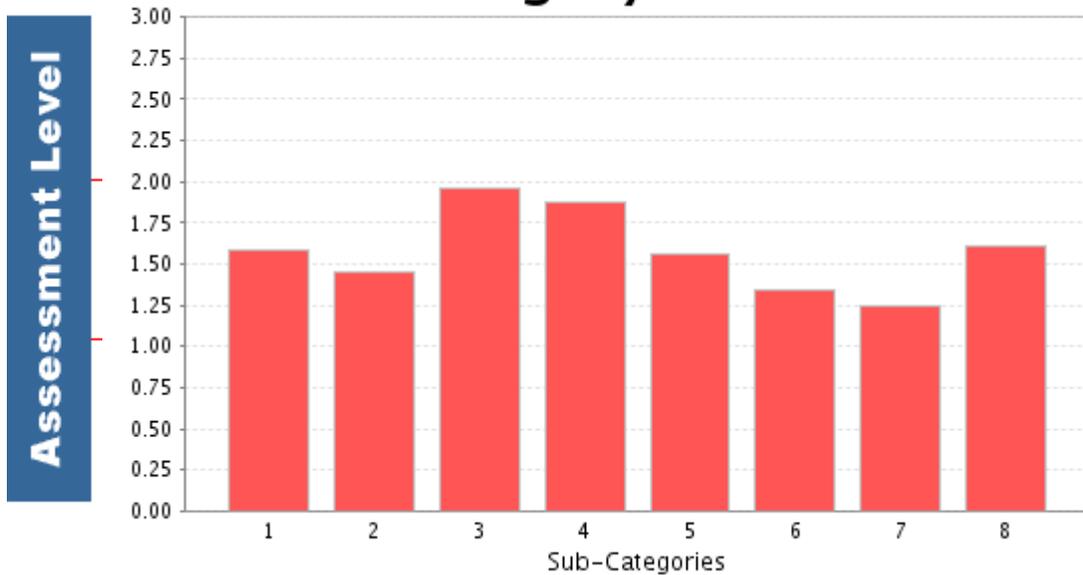
- Demonstrate creativity and innovation
- Communicate and collaborate
- Conduct research and use information
- Think critically, solve problems, and make decisions
- Use technology effectively and productively

In addition to student proficiency related to information literacy skills, it is vital to ensure that teachers also have skills necessary to use Information Literacy Skills appropriately. When analyzing teacher responses to “Knowledge of Acceptable Use Policies, safety, and health issues” (CCTC Program Standard 9i), only 28% report that they *require* their students to use computer technologies in accordance with the school's/district's Acceptable Use Policies and safety and health issues. An additional 25% regularly use technology in their classroom in accordance with the school's/district's Acceptable Use Policy and safety and health issues. This means that almost half of the teachers do not know how to implement, and therefore would have difficulty instructing students on policies or monitoring compliance. Similar numbers are seen in the category “Knowledge of state and federal laws for uses of computer-based technologies” (20% require and 28% regularly use). Only 19% of the teachers report that they require students to select and use computer technologies in accordance with best practices of computer and network security and shared resource management. Teacher professional development needs related to Informational Literacy will be addressed in Section 4. Additional statistics highlighting this need are located below.

Teachers' proficiency levels in CCTC Program Standard 9 sub-categories:
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Using Technology in the Classroom:
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## Category Chart

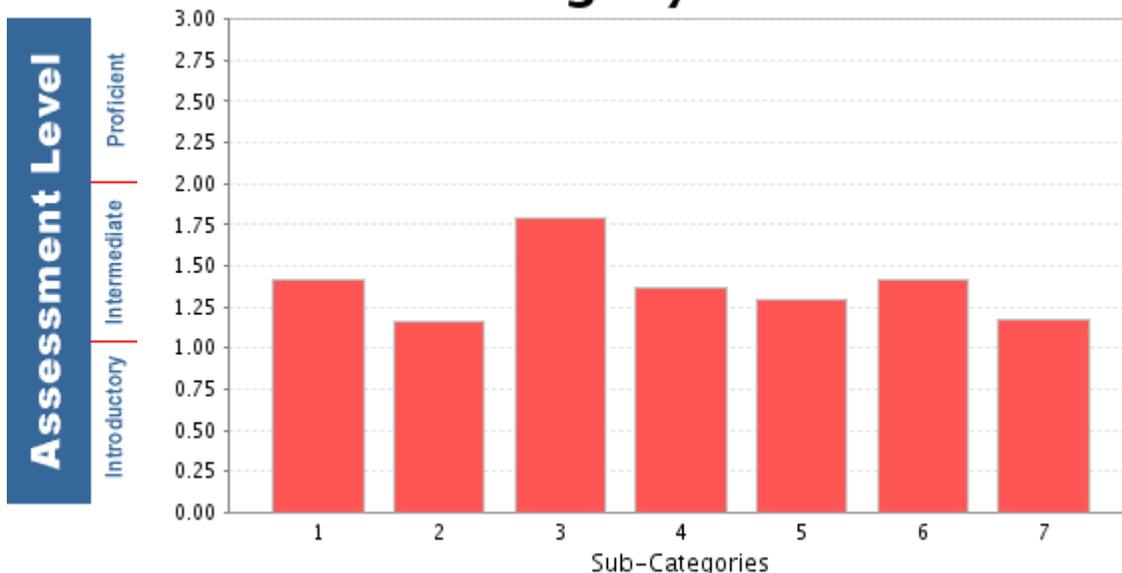


- 1 Standard 9a Each candidate considers the content to be taught and selects appropriate technological resources to support, manage, and enhance student learning in relation to prior experiences and level of academic accomplishment.
- 2 Standard 9b Each candidate analyzes best practices and research findings on the use of technology and designs lessons accordingly.
- 3 Standard 9d Each candidate uses computer applications to manage records and to communicate through printed media.
- 4 Standard 9e Each candidate interacts with others using e-mail and is familiar with a variety of computer-based collaborative mechanisms
- 5 Standard 9f- Each candidate examines a variety of current educational technologies and uses established selection criteria to evaluate materials, i.e. multimedia, Internet resources, telecommunications, computer-assisted instruction, and productivity and presentation tools.
- 6 Standard 9g Each candidate chooses software for its relevance, effectiveness, alignment with content standards, and value added to student learning.
- 7 Standard 9h 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 Standard 9i Each candidate demonstrates knowledge of copyright issues and of privacy, security, safety issues and Acceptable Use Policies.

Teachers' proficiency levels in CCTC Program Standard 16 sub-categories:

Using Technology in the Classroom:

## Category Chart



1 Standard 16a Each participating teacher communicates through a variety of electronic media.

2 Standard 16b Each participating teacher interacts and communicates with other professionals through a variety of methods, including the use of computer-based collaborative tools to support technology enhanced curriculum.

3 Standard 16c Each participating teacher uses technological resources available inside the classroom or in library media centers, computer labs, local and county facilities, and other locations to create technology enhanced lessons aligned with the adopted curriculum.

4 Standard 16d Each participating teacher designs, adapts, and uses lessons which address the students' needs to develop information literacy and problem solving skills as tools for lifelong learning.

5 Standard 16e Each participating teacher uses technology in lessons to increase students' ability to plan, locate, evaluate, select, and use information to solve problems and draw conclusions. He/she creates or makes use of learning environments that promote effective use of technology aligned with the curriculum inside the classroom, in library media centers or in computer labs.

6 Standard 16f Each participating teacher uses computer applications to manipulate and analyze data as a tool for assessing student learning and for providing feedback to students and their parents.

7 Standard 16g Each participating teacher demonstrates competence in evaluating the authenticity, reliability and bias of the data gathered, determines outcomes, and evaluates the success or effectiveness of the process used. He/she frequently monitors

and reflects upon the results of using technology in instruction and adapts lessons accordingly.

Establishment of clear technology proficiency and information literacy skill standards, such as those outlined in CCTC Standards 9 and 16 for teachers, will guide and assist staff in providing the best education and school-career preparation for our students. We will utilize the NETS•S student standards as a starting point and revise as needed to meet our community needs.

<b>Goal 1:</b> All students will develop critical technology and information literacy skills that enable them to become independent learners and further their education.					
<b>Objective</b>	<b>Benchmark</b>				
	<b>June 30, 2012</b>	<b>June 30, 2013</b>	<b>June 30, 2014</b>	<b>June 30, 2015</b>	<b>June 30, 2016</b>
<u>Objective 1a-</u> At least six yearly grade-appropriate sample lesson plans will be created by teachers or Tech Dept. to support research and information literacy skills to be presented to students, K-12	Lessons 1-6 will be implemented as well as i-SAFE copyright lessons (see section 3f)	Lessons 7-12 will be implemented and lessons 1-6 maintained as well as i-SAFE copyright lessons	Lessons 13-18 will be implemented and lessons 1-12 maintained as well as i-SAFE copyright lessons	Lessons 19-24 will be implemented and lessons 1-18 maintained as well as i-SAFE copyright lessons	Lessons 25-30 will be implemented and lessons 1-24 maintained as well as i-SAFE copyright lessons
<u>Objective 1b-</u> All students will receive regular instruction, at least once per week, aligned with NETS•S in both classroom and lab settings to promote technology and information literacy skills.	NETS•S working groups will be established, adapted, then implemented for grades K-3	NETS•S working groups will be established, adapted, then implemented for grades 4-6	NETS•S working groups will be established, adapted, then implemented for grades 7-9	NETS•S working groups will be established, adapted, then implemented for grades 10-12	Revisions will be made as necessary
<b>Goal 2:</b> All students will acquire technology and information literacy skills through the use of technology in lessons and activities embedded in the curriculum.					
<b>Objective</b>	<b>Benchmark</b>				
	<b>June 30, 2012</b>	<b>June 30, 2013</b>	<b>June 30, 2014</b>	<b>June 30, 2015</b>	<b>June 30, 2016</b>
<u>Objective 2a-</u> The % of teachers who rate themselves as proficient in information literacy skills, as shown on the EdTechProfile Technology Assessment Profile, Standard 16d will increase by	33% of Teachers will rate themselves as proficient in information literacy skills	41% of Teachers will rate themselves as proficient in information literacy skills	49% of Teachers will rate themselves as proficient in information literacy skills	57% of Teachers will rate themselves as proficient in information literacy skills	65% of Teachers will rate themselves as proficient in information literacy skills

8% yearly (Baseline 25%)					
<p><u>Objective 2b-</u> Elementary school students will be taught technology and information literacy (IL) skills by their classroom teachers during the course of academic instruction in California content standards (such as elements of Writing Strategies— Research and Technology and Writing and Speaking Applications in English/Language Arts; Historical and Social Sciences Analysis Skills in History/Social Science; Mathematical Reasoning; and Investigation and Experimentation in Science), using classroom or lab computers to practice.</p>	<p>At least two IL lessons will be taught in each K-5 classroom. Sample lessons will be shared and posted in Edline.</p>	<p>At least three IL lessons will be taught in each K-5 classroom. Sample lessons will be shared and posted in Edline.</p>	<p>At least four IL lessons will be taught in each K-5 classroom. Sample lessons will be shared and posted in Edline.</p>	<p>At least five IL lessons will be taught in each K-5 classroom. Sample lessons will be shared and posted in Edline.</p>	<p>At least six IL lessons will be taught in each K-5 classroom. Sample lessons will be shared and posted in Edline.</p>
<p><u>Objective 2c-</u> Middle school students will be taught technology and information literacy (IL) skills by their classroom teachers, in collaboration with Librarians during the course of academic instruction in California content</p>	<p>Identification of which course will take responsibility for lesson implementation will be determined. At least two IL lessons will be taught in the</p>	<p>At least three IL lessons will be taught in the selected 6-8 classroom. Sample lessons will be shared and posted on Edline. Students enrolled in</p>	<p>At least four IL lessons will be taught in the selected 6-8 classroom. Sample lessons will be shared and posted on Edline. Students enrolled in</p>	<p>At least five IL lessons will be taught in the selected 6-8 classroom. Sample lessons will be shared and posted on Edline. Students enrolled in</p>	<p>At least six IL lessons will be taught in the selected 6-8 classroom. Sample lessons will be shared and posted on Edline. Students enrolled in</p>

standards, using fixed or mobile labs to practice. Some middle school students will be able to take electives or special programs involving technology.	selected 6-8 classrooms. Sample lessons will be shared and posted on Edline. Students enrolled in computer electives will complete a unit in information literacy	computer electives will complete a unit in information literacy	computer electives will complete a unit in information literacy.	computer electives will complete a unit in information literacy	computer electives will complete a unit in information literacy.
<u>Objective 2d</u> - High school students will be taught lessons on technology and information literacy skills through chosen electives (such as, art, media, career technology, and ROP courses) and through their English and other core classes (through collaboration between their teachers and librarians) and will demonstrate appropriate IL skills	High school departments will meet to define the mechanics of Information Literacy instruction at the HS level. At least two IL lessons will be taught in the selected 9-12 classrooms.	At least three IL lessons will be taught in the selected 6-8 classroom.	At least four IL lessons will be taught in the selected 6-8 classroom.	At least five IL lessons will be taught in the selected 6-8 classroom.	At least six IL lessons will be taught in the selected 6-8 classroom.

**Implementation:** Over the duration of this plan, the Curriculum office, in collaboration with the Technology Department, will develop lessons that focus specifically on technology resources and information literacy to help our staff and students gain necessary skills. Principals will use the NETS•S Standards for Students in working with teachers to ensure technology is used on a consistent basis and that information literacy skills are incorporated into lessons throughout the year. Principals will review the ISTE Technology Standards for Students during at least one staff meeting by June 30 of each year of this plan. Teachers will discuss the integration of the standards in at least two Professional Learning Communities (PLC) meetings by June 30 of each year of this plan. Teachers will teach at least the minimum number of lesson indicated above in their grade level by June 30 of each year of this plan. Information on 21st century learning skills will be distributed to all teachers and administrators via monthly email information updates and posted on the District website.

Activities-

- Convene a broad-based committee to determine SSUSD Technology Proficiency Standards and Information Literacy Standards (determine scope and direction for local implementation of NETS•S)
- Lessons will be developed and shared with teachers through email and Edline
- Principals will be provided with resource materials and training on information literacy to aid in classroom observations
- Staff development for teachers is covered in Section 4
- Fully implement i-SAFE
- Purchase other software or programs deemed necessary to accomplish the goals

**Evaluation Instruments, Procedures, and Responsibility:**

**Students-** participate fully in classroom lessons, complete student surveys as requested

**Teachers-** participate fully in professional development, read informational/ training emails, share successful lessons to be included on Edline, develop and present lessons to their classes, document the teaching of the lessons in their lesson plan books, annually participate in EdTechProfile

**Principals-** maintain the attendance logs from the annual meetings, use provided materials during classroom observations and walkthroughs, monitor the creation and teaching of at least one lesson, ensure completion of EdTechProfile

**District Administration and Technology Department-** organize lessons and post, lead discussions and provide guidance to committees, provide support for EdTechProfile

**Overall Responsibility for Implementation:** Asst. Supt of Curriculum, Coordinator of Special Projects, Director of Technology and site administrators. Guidance and input provided by Technology Advisory Committee

**3f- Appropriate and Ethical Use of Technology in the Classroom**

Computer paraprofessionals, librarians, and teachers are still teaching Information Literacy Skills in a non-systematic and limited manner. This is also evident when only 29% of teachers report having students use the Internet 2-4 times per week to complete class assignments, 13% for doing research on the Internet, and only 14% require the use of email. Many teachers are not comfortable with the Internet and that is reflected in the lessons and tasks they assign. To comply with the Child Internet Protection Act (CIPA), the district needs to seek out solutions to the practical, as well as moral and ethical issues surrounding how to teach information literacy and access. Information Literacy skills, as defined in SSUSD (based upon ISTE- NETS•S), will be taught. The Sierra Sands Unified School District (SSUSD) Board of Education has adopted an Acceptable Use Policy, which is due to be updated in 2010-2011 (see Appendix E).

An i-SAFE subscription will be purchased yearly. Over 300 lessons are available on a variety of topics including:

Cyber Community Citizenship – Relates real world and online behavior/consequences

Personal Safety – Responsible online communication and safe interaction

Cyber Security – Malicious software, spam, identity theft awareness and response

Intellectual Property – Copyright protections, plagiarism, file-sharing in Cyberspace

Predator Identification – Understanding the grooming process, and appropriate response to strangers online

Digital Literacy – Comprehending the purpose of media and how to utilize media to its best purpose

**3g- Internet Safety**

**Filtering, as required by Child Internet Protection Act (CIPA) and SSUSD board policy, is provided on all district connected computers.** In addition to meeting the safety needs of K-12 students, schools must also teach Internet safety to receive E-Rate reimbursements for costs associated with Internet service, Internet access or internal connections. The “Protecting Children in the 21st Century Act” of 2008 mandates that schools teach students about “appropriate online behavior, including interacting with other individuals on social networking websites, chat rooms and cyber bullying awareness and response.” Sierra Sands USD will purchase a yearly license with i-Safe related to e-Rate issues. The program will be implemented and includes the following topics:

- Appropriate Online Behavior – Safety and responsibility in Cyberspace
- Social Networking – Safe and responsible interaction with other individuals on social networking Web sites and in chat rooms
- Cyber Bullying – Increase students’ awareness about cyber bullying and response

**3f and 3g- Goals and Implementation Plans**

<b>Goal 1: All students and teachers will demonstrate appropriate and ethical use of information technology including the ability 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.</b>					
<b>Goal 2: All students in SSUSD will be educated to be safe and responsible users of digital tools; students will be knowledgeable about internet safety, including awareness and dangers of cyber-bullying, protection against online predators, and how to maintain online privacy.</b>					
<b>Objective</b>	<b>Benchmark</b>				
	<b>June 30, 2012</b>	<b>June 30, 2013</b>	<b>June 30, 2014</b>	<b>June 30, 2015</b>	<b>June 30, 2016</b>
<u>Objective 1a</u> An i-SAFE implementation schedule will be developed	i-SAFE-Implementation committee will identify the initial grade levels to receive instruction, minimum instruction standards and hours for i-SAFE lessons	i-SAFE Implementation committee will observe and evaluate current instruction and revise plan/schedule as needed	i-SAFE Implementation committee will observe and evaluate current instruction and revise plan/schedule as needed	i-SAFE Implementation committee will observe and evaluate current instruction and revise plan/schedule as needed	i-SAFE Implementation committee will observe and evaluate current instruction and revise plan/schedule as needed
<u>Objective 1b</u> 100% of staff teaching i-SAFE lessons will participate in training (Benchmark= 0-goal 150)	Thirty staff members will receive training.	An additional thirty teachers will receive training			

<u>Objective 1c</u> All students K-12 will receive basic instruction in internet safety tools (Benchmark 0%)	Three Grade levels will receive i-SAFE instruction per committee's recommendations	Three additional Grade levels will receive i-SAFE instruction per committee's recommendations	Three additional Grade levels will receive i-SAFE instruction per committee's recommendations	Three additional Grade levels will receive i-SAFE instruction per committee's recommendations	Three additional Grade levels will receive i-SAFE instruction per committee's recommendations
<u>Objective 1d</u> The SSUSD AUP and policy will be updated and reviewed on a regular basis	Update AUP and related policies		Update AUP and related policies		Update AUP and related policies

**Implementation:** Students in grades K-12 will receive instruction in Internet Safety and copyright law over the five year period of this plan. Teachers will also receive training to allow them to be knowledgeable instructors and users of technology

**Activities-**

- Revise existing Acceptable Use Policy. In-service staff on AUP policies. Require annual signature from staff and parents upon receipt of AUP.
- All policies on copyright, use of technology, and webpages will be reviewed yearly and updated as necessary.
- Purchase i-SAFE curriculum
- Establish Implementation Committee composed of a wide range of participants (elementary to HS, teachers, paras and admin.)
- Prepare implementation plan, gather feedback
- Train first implementers in i-SAFE curriculum. Library/Media Specialists/ Computer Paras, and teachers will attend training on Information Literacy/Internet Safety and i-SAFE,
- Students receive a minimum of 4 lessons on copyright, fair use, plagiarism, and unlawful downloading
- Evaluate training, conduct observations, and add or deduct lessons as needed
- Train additional staff each year to ensure full implementation
- Pre and Post assessment (Copyright and Fair Use) will be given and information uploaded to NAC (i-SAFE assessment). A report will be generated yearly showing student progress,
- Students incorporate appropriate copyright and fair use into their projects- evaluate through assessments and observations.

**Evaluation Instruments, Procedures, and Responsibility:**

The implementation, sequencing of the lessons, and monitoring will be a joint responsibility of the Technology Advisory Committee, Asst. Supt of Curriculum, Coordinator of Special Projects, Director of Technology and site administrators.

As part of i-SAFE, each student takes a pre and post assessment to monitor knowledge and attitude changes as a result of instruction. Annually, district staff will evaluate the student post-assessment data to determine necessary modifications of the instructional program to better ensure understanding of copyright and fair use, legal and illegal downloading and file sharing, and avoiding plagiarism. Records to maintain include: Purchasing records, Implementation Plan, Lesson plans,

training logs, Pre- and Post- assessments. Principal shall review teacher participation in online i-Safe training. Student work is reviewed and monitored by staff on an ongoing basis.

### **3h- Policies/ Practices that Ensure Equitable Technology Access for All Students**

We recognize that our district has students with diverse needs, varied levels of support at home, and that our population will most likely continue to become more diverse over time. It is the intent of SSUSD to provide equitable access for ALL students, including technology access. In order to meet the needs of all the students we will continue to expand access within the community to our students and adults. In order to minimize the ‘digital divide, it is critical that ALL students have equal and universal access to technology. Although it would be convenient to assume that all students are “digital natives” and have equal skills, experience shows us that today’s students may not have access equal to that of their peers.

In SSUSD special groups of students (i.e., ELL, RSP, SDC, GATE) may have additional software and hardware available for their use. Students who need assistive technologies, as specified in IEP or 504 Plans are provided with those resources. Students use spell checkers for language arts, keyboards to compensate for motor skill issues, and CDs for listening centers to assist students with visual/ auditory discrimination or language problems. ELD students may use electronic translation devices or use the Rosetta Stone program. Most schools are investing in permanently mounted digital projectors, interactive white boards and document cameras and are trying to provide a technology rich environment for their students at school. Some classrooms have access to electronic student response systems. Individualization through math programs such as ALEKS and Accelerated Math provide access for remediation/ intervention and acceleration.

In order to accomplish equitable access the district has establish goals including

- Goal 1:** Develop and implement strategies to maintain all sites at or above a determined technology standard.
- Goal 2:** Provide extended learning in order to help students meet standards, pass the High School Exit Exam (CAHSEE), and provide for equal access.
- Goal 3:** Explore and implement distance and on-line learning.
- Goal 4:** Refine and create new partnerships with various agencies in the community (Naval Weapons Station, City of Ridgecrest, Cerro Coso Community College, Adult Literacy Providers) to increase student access to technology after school hours, weekends, evenings, and during holidays. Networkable computers need to be provided at a variety of places in our schools and community for student and community access.
- Goal 5:** Ensure Section 508 compliance for handicap accessibility of equipment and software as needed.

### **Implementation Plan for Programs and Methods of Utilizing Technology to Ensure Access to All Students:**

Specific activities include:

- Continue to develop effective interventions to meet the needs of underachieving students.
- Search for funding to support additional technology purchases as well as support expanded hours for student access to technology and research-based computer-assisted programs.

- Explore, assess and determine the practicality of on-line and distance-learning courses that will allow students access to advanced or credit recovery courses. Expand concept to part day and full day programs to meet student need.
- Establish and maintain partnerships through joint advisory groups and formalized agreements.

Implementation will be monitored by site and district administration.

### **3i- Technology Use for Efficient Student Record Keeping and Assessment**

Time spent on record keeping is time not spent on teaching and planning. Automated record keeping is a mechanism that may provide teachers more time to dedicate towards instruction of students, as well as give administration more time to serve as instructional leaders. The AERIES SIS System provides important information that is now available to teachers both in classrooms and on home computers. By interfacing electronic grade books and report cards to the SIS, teachers and administrators have a fully automated means for record keeping. The district is dedicated to making instructional decisions based on data. Benchmark and teacher assessments need to be easy to access and provide timely information to teachers and administrators. Data is warehoused in Edusoft to facilitate teacher and administrator access.

**Goal 1:** Continue activities to effectively track, record, and update student records and needs at the classroom, site, and district levels through the AERIES SIS system

**Goal 2:** Provide district support to generate, analyze, and organize data for site and district use

**Goal 3:** Consistently utilize disaggregated data and data analysis to make instructional decisions at the classroom, site, and district levels as well as in the development of annual Single Plan for Student Achievement at the site level and the Local Education Agency Plan at the district level

**Goal 4:** Provide teachers access to attendance and grade reporting programs at school and at home through Edline and portals

### **Implementation Plan to Make Student Record Keeping and Assessment More Efficient and Supportive of Teachers' Efforts to Meet Each Student's Academic Needs**

Specific activities include:

- Continue with ABI training for teachers not already trained. Provide coaching support.
- Continue with data warehousing. Explore other solutions for ease of use and reports.
- Provide staff development to facilitate staff use of district programs.
- Completely institute Cal PADS and other state longitudinal tracking systems
- Continue refining K-5 benchmarking procedures, expand grade 6-12 assessments

### **3j- Utilizing Technology to Improve Two-way communication between Home and School**

All school sites have developed web sites for parent communication and the district has a robust web page as well as Intranet site. Fifty-four percent of teachers (compared to 18% in 2006) utilize a School web site with class related information, such as assignments, grades, upcoming events, parental information, etc. anywhere from 2-5 days per week. Edline is the system that the school sites use to implement and maintain their school websites. Teachers also use Edline to maintain and update their class web pages. Informational items such as announcements, progress reports, calendars, and private reports are posted on the school and teacher web pages. The visibility of all information can be set to public or private view. The system utilizes an easy to use and intuitive interface for ease of implementation. Every year the district evaluates the effectiveness of this system and will continue to monitor its use, effectiveness and cost to the

district. The Edline system is procured and partially paid for using E-rate discounts and as such, must be evaluated and compared with similar systems on a yearly basis. In the event that a comparable system is identified and has the potential to save the district money, such system will be evaluated as a replacement. A software support person provides support to all district staff members that are responsible for maintaining pages through the Edline system. All schools have internet access and telephones available in classrooms. Teachers also have access to homework hotlines, email, voice mail, and remote access from home. Seventy-four percent use voice mail daily-weekly to communicate with parents (67% in 2006). Technology is used to develop newsletters, assignment sheets, calendars, report cards, attendance reports, and progress reports. Sixty-two percent of the teachers indicate that they use technology tools to communicate with parents at least weekly (25% in 2006). **Strategies for efficient communication between home and school need to be continued and ongoing support provided to teachers uncomfortable with using technology to enhance parent communication.**

Students are successful at a higher rate when parents are involved in their education. Parent involvement has been a key component of Title I legislation for years. District board goals include improving communication within the community and with parents. Technology is an effective tool to reach out and involve parents in the education process. Many of the parents in the community use e-mail and other technology communication tools in their work and personal lives, so a natural extension of that use would be to communicate with the schools via these technologies

**Goal 1:** Use technology to actively enhance two-way communication between school and home

**Goal 2:** Provide students with safe and secure email accounts as needed

**Goal 3:** Provide community connectivity through the district website, allowing for parent/student access to grades and attendance data; as well as interactive class pages that allow teachers to post information, assignments, and links

**Goal 4:** Enhance capabilities to utilize phone system for important messages and emergency communication

### **Implementation Plan so Teachers and Administrators can be More Accessible to Parents**

SSUSD has been proactive over the last five years in increasing communication and parent access to information through technology. Some parents currently use the existing parent/student portal. By June 2012, we are striving to have 90% of parents able to access student data, such as assignments and grades, via a parent/student portal.

Currently 62% of teachers report that they use technology daily up to 4 times per week for communication. Our goal is that by June 2013, 80% of teachers will use technology to communicate with homes (parents and students) daily up to 4 times per week as shown on the EdTechProfile and that the percent will increase to 90% by 2016.

Activities-

Specific Activities include-

- Expand collection of parent and student email addresses to be used for electronic communication
- Expand portal access for parents and students
- Expand parent training on accessing Edline
- Provide computer courses for parents of English language learners
- Establish a district solution for parent/ student communication for coaches and adjunct staff members, rather than using personal emails.

- Expand the use of district email accounts for students as necessary
- Provide training and support to teachers that will allow them to comfortably access parent communication programs

### **3k- Monitoring of Curriculum Component**

Monitoring of curriculum strategies outlined in this plan will be the responsibility of the Assistant Superintendent of Curriculum and Instruction, along with the Coordinator of Special Projects, and Director of Technology. They will be assisted in monitoring by the Technology Advisory Committee.

- Reports will be generated annually, as appropriate, for identified audiences such as the School Board, Superintendent, management team, and school staffs. Reports will include progress on the curriculum goals, as well as the hardware and software goals outlined in this plan. Successful implementation of the curriculum component will be measured using the specific outputs and outcomes defined below.
- Information shared with staff through email, intranet and webpages will include updates on the progress of technology projects, available professional development, practical tips, and sample lessons designed around the California Standards. Staff will be encouraged to electronically share information on effective lesson design and other strategies via e-mail and Edline.
- Student progress will be monitored on state assessments and district assessments by site administrator.

<h3><b>Indicators of Success Used to Evaluate Positive Impact on Student Achievement</b></h3>
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**OUTPUTS**–The following measurable indicators will be used to monitor and evaluate the success of our technology plan in meeting student and staff needs:

- Annual Parent Survey (administrators, parents, students, teachers) required at Title I schools and recommended at all other sites
- Technology assessment data (EdTechProfile) and identified professional development needs
- Student Technology surveys (5<sup>th</sup>, 8<sup>th</sup> and 11<sup>th</sup> grades)
- Percentage of teachers participating in professional development opportunities
- Student performance data (i.e., API, AYP, performance on CST tests, pass rates on CAHSEE exam, attendance, SAT, AP exam scores)
- Increased use of technology as evidenced by check-out records and requests for technology
- Benchmarks by quarter/semester/year as appropriate
- Professional Development Evaluations (i.e., teachers, support staff, administrators, parents, students)
- Technology proficiency level: students will progress towards mastering Sierra Sands Unified School District technology standards (based on NETS•S) through an instrument/assessment to be developed.
- Through implementation of the i-SAFE program there will be a reduction of inappropriate on-line behavior as evidenced through daily reports to the Director of Technology

**OUTCOMES**–We expect to see improvement in the following areas:

- Steady progress will be made towards meeting the goals and affiliated activities as outlined in this document in each component area.

- Student interest in class work and school in general will increase as technology is integrated into the curriculum.
- School staff will increase requests for access to relevant technology and professional development.
- Collaboration will increase as teachers, all other instructional staff, administrators, and students explore different ways of communication.
- Students and teachers will be able to demonstrate the use of technological skills in their everyday work. As students and teachers develop competence and confidence in the use of technology, we would expect to see sharing and mentoring occurring on a regular basis. Events such as Student Technology Showcases, that enable students and teachers to share projects and innovative uses of technology, will illustrate the increased sophistication as people infuse the curriculum with technology.
- Students will be better prepared to meet the technological demands of the work place and graduate both college and career ready.

## **Section 4: Professional Development Component**

### **4a- Teachers' and Administrators' Current Technology Proficiencies and Needs**

The range of technology skills among teachers continues to be highly variable and needs to be developed through effective professional development. Teachers are increasing their use of computer technology for personal and administrative purposes, but are not comfortable with the integration of technology in the classroom to improve student learning. On the 2010 EdTechProfile, 77% of the respondents wanted training in integrating technology into the curriculum and only 23% wanted basic computer/technology skills. The professional development component of this plan will focus on helping teachers develop a vision for integrating technology as a tool to enhance the curriculum and improve student learning.

Since 2006, over 60% of the teachers and administrators in Sierra Sands USD have completed the EdTechProfile assessment on a yearly basis. The results of this survey indicate:

- There has been an increase in technology proficiency with general computer knowledge and word processing. Eighty-eight percent of teachers feel they are intermediate or proficient users of general computer knowledge (82% in 2006). Eighty-nine percent felt they were intermediate to proficient users of word processing (87% in 2006). Comfort with additional skills is much lower but has also shown increases since the prior technology plan was instituted in 2006 (i.e., Internet-78% (67% in 2006), e-mail 77% (68%), and presentation software-58% (46%). (Appendix D- contains additional data.)
- Only 51% (43% in 2006) of teachers feel that they can manage and align technology resources with lesson content, or know their students' level of technology proficiency.
- Based upon the self-assessment survey mentioned above, many teachers are still using technology at the adoption and adaptation levels, as defined in the Apple Classrooms of Tomorrow report. (This study, published in 1998, included extensive research on teacher use of classroom technology.) Professional development should address the need to integrate technology into the curriculum.
- Many teachers could benefit from learning additional classroom management strategies for working with a limited number of computers in the classroom. Individual teachers have taken the initiative to train themselves in management strategies based upon the level of technology available in their classrooms.

- There is a need to increase teacher comfort with physical hardware and software programs. Providing additional technical staff in computer labs or the help desk may help in this respect as would creation of technology leaders at each site who are provided with regularly scheduled training and then would assist colleagues.
- Some of the following specific skills needs for professional development include:
  - a. Understanding, teaching, and monitoring Acceptable Use Policies
  - b. Renaissance Place training and management of student records
  - c. Edusoft assessment creation, scanning, printing, and analysis of reports
  - d. ABI Gradebook/AERIES database/queries
  - e. Training in Edline
  - f. Data Warehousing- Edusoft
  - g. Effective e-mail usage/Outlook
  - h. Digital camera usage
  - i. Presentation skills (i.e., PowerPoint)
  - j. Spreadsheet skills (i.e., Excel)
  - k. Integration of Technology including embedded skills of:
    - Strategies to use technology to deliver instruction and engage students in the learning process
    - Managing student research using the Internet and electronic resources, creating reports and providing simulations
  - l. NETS Technology Standards
  - m. Use of interactive white boards, data projectors, document cameras, and other specific hardware in instruction
  - n. Conducting research and accessing model lessons using the Internet
  - o. Information Literacy, including understanding reliability, validation, bias, and cyber safety (i-SAFE curriculum and how to teach it)
  - p. Emerging technologies- hand helds, incorporation of student owned technology (i.e. iPads, phones) into the learning process

Analysis of EdTechProfile data shows patterns indicating the need for specific professional development addressing teacher competencies in the following areas:

- a. Assessment of student technology proficiency levels.
- b. Integration of individual and isolated skills into comprehensive and proficient use of software programs in instruction.
- c. Implementing use of technology in the classroom to enhance, expand, and differentiate curriculum and more effectively address a variety of student needs.
- d. Effective use of Internet research tools and evaluation and selection of education software to supplement adopted textbooks and library resources.

It is the district's intent to continue to have a minimum of 70% of certificated staff, including those participating in professional development, annually complete the EdTechProfile assessment.

The district has a strong professional development program focused on improving student performance and teacher practices. Technology practices are woven into some of the trainings. Whenever possible, we encourage staff to receive intensive training and become local trainers.

We are an isolated community. In order to explore all resources and options, SSUSD faculty and staff may also need to utilize local and distance-learning resources for professional development. SSUSD staff and teachers will have the option to access online resources

providing opportunities for professional development via computers in the work place and/or at home on their connected computers

- CTAP: The California Technology Assistance Project (CTAP) <http://ctap.k12.ca.us/> is a statewide educational technology leadership initiative, providing assistance to schools and districts. Funded by the Education Technology Local Assistance Program, CTAP focuses on promoting the effective use of educational technology through regional coordination of educational support services based on local needs. Each of the eleven county superintendents' regions in the state has developed and is implementing a plan to provide technology assistance in five key component areas:

1. Professional Development
2. Technical Assistance
3. Information & Learning Resources
4. Telecommunications Infrastructure
5. Coordination & Funding

The goal in each CTAP region is to work collaboratively to support the use of technology in the districts and schools. Sierra Sands USD has an active partnership with CTAP Region 8 affiliated with Kern County Superintendent of Schools (<http://learning.kern.org/ctap/>). Courses are offered by CTAP through KCSOS-paid CTAP Level 3 Mentors on a yearly basis and may receive training through videoconference and online courses). The CTAP Proficiency Checklists are located in Appendix F.

- Cerro Coso Community College: Cerro Coso provides courses in a variety of areas and may be willing to develop specific courses that would benefit the faculty and staff of SSUSD. Several prior partnerships with Cerro Coso have offered courses to both staff and students.
- The International Society for Technology in Education (ISTE) [www.iste.org](http://www.iste.org) provides professional development, educator resources, and annually presents the NECC conference. ISTE publishes the NETS - National Education Technology standards.
- Computer-Using Educators (CUE): Computer-Using Educators, Inc. is a nonprofit California corporation founded in 1978. CUE's goal is to promote and develop instructional uses of technology in all disciplines and at all educational levels from preschool through college. CUE is the largest organization of this type in California, and one of the largest in the country. CUE holds annual conferences. The focus of these conferences is on the use of technology-rich lessons as demonstrated by classroom teachers.
- Distance Learning Courses for Teacher K-12 Professional Growth Credit, presented in cooperation with Loyola Marymount University, One LMU Drive, Los Angeles, CA 90045, <http://www.enhancementcourses.edu> offers extensive program on a variety of topics.
- TICAL Project, <http://portical.org> This SETS project provides numerous resources for school administrators through articles, models of successful technology integration programs, online tutorials, and a searchable matrix.
- Center for the Advancement of Digital Resource in Education (<http://cadreonline.org/> is a site maintained by the Butte County office of Education. CADRE is a team of education technology professionals that specialize in the design and development of digital resources supporting various initiatives.

- TechSETS (<http://www.techsets.org/>): TechSETS is focused on providing technical professionals in California schools improved access to training, support, and other resources. TechSETS is one of four Statewide Education Technology Services (SETS) to provide support and/or resources for California schools.
- California Learning Resource Network (CLRN) (<http://www.clrn.org/home/>): The purpose of the California Learning Resource Network is to provide a one-stop information source that enables California educators to identify supplemental electronic learning resources that both meet local instructional needs and embody the implementation of California curriculum frameworks and standards.

All identified sources meet recommended *Design Elements for High Quality Professional Development* as identified in Appendix C of the *Educational Technology Planning Guide* provided by the California Department of Education.

#### **4b- Plan for Providing Professional Development Opportunities**

##### **District Goals for Providing Professional Development Opportunities**

**Goal 1:** At least 70% of certificated staff will complete EdTechProfile on a yearly basis.

**Goal 2:** EdTechProfile data will be used, along with other data sources, to identify professional development needs in technology.

**Goal 3:** A district professional development plan, including technology offerings, will be developed yearly and published and distributed through a variety of means.

**Goal 4:** Completion of technology certifications will be encouraged and supported.

**Goal 5:** Technology leaders may be identified, trained, and utilized to assist with technology and to provide professional development.

**Goal 6:** SSUSD will provide professional development through a variety of delivery options, including short- and long-term workshops, online/videoconferences, independent study, coaching and mentoring, attendance at conferences, and project-based learning. Appropriate and meaningful professional development will be provided to administrators, certificated staff, and classified staff.

The ultimate goal of professional development in technology is for seamless integration of technology in the classroom in order to improve student achievement. *Zhao et.al. (2001) found that successful implementation of innovations of technology require teachers to have “colleagues who will support and mentor them through the implementation.”* Identification and support of technology leaders at school sites and providing them with the tools and time to assist others is essential. Through learning communities and collaboration these teacher leaders can be an important asset for their schools. These technology leaders can identify site-specific needs, assist with training, be program specialists, and/or operate classroom models for integration of technology. Technology leaders can work within grade levels, be specific for programs, or focus on hardware. Technology leaders can work informally to mentor others or formally to provide training and coaching. Technology leaders pilot new hardware or software before purchasing. Technology leaders can be CTAP Level 3 Mentors or possess specific skills through training, experience, or innovation in the classroom. Technology leaders may need release time to provide in-time support and implement programs that meet the needs of individual sites and staff.

*Elements of High Quality Professional Development:* The design and implementation of a professional development program for technology will incorporate components which were selected to meet needs found in the Ten Design Elements for High Quality Professional Development found in Appendix C of the California Field Guide for Teachers’ Professional

Development. Professional development must be designed to meet teacher's needs and current skill levels and must be challenging yet supportive as skills are learned and practiced.

*Cradler & Cradler (1995) report that "effective integration requires that:*

- *Technical assistance is available when needed.*
- *There is time for teachers to plan, learn about, and implement technology applications.*
- *Long-term professional development, rather than one-time workshops, is needed to support integration of technology into instruction.*
- *Teachers must have ready access to technology while planning."*

### **Implementation Plan for Professional Development**

Specific activities:

- Fully train all staff on district-identified programs and software
- Develop professional development plan and calendar
- Train cadre of in-district specialists for mentoring/coaching as well as training assignments
- Provide workshops and other trainings in district-adopted programs
- Provide training to administrators and teachers in analyzing data for program planning
- Provide curriculum-based workshops on integration of technology within the classroom
- Obtain, install and train staff in the use of additional technology resources for classrooms (i.e., interactive white boards, projectors, computers/laptops, digital cameras, document cameras, handheld classroom performance assessment systems, tablets).
- Include all library personnel in teacher professional development activities focusing on the core curriculum, essential standards, and the CAHSEE
- Provide training on Information Literacy Skills and Technology Proficiency Standards

### **4c- Monitoring Process for Professional Development Component**

The Assistant Superintendent of Curriculum and Instruction, Coordinator of Special Projects, site administrators, and Technology Advisory Committee will be responsible for monitoring the progress of the professional development plan implementation a quarterly basis. Status of plan implementation will be reported to the district Superintendent and the school board on an annual basis or as requested. Monitoring and evaluation will focus on the following components:

- EdTechProfile assessments will be updated and reviewed on an annual basis to monitor progress and set baselines for new staff.
- Staff accomplishment of CTAP level proficiencies (or other technology certification) over time will be monitored.
- Use of computer labs and technology equipment will be monitored and evaluated.
- Staff surveys will be utilized to provide feedback on needs and successes of the program. Surveys may be used to qualitatively evaluate effectiveness of professional development training.
- Staff and technology leaders will work with the site administrator to further monitor specific professional development needs and outcomes at the site level.

Our ultimate goal is to increase student performance through improved instructional practice and effective technology integration practices. In order to determine the impact of the professional development program in this area, the Technology Advisory Committee will review the results of monitoring and evaluation for the Curriculum component of this plan. In

order for the Professional Development component to be considered completely successful, positive outcomes must result for curriculum as well.

## **Section 5: Infrastructure, Hardware, Support, Software, and Security Components**

### **5a- Description of the Existing Technology Resources in the District**

Appropriate technology hardware, electronic learning resources, networking and telecommunication infrastructure, physical plant modifications, and technical support are needed by teachers, students, and administrators in order to support the activities in the Curriculum and Professional Development components. *Zhao, et.al. (2001) found that “the most successful technology projects were those where teachers were least dependent on resources beyond their reach.”* Additionally, teachers need to know the requirements of the technology application they wished to use, have access to the additional resources, and an “*awareness of and access to timely technical guidance.*” The district focuses on utilizing industry standards for the acquisition of computers and peripherals. Vendors are changed if the total cost of ownership (TCO) is affected by a combination of initial cost, support service availability, reliability, and anticipated life expectancy. TCO has become a part of the district’s method of operation, thereby increasing our ability to purchase and replace equipment and delaying obsolescence, and keeping overall costs lower.

Throughout the implementation of the previous 2006-2011 Technology Plan, a number of infrastructure, hardware, support, and software components were implemented. These are outlined in Appendix A as well as below.

**Infrastructure:** Currently, all sites have a complete and robust Local Area Network in place. The district Wide Area Network is also a complete, robust, and redundant system. The district wireless infrastructure was also recently implemented and currently provides for campus-wide coverage at each school site. It should be noted however, that current wireless implementation is adequate for coverage, but not for density. As needs for wireless connectivity increase, the wireless infrastructure will need to be enhanced to allow for density as well as coverage.

- There are 13 separate sites within the district. Each has an administrative LAN and a dedicated connection back to the District Office. All schools are using a combination of hard and wireless LAN systems. All sites have adequate network accessibility at this time, but maintenance and enhancements of these systems will be required within the 5 year period that this Tech Plan covers. One such enhancement will be in the district wireless implementation. Currently the wireless implementation is designed for coverage, not density. In order to move towards a 1-to-1 initiative at the secondary level, the wireless system will require enhancement at the High School.
- All sites are connected to the district WAN. The district WAN is comprised of dedicated (site to site) licensed microwave radio connections and one T1 connection to Rand Elementary. Each radio is built as a redundant system and has proven to be a solid and robust network connection for all sites. Rand has much less bandwidth requirements and is running on a T1 connection which has also proven to be a solid and adequate network connection. However, software and bandwidth requirements increase steadily and upgrading the current system will be required within the next 5 years.

- Videoconferencing, Webcast and other such technologies are available for distance meetings and learning opportunities, but more capabilities in the area are needed.
- The district is currently on a combination of Voice over IP Telephony systems (District Offices, SVEC, Faller, Pierce, and Inyokern) and legacy analog telephony systems (all other sites).

**Hardware:** The District Data Center has been implemented and is used to store, optimize, backup, recover, and streamline all of the district's critical and sensitive data. The Data Center has been designed to allow for growth and adapt to changing technology. Server and workstation virtualization is being used throughout the district as a way to reduce ongoing maintenance and power consumption costs. There are currently 2000+ devices connected to the district network, this includes computers, printers, servers, wireless access points, some handheld devices, and scanners. There are 100+ digital projectors in the classrooms and conference rooms. There are 50+ SmartBoards in the classrooms. There are 30+ Classroom Responses Systems in the district.

**Support:** The Technology Department supports all technology efforts with a team that is comprised of a Director of Technology, one network service technician, two computer repair technicians, one software support technician, and one telecommunication technician. Temporary employees are also sometimes used to help complete projects that are time sensitive or require personnel time beyond the normal staffing. Burroughs High School may utilize TAs who are trained in computer repair and cabling. In addition, implementation of programs like LANDesk (desktop management), SchoolDude (Work Order submission and maintenance), the Technology Resource Center, and Technology trainings sessions have all been implemented to help all staff members understand the technology, have the ability to ask for help when needed, and get speedy and appropriate support.

**Software Component:** The district continues to maintain appropriate software and licenses to support the administrative and curriculum requirements throughout the district. Standardization of software has continued over the past five years. The district has obtained low price licenses and uses imaging to deliver software to computers. Many software programs are now web-based systems. Each school has access to Renaissance Place, ABI, Destiny, Edline, netTrekker, Edusoft, Google, and other CIPA-Compliant internet websites. The district technology department provides direction to the sites regarding software inventory, licensing, and installation. In addition:

- Microsoft Office software is available for all networked computers.
- Attendance and student record keeping (AERIES - Eagle) is on district computers in administrative offices.
- ABI (Aeries Browser Interface) is available in 100% of classrooms and administrative offices. ABI is used to track grades and attendance and is a web-based interface to the Aeries system.
- All teachers have access to state analysis data warehousing (7 years of data) through the web-based Edusoft system.
- All schools use Renaissance Place software (i.e., Accelerated Reader and Math, STAR Reading and Math). Professional development and support are provided by the technology and curriculum departments.
- All of the school site libraries use the web-based Destiny Library management system.

- All school sites and the district offices use Edline to provide robust and interactive websites at the district, site, and classroom level.
- There are various other types of instructional software in use throughout the district.

**Security:** The physical security of our staff and students, as well as the security of our electronic assets, is of utmost importance and concern to the district. Over the past 5 years a number of measures have been put into place to help secure the safety of these assets.

- Intrusion Alarm systems have been implemented at all but two of our district locations. These two locations, Murray Middle School and Richmond Elementary School are both located on the Navy Base and local security policies and procedures on base have proven to be sufficient in securing the campus against unlawful entry. All other sites are armed and disarmed on a scheduled basis and site personnel are trained in the use of the system.
- Video Surveillance systems exist at 6 of our schools. The systems at each site are capable of live and controlled access to the cameras as well as storing multiple weeks of recorded video that can be reviewed and/or copied to removable media.
- In an effort to help secure the district's data, the Technology Department has implemented a district firewall, intrusion prevention system, antivirus software, network access control, software restriction policies, and behavior-based traffic analyzers.
- The District Data Center was implemented as a way to optimize, replicate, backup and secure all critical data. The Data Center consists of a main site location, as well as an off-site location to ensure that the data is secured.

**5b- Description of Hardware, Electronic Resources, Infrastructure, Physical Plant Modifications, and Technical Support Needed to Support the Technology Plan**

Although the district has come a long way since our last Technology Plan and many aspects of the Infrastructure, Hardware, Support, and Software Components are adequate for today's standards, technology requirements change rapidly. Many aspects of our current technology system will need to be upgraded or enhanced within the next 5 years. In addition, there is a need to implement new technology in order to keep up with the industry and continue to provide cutting edge solutions to our teachers and staff. Technology is a huge component in how today's curriculum is delivered and providing the appropriate technology tools to the staff and teachers is vital to our educational success. District needs were established using input from each grade level as well as established standards for the K-12 academic arena. In addition, the district will continue to take advantage of the federal E-Rate, CMAS, WSCA, and other such programs to ensure we are getting the best available pricing. We will continue to apply for grants and other opportunities to help fund various technology projects.

**Infrastructure:** All district sites are between eighteen to fifty years old. Electrical capacity continues to be an issue in our older schools. SSUSD must be diligent in making physical plant and Infrastructure modifications to meet current and future needs. The district only works with contractors who will meet its specifications for working after students have left the campus or submit fingerprints for all crewmembers who will be working on campus while school is in session. Other district requirements for working during school hours include having the work area fenced off to restrict student access, as well as other safety precautions as dictated by Education Code.

Identified objectives and activities in this plan include:

- Complete the district-wide Voice over IP implementation.

- Upgrade the wireless infrastructure at the High Schools and Middle Schools to accommodate the density required to implement a 1-to-1 initiative. Ultimately, under a 1 to 1 initiative, every student would have a wireless device that he or she uses to access electronic versions of textbooks, perform class research, submit assignments electronically, and complete other class functions. Wireless density would be required to accommodate that many concurrent wireless connections.
- Pilot programs to provide internet access to students' homes as needed to provide for equal access.
- Automate the warehouse facility operations utilizing wireless inventory systems.
- Upgrade the district Wide Area Network to increase bandwidth to 1 GB at each school site in order to enhance current technological needs, as well as provide for future needs.
- Electrical capacity at all sites needs to be elevated and increased appropriately to support hardware and infrastructure. All wiring will be configured to comply with fire code.
- Evaluate all network backbone's and switching capabilities to ensure adequate local through-put to accommodate increased software requirements.

**Hardware:** Potential objectives and activities include:

- At the High School Level- one multi-media portable device for each student to be used in the classrooms for electronic textbooks, research, curriculum delivery and general classwork.
- At the Elementary and Middle School levels- one multi-media computer available for every 4.5 students, including special populations, and one laptop for each computer projector.
- Digital projectors in 80% of the district classrooms over the next five years.
- Interactive white boards and document cameras in 70% of district classrooms.
- Maintain an up-to-date equipment inventory, with a professional inventory every three to five years or implement an in house inventorying system, such as Follett's Asset Manager.
- Classroom Response Systems in 40% of district classrooms.
- Fully implement the District Data Center that will allow for increased storage capabilities and provide disaster recovery procedures of all sensitive data.

**Support:**

- Increase school to home communication by exploring options for utilizing local television channel(s) for broadcasting various programs, advertisements, emergency messages, and general information.
- Implement an online Technology Resource Center where staff can go to find assistance such as video tutorials, how to's, knowledge-based articles, and user manuals.
- Provide help desk, technical support, and curricular support for district agreed upon instructional software and hardware components.
- Provide ongoing professional development in all areas of technology.
- Continue to implement classroom performance systems for student assessment.
- Provide community connectivity through an all-inclusive website, allowing for parent/student access to grades and attendance data, as well as interactive class web pages that allow teachers to post information, assignments, links, etc
- Continue to utilize programs like LANDesk to provide timely support with remote connection capabilities, software distribution, and patch management capabilities.

- Review technology usage throughout the district. Adjust and/or modify technology staffing as appropriate.
- Train cadre of site located personnel who are able to provide support for basic functions (printers, software loading)
- Evaluate and modify the district Acceptable Use Policy (AUP) as needed to ensure current issues are addressed in the policy.

### **Software:**

- Implement Virtual Field Trip capabilities.
- Provide Distance Learning and fully integrated Online Classroom Delivery Mechanisms. Once the curriculum committee has explored on-line and distance-learning courses, determine what additional hardware and/or upgrades to the infrastructure might be needed. Purchase and install equipment and related software as necessary.
- Implementation of Follett Software's Asset Manager.
- Investigate and implement the use of electronic textbook resources.
- Maintain master inventory of all software licenses purchased through the district with the use of LANDesk.
- Maintain appropriate district licensing to provide productivity software to all computers purchased in the district.
- Provide all sites with access to district standardized instructional software.
- Continue to utilize existing software to track hardware inventories, provide increased access for software and security updates, and troubleshoot problems.
- Continue the use of programs such as Lightspeed System's Total Traffic Control to provide Internet content filtering and Child Internet Protection Act (CIPA) compliance.

### **Security:**

- Implement Network Access Control system to ensure that only district computers are able to connect to the district network
- Continue with the district-wide video surveillance implementation plan to ensure that all school sites and appropriate district offices have video surveillance systems in place.
- Continue to refine Internet filtering and spam system with specific, customized levels of filtering.
- Maintain current off-site data storage and disaster recovery.
- Continue to work with the district safety committee to develop and plan strategies to continue the district operations in case of a catastrophe.
- Implement ongoing security training to discuss and educate staff members of current threats, safeguards, and best practices.
- Continue to monitor, analyze, and adjust current network intrusion detection and behavioral-based traffic analyzer systems that identify abnormal network activity (i.e., virus, worms, targeted attacks/hacks).

SSUSD has a CTAP regional representative available at the Kern County office and technical support through the Kern County Superintendent of Schools office. Other districts have been contacted for hardware, software, and network standards. Community members have been included in the development of this component. Contractors may be used as sources of information. The bid process and bid results from other contracts are used appropriately.

The Technology Director is a member of the California Educational Technology Professionals Association (CETPA) and utilized this resource regularly to gain insight into current Educational needs and trends.

**5c- Benchmarks for Obtaining the Needed Resources**

These benchmarks and timelines are a guide to assist in implementation and may be revised as needed. It is anticipated that some goals will be completed earlier if additional funding (i.e. vouchers and grants) is received, and some timelines and events will be adjusted due to new or improved technologies becoming available on the market. Many of these activities are continuous goals and will cover the full life of this 5 year Technology Plan. The following list summarizes the major activities over the next year. Additional and specific details and tasks are included in the Benchmarks/ Timeline chart.

**Major Activities**

- District-Wide VoIP conversion.
- Implement 1-to-1 initiative and start using electronic textbook resources.
- Automate the warehouse with wireless and modern software components.
- Upgrade WAN to 1GB or higher.
- Implement Follett’s Asset Manager.

<b>Timeline for strategies and activities to obtain the needed hardware, infrastructure, learning resources, and technical support required to support the other components.</b>					
<b>Start Date</b>	<b>Projected Completion</b>	<b>Activity or Benchmark</b>	<b>Target Audience</b>	<b>Person Responsible</b>	<b>Component</b>
7/11	6/12	Complete district-wide VoIP conversion.	School sites	Director of Technology	Infrastructure Budget
7/11	6/12	Increase school to home communication by exploring options for utilizing local television channel(s) for broadcasting	School sites	Director of Technology City of Ridgecrest	Support
7/11	6/12	Implement Network Access Control system to ensure that only district computers are able to connect to the district network	All sites	Director of Technology	Security
7/11	6/12	Implement online Technology Resource Center	All sites	Director of Technology	Support
7/12	6/13	Implement Follett Asset Manager	School sites, District Offices	Director of Technology	Infrastructure Budget
7/12	6/13	Automate the warehouse facility operations utilizing wireless inventory systems.	Warehouse Facility	Director of Technology, Director of Warehouse	Infrastructure Budget
7/13	6/14	Upgrade the wireless infrastructure at the High Schools and Middle Schools to accommodate the density required to implement a 1-to-1 initiative.	School sites.	CFO, Director of Technology	Infrastructure Budget
7/14	6/15	At the High School Level, one multi-media portable device for each student	High School, Students	CFO, Director of Technology	Hardware, Budget, Curriculum
7/14	6/15	Provide community connectivity through an all-inclusive website	All sites, community	Director of Technology	Curriculum Software Hardware Budget
7/13	6/14	Implement Virtual Field Trip capabilities	Administrators, Teachers, Students	Director of Technology	Curriculum Software Hardware

Start Date	Projected Completion	Activity or Benchmark	Target Audience	Person Responsible	Component
					Budget
7/13	6/14	Upgrade WAN to support up to 1GB transfer speeds	School sites	Director of Technology	Infrastructure Budget
7/13	6/15	Identify funding sources that will help implement the 1to1 initiative at the High School level	School sites	CFO, Director of Technology	Infrastructure Budget
7/14	6/16	Continue with the district-wide video surveillance implementation plan	School sites	Director of Technology	Security, Budget
7/14	6/16	Pilot programs to provide internet access to students' homes.	Students, community	CFO, Director of Technology, Asst. Superintendent of C & I	Infrastructure, Support, Curriculum, Budget
7/13	6/16	Evaluate all network backbone's and switching capabilities to ensure adequate local through-put to accommodate increased software requirements.	All Sites	Director of Technology	Infrastructure, Support, Curriculum, Budget
7/11	6/16	Digital projectors in 80% of the district classrooms over the next five years.	School Sites, staff, students	CFO, Director of Technology	Hardware, Budget, Curriculum
7/11	6/16	Interactive white boards and document cameras in 70% of classrooms.	School Sites, staff, students	CFO, Director of Technology	Hardware, Budget, Curriculum
7/11	6/16	Interactive Classroom Response Systems in 40% of classrooms	School Sites, staff, students	CFO, Director of Technology	Hardware, Budget, Curriculum
7/11	6/16	Assist with training in order to fully implement district identified software programs.	Administrators, Teachers, Students	Director of Technology, Coordinator of Special Projects	Curriculum Professional Development Infrastructure Budget
7/11	6/16	Evaluate and modify the district Acceptable Use Policy (AUP) as needed to ensure current issues are addressed in the policy.	Administrators, Teachers, Students	Director of Technology, technology committee	Support, Security
7/11	6/16	Provide help desk, technical support, curricular support and professional development for district agreed upon instructional software and hardware components.	All sites	Director of Technology, Software Tech.	Curriculum Professional Development Infrastructure Budget
7/11	6/16	Design and implement safe internet training (include threats, safeguards, and best practices).	Administrators, Teachers, Students, Technology Department	Director of Technology, Coordinator of Special Projects	Curriculum Professional Development Infrastructure Budget
7/11	6/16	Review staffing needs; propose changes to Superintendent	Technology Department, School sites	Assistant Superintendent of C & I, Assistant Superintendent of Human Services, Director of Technology	Curriculum Professional Development Infrastructure Budget
7/11	6/16	Distance Learning and fully integrated Online Classroom Delivery Mechanisms.	Administrators, Teachers, Students	Director of Technology, Coordinator of Special Projects, Principals	Curriculum Professional Development Infrastructure Budget
7/11	6/16	At the Elementary and Middle School levels, one multi-media computer available for every 4.5 students	School Sites, Students	CFO, Director of Technology	Hardware, Budget, Curriculum

Start Date	Projected Completion	Activity or Benchmark	Target Audience	Person Responsible	Component
7/11	6/16	Continue to provide e-mail accounts to students and look at ways to provide internet at student homes.	Students	Director of Technology	Curriculum Infrastructure Budget
7/11	6/16	Upgrade electrical capacity (needs assessment, identify funding, vendors and bids)	School sites, District Office	Director of Technology, Director M & O	Infrastructure Budget
7/11	6/16	Yearly update equipment and software inventories through LANDesk, and purchase needed licenses.	School sites	Director of Technology, Purchasing Dept.	Curriculum Infrastructure Budget
7/11	6/16	Assist sites with equipment purchases through group purchasing discounts.	School sites	Director of Technology, Purchasing Dept.	Curriculum Infrastructure Budget
7/11	6/16	Assess filtering/spam solution yearly in order to customize filtering to meet specific needs. Upgrade as needed.	Administrators, Teacher, Students	Director of Technology, Network Mgr.	Curriculum Security Budget

### **5d- Monitoring of Achievement of Benchmarks**

On a quarterly basis, the Assistant Superintendent of Curriculum and Instruction, along with the Director of Technology, Coordinator of Special Projects, and Technology Advisory Committee will be responsible for monitoring the progress of plan implementation against the goals, benchmarks and timelines.

- The inventory of technology resources will be the responsibility of the technology department. The initial capture of inventory assets will be accomplished through the district's purchasing/receiving system. Deletion and surplus information will be routed to the department through the business office. Sites will periodically review inventory records for accuracy and completeness. The LANDesk and Follett Asset Manager systems will allow the technology department to monitor all assets including software licensing.
- The status of the plan implementation will be reported to the Superintendent yearly, or as otherwise requested. The Superintendent will provide updates to the board via the Superintendent's report as deemed necessary. A formal annual status report of the implementation plan will be presented to the board by the Technology Department each June, or as requested.
- If plan implementation is not on target, the schedule will be evaluated and revised.

## **Section 6: Funding and Budget Component**

### **6a-List of Established and Potential Funding Sources**

Implementation of the technology plan is to be funded through a variety of funding sources including the unrestricted general fund, state and federal categorical funds, grants, and one time funding requests. The current technology budget (2010-2011) out of the unrestricted general fund is \$900,000 (\$500,000 salaries/ benefits and \$400,000 supplies, equipment and capital outlay) with additional funding for other projects, such as professional development from categorical and grant funding. The district applies for all available EETT Formula and Competitive grants. E-Rate funding is aggressively pursued to decrease district costs associated with wiring projects, hardware expenditures, telecommunications (phones) and Internet. The district supports various one time projects through a variety of funding resources (i.e. Inyo-Kern Financing Authority) whenever possible and has actively supported the technology plan

since its development in 2001. School sites use their unrestricted general fund and categorical funds to support technology goals. Grants will be actively pursued to offset costs of this plan. Funding is not guaranteed and is subject to district and state financial conditions.

The Technology Department is composed of 6 people: 2 computer repair technicians, 1 software support technician, 1 telecommunication specialist, 1 network service technician and a Director of Technology. The department is overseen by the Assistant Superintendent of Curriculum and Instruction and assistance is provided by the Coordinator of Special Projects. A budget has been established that supports the salaries and benefits of all technology staff, all one-time and recurring costs for district supplied applications and software licensing, LAN and WAN maintenance and upgrades, security (physical and electronic) and fire costs, supplies, and services.

**6b- Estimated Annual Implementation Costs for the Term of the Plan**

Over the last five years many significant infrastructure projects have been completed. With infrastructure in place, the primary on-going items to include in future budgets would be the costs for technology staff, department budget, training, replacement of obsolete equipment, and support costs/ licenses for software. As new adoptions are introduced into the curriculum, adjustments for software and hardware will need to be considered. For the most part, this will represent one-time purchases; however, there will be on-going support costs. The staffing ratios for technology support staff will be reviewed as the district increases in size and technological complexity.

Costs associated with implementing each component of this plan, including ongoing technical support and the obsolescence of equipment, are listed in the budget narrative below. This chart reflects a FIVE YEAR net timeline.

(C= Curriculum, PD = Professional Development, I= Infrastructure, hardware, technical support, and software, M= Monitoring/ Evaluation)

<b><u>ESTIMATED COST OF SSUSD TECHNOLOGY PLAN OVER A 5 YEAR PERIOD</u></b>		
<b><u>Includes General Fund, Categorical and Grant Funds</u></b>		
<b><u>2011-2016</u></b>		
<u>Line Item Category</u>	<u>Budget Narrative Description</u>	<u>5 Year Estimated Cost</u>
1000-1999 Certificated Personnel Salaries	<ul style="list-style-type: none"> <li>▶ Stipends/ substitute costs for staff participating in professional development in the following areas (C, PD, I)               <ul style="list-style-type: none"> <li>• District identified software programs</li> <li>• Integration of technology</li> <li>• Data analysis</li> <li>• Website development</li> <li>• Use of Internet and e-mail</li> <li>• Hardware use and management</li> <li>• Technology Proficiency Standards and Information Literacy Standards</li> <li>• Benchmark</li> <li>• Security training</li> </ul> </li> <li>▶ Benchmarking assessment development stipends (C)</li> </ul>	\$60,000
	Subtotal	\$5,000
		<b><u>\$65,000</u></b>

**ESTIMATED COST OF SSUSD TECHNOLOGY PLAN OVER A 5 YEAR PERIOD**

**Includes General Fund, Categorical and Grant Funds**

**2011-2016**

Line Item Category	Budget Narrative Description	5 Year Estimated Cost
2000-2999 Classified Personnel Salaries	<ul style="list-style-type: none"> <li>▶ Technology Support Staff- 6 FTEs including director (I)</li> <li>▶ Office manager meetings, professional development and conferences- AERIES (PD, I)</li> <li>▶ Provide in-service for instructional support staff, including library personnel, in use of district identified software and hardware, etc, (see list in certificated salaries) (C, PD, I)</li> </ul> <p align="right">Subtotal</p>	<p align="right">\$1,648,590</p> <p align="right">\$20,000</p> <p align="right">\$20,000</p> <p align="right"><u>\$1,688,590</u></p>
3000-3999 Employee Benefits	<ul style="list-style-type: none"> <li>▶ Benefits for 1000-2999 functions (C, PD, I, M)</li> </ul> <p align="right">Subtotal</p>	<p align="right">\$871,366</p> <p align="right"><u>\$871,366</u></p>
4000-4999 Books and Supplies	<ul style="list-style-type: none"> <li>▶ Maintain email accounts for employees (I)</li> <li>▶ Server CAL's, MS Office and O/S Licenses</li> <li>▶ Infrastructure maintenance and upgrades (I)</li> <li>▶ Basic supplies- ink, paper, low cost peripherals</li> <li>▶ Computer purchases to increase ratio of computers to students and replace old equipment over 5 year period (C, I)</li> <li>▶ Digital Projector purchases to meet eventual goal of 80% of classrooms over 5 year period (C, I)</li> <li>▶ Additional classroom response systems (C, I)</li> <li>▶ Equipment for Section 508 requirements (C, I)</li> </ul> <p align="right">Subtotal</p>	<p align="right">\$12,500</p> <p align="right">\$45,000</p> <p align="right">\$250,000</p> <p align="right">\$50,000</p> <p align="right">\$600,000</p> <p align="right">\$100,000</p> <p align="right">\$120,000</p> <p align="right">\$10,000</p> <p align="right"><u>\$1,187,500</u></p>
5000-5999 Services and Other Operating Expenditures	<ul style="list-style-type: none"> <li>▶ Annual Software Contracts- 5 year costs <ul style="list-style-type: none"> <li>Sophos Antivirus</li> <li>Renaissance Place</li> <li>Edusoft</li> <li>Follett</li> <li>AERIES (C, I)</li> <li>SchoolDude</li> <li>School Messenger</li> <li>Traffic Control</li> <li>Edline</li> <li>netTrekker</li> <li>LANDesk</li> <li>I-SAFE curriculum</li> </ul> </li> <li>▶ Internet (E-Rate 71%- 30%), phones, radio maintenance/repair/upgrades (I)</li> </ul> <p align="right">Subtotal</p>	<p align="right">\$5,500</p> <p align="right">\$175,000</p> <p align="right">\$200,000</p> <p align="right">\$70,000</p> <p align="right">\$90,000</p> <p align="right">\$20,000</p> <p align="right">\$85,000</p> <p align="right">\$60,000</p> <p align="right">\$60,000</p> <p align="right">\$60,000</p> <p align="right">\$135,000</p> <p align="right"><u>\$10,000</u></p> <p align="right">\$200,000</p> <p align="right"><u>\$1,170,500</u></p>
6000-6999 Capital Outlay	<ul style="list-style-type: none"> <li>▶ Hardware to support, expand and enhance District DataCenter (I)</li> </ul>	<p align="right">\$80,000</p>

<b><u>ESTIMATED COST OF SSUSD TECHNOLOGY PLAN OVER A 5 YEAR PERIOD</u></b>		
<b><u>Includes General Fund, Categorical and Grant Funds</u></b>		
<b><u>2011-2016</u></b>		
<u>Line Item Category</u>	<u>Budget Narrative Description</u>	<u>5 Year Estimated Cost</u>
	▶ District-Wide VoIP conversion	\$50,000
	▶ Finish Video Surveillance projects at remaining school sites (I)	\$250,000
	▶ Automate warehouse facility (C, I)	\$50,000
	Subtotal	<u>\$430,000</u>
	TOTAL over 5 years	\$5,412,956
	Average Yearly Cost	\$1,082,591

Sierra Sands Unified School District will make every effort to accomplish the goals set forth in this plan, subject to the District's annual budget and determinations made by the School Board and Superintendent on appropriate and available funding. Staff will review progress and make adjustments accordingly based on budgetary restrictions, policy decisions, and any other unforeseen factors on at least an annual basis. Should these budgeting forecasts change at any time because of budget restrictions, revised policy, changes in the Board's or the Superintendent's priorities, changed circumstances, or other similar factors, the goals identified in this plan and/or their implementation may be reviewed, modified, deleted and/or supplemented, as appropriate.

**6c- Description of the District's Replacement Policy for Obsolete Equipment**

Sierra Sands USD currently utilizes cost reducing measures such as CMAS and WSCA, negotiates contracts, and obtains competitive bids to further reduce costs. Inventory control allows us to identify underutilized technology and group purchasing power has been utilized over the last three years to obtain lower prices. Obsolete equipment is defined as technology which is no longer operational and which cannot be repaired economically, or which can no longer sustain useful software. Obsolete equipment is disposed of according to Board policy. SSUSD uses the Useful Life Table from the *GASB Statement 34 Implementation Recommendations for School Districts*, as published by the Association of School Business Officials International.

FAX, duplicating and Printing equipment	10 years
Computer Hardware	5 years
Computer Software	10 years
Audiovisual equipment	10 years

The District complies with all E-Waste disposal regulations. Obsolete technology is disposed of through auctions. E-Rate funding is applied for each year, and the technology staff continues to monitor and pursue other available means of reducing costs. Funds, primarily provided by categorical site funds including grants and supplemental funding, are used to update and replace equipment. Ongoing district upgrades are budgeted for from the unrestricted general fund, E-Rate, and the Inyo- Kern Schools Financing Authority as appropriate. Old equipment can be recycled, used in family lending programs, or sold at auction.

## **6d- Description of Process to Monitor Funding, Costs, and New Funding Opportunities**

The Director of Technology works closely with the Chief Financial Officer and the business department to develop a realistic, working general fund budget on a yearly basis. Categorical funding input is provided by the Coordinator of Special Projects.

In order to support expansion of technology, the District encourages sites to direct money, based on School Site Council recommendations and Single Plans for Student Achievement, from funding sources such as SLIBG, Title I, EIA. Potential funding, under certain restrictions, is also available through EIA- LEP, Title III, Adult School, ROP and Career Technical Education sources. Applications for EETT Competitive Grants will be submitted annually. It is anticipated that there may be one more disbursement of K-12 Voucher Funds from the Microsoft settlement. Professional development costs are assisted by Region 8 CTAP, Title 1, Title IIA and Title IID as appropriate.

To make certain that the district has budgeted and expended funds according to this technology plan, financial reviews should be conducted twice a year. The first review should be performed prior to the completion of each year's budget. The business services department and the Technology Department must review the "Budget Narrative" and the "Budget," as presented in this report, for the appropriate budget year. The purpose of the review is to ensure that all elements of the plan have been considered when preparing that year's budget. In the event that an element of the technology plan is removed during the budget development process, the technology department will be notified. If necessary, the Technology Advisory Committee will be convened to determine if/how the element(s) will be reintroduced to the plan and to that year's budget and future budget(s).

The second review should occur once a fiscal year has been closed. The business services department will work with the Technology Department to report out on progress and expenditures made during the preceding year. Any revisions that may need to be made to this report, in order to keep the technology plan progressing properly, will be discussed and necessary appropriate action taken by the Technology Advisory Committee.

## **Section 7: Monitoring and Evaluation**

### **7a. Process for evaluating plan's overall progress and impact on teaching and learning**

Monitoring of strategies outlined in this plan will be the coordinated responsibility of the Assistant Superintendent of Curriculum and Instruction, along with the Coordinator of Special Projects and Director of Technology, in shared decision-making with the Asst. Superintendent of Business Services and other cabinet positions. They will be assisted in monitoring by the Technology Advisory Committee. Data collected will include, but is not limited to student achievement data (STAR CST, CAPA, CMA; CAHSEE and graduation rates), technology related data (EdTechProfile, Student technology survey), inventory monitoring (fixed asset), fiscal records (expenditure reports, audits, purchasing procedures) and participation data (professional development).

The impact of technology on student learning includes two components: 1. technology used to enhance the curriculum by teaching staff and 2. student acquisition of skills to use technology for learning.

The annual reviews will collect and report information regarding the use of technology to enhance the curriculum and student learning. After the development of grade/content-specific technology standards and information literacy skills, staff will be able to evaluate what students know and are able to do relative to these standards.

- Performance indicator criteria will include examples of student-generated work, attendance & attitude surveys, and assessment of what students know and can do relative to technology use standards.
- The evaluation instruments will include information regarding appropriate demographic information to determine the effect of technology on these special populations.
- The evaluation will include monitoring technology access (specific to site and grade levels) at both school and home.
- The EdTechProfile Student Survey will be utilized as one measurement of student technology proficiency.

The second component is the ability of the students to use technology for learning. Staff will be able to evaluate what students know and are able to do relative to technology by measuring student performance through:

- Appropriate use of the Internet for research projects
- Student portfolios/projects demonstrating technology skills
- Percentage of students attaining “proficient or above” as measured by the California Standards Tests and other measures identified in the Curriculum Component

In monitoring the **curriculum component**:

- Reports will be generated as appropriate for identified audiences such as the School Board, Superintendent, management team, and school staffs. Reports will include progress on the curriculum goals. Successful implementation of this component will be measured using the specific outputs and outcomes defined in the Monitoring and Evaluation portion of the curriculum component.
- An information mechanism will be developed for e-mail communication with teachers and other staff. Information shared will include updates on the progress of technology projects, available professional development, practical tips, and sample lessons designed around the California Standards. Staff will be encouraged to electronically share information on effective lesson design and other strategies via e-mail and Edline.
- Student progress will be monitored on state assessments and district assessments by each administrator.

Monitoring the progress of the **professional development** plan implementation is scheduled on a quarterly basis. Status of plan implementation will be reported to the district Superintendent and the school board on an annual basis, or as requested. Monitoring and evaluation will focus on the following components:

- EdTechProfile assessments will be updated and reviewed on an annual basis to monitor progress and set baselines for new staff.
- Staff accomplishment of CTAP level proficiencies (or other technology certification) over time will be monitored.
- Use of computer labs and technology equipment will be monitored and evaluated.

- Staff surveys will be utilized to provide feedback on needs and successes of the program. Surveys may be used to qualitatively evaluate effectiveness of professional development training.
- Staff and technology leaders will work with the site administrator to further monitor specific professional development needs and outcomes at the site level.

Our ultimate goal is to increase student performance through improved instructional practice and effective technology integration practices. In order to determine the impact of the professional development program in this area, the Technology Advisory Committee will review the results of monitoring and evaluation for the curriculum component of this plan. In order for the Professional Development component to be considered completely successful, positive outcomes must result for curriculum as well.

The monitoring of the **infrastructure, hardware, software support and security** components shall include the following:

- The inventory of technology resources will be the responsibility of the technology department. The initial capture of inventory assets will be accomplished through the district's purchasing/receiving system. Deletion and surplus information will be routed to the department through the business office. Sites will periodically review inventory records for accuracy and completeness. The LANDesk system will allow the technology department to monitor all assets including software licensing. Follett Asset Manager will be utilized to track all assets.
- The Technology Department will annually review district hardware and software standards and revise as necessary.
- The status of the plan implementation of will be reported to the Superintendent at least yearly, or as otherwise requested. The Superintendent will provide updates to the board via the Superintendent's report as deemed necessary. A formal annual status report of the implementation plan will be presented to the board by the technology department each June, or as requested.
- If plan implementation is not on target, the schedule will be evaluated and revised as appropriate.
- Technology resources will be reviewed to confirm that special needs population has equal access.

In order to monitor the **funding and budget**, the Director of Technology and the Assistant Superintendent of Curriculum and Instruction along with the Chief Financial Officer will be responsible for monitoring the progress of plan implementation against the goals, benchmarks, and timelines.

To make certain that the district has budgeted and expended funds according to this technology plan, financial reviews should be conducted two times per year.

- The first review should be performed prior to the completion of each year's budget. The business services department and the technology department must review the "Budget Narrative" and the "Budget," as presented in this report, for the appropriate budget year. The purpose of the review is to ensure that all elements of the plan have been considered when preparing that year's budget. In the event that an element of the technology plan is removed during the budget development process, the technology department is notified. If necessary the Technology Advisory Committee will be convened to determine if/how the element(s) will be reintroduced to the plan and to that year's budget and future budget(s).

- The second review should occur once a fiscal year has been closed. The business services department will work with the Technology Department to report out on progress and expenditures made during the preceding year. Any revisions that may need to be made to this report, in order to keep the technology plan progressing properly, will be discussed and appropriate action taken by the Technology Committee and its sub-groups, if necessary.

**7b- Schedule for Evaluating the Effect of Plan Implementation:**

Student achievement data	STAR CST, CAPA, CMA	Yearly in August-Sept
	CAHSEE- Dataquest	After 10 <sup>th</sup> grade census administration
	Graduation rates- Dataquest	October
	Benchmark Assessments	Elem- Nov, March, May Secondary- October, January, March, May
Technology related data	EdTechProfile	Dec- March
	Student technology survey	March- May
Fixed Asset	Inventory records (LANDesk)	Quarterly
	District asset information	Minimum- Every 2 yrs
	State Technology Survey	Feb-March
Fiscal records	Expenditure reports	Quarterly
	Audits	July-October yearly
Participation Records	Sign in sheets	After each training
	Evaluation records	After each training
Technology Advisory Committee		Sept, Nov, Jan. and April

By using surveys of both staff and students at select grade/content areas, the process of monitoring should be cost effective. After the development of standards, evaluation tools will be designed for the purpose of collecting the appropriate information.

- The CTAP Region 8 representatives are being utilized for guidance. The C3 evaluation tool will be piloted in 2010-211
- SSUSD currently uses AERIES for managing student data and can monitor student success, i.e. attendance and grades, with the system.
- SSUSD currently uses Edusoft and can analyze student academic performance easily, including longitudinal studies.
- Data received regarding STAR and other low- or no-cost measurement instruments identified in the Curriculum Component will also be used to monitor students' attainment of proficiency levels in meeting standards as outlined by the state.
- SSUSD is collaborating with staff at Cerro Coso Community College for assistance with monitoring and evaluation of technology and the impact on students transitioning from the high school to higher education.
- SSUSD utilizes employees from the NAWCWD China Lake to provide input regarding technology trends and industry specifications. The base is helpful in providing this information.

- SSUSD participates in Curriculum and Categorical Advisory Committees and collaboratives at the county office. Other participants in these forums are willing to share evaluation instruments and successes.

The effectiveness of plan implementation will be reviewed quarterly and reported out annually, or as requested. Members of the Technology Advisory Committee, representing teachers, administrators, school staff, students, parents, and community members, have agreed to the methods and schedule for data collection outlined throughout the plan. Each component identifies the data needed and persons responsible for its collection. Each site has access to a Technology Advisory Committee representative, and all stakeholders have opportunities to offer input through discussion, email, and surveys.

### **7c- Process and frequency of communicating evaluation results**

The information from the process of monitoring and evaluation of the technology plan, as well as other plans in the district, is generally reported to the board annually. Prior to reporting to the board, the Technology Advisory Committee will convene to review data and adjust the plan accordingly.

- The status of the implementation of the technology plan will be reported to the Superintendent following meetings of the committee. A report on the status of the technology plan will be made annually to the board and is available to other stakeholders upon request.
- Data will be considered when conducting reviews of the plan and every attempt will be made to reach consensus of the advisory group.
- Strategies with a positive effect on teaching and learning will be reported to the board. Ineffective strategies will be eliminated from the district plan.
- CTAP Level III Mentors and Technology Leaders will model successful strategies at sites to help staff implement appropriate strategies that have a positive effect on teaching and learning.
- Success stories will be documented in the process of the committee meetings and in gathering data from surveys and staff. The local newspapers are very helpful and anxious to be supportive of the schools in the community and are very willing to publicize positive programs.

## **Section 8: Collaboration with Adult Literacy Providers**

Due to the small size of our community, coordination of services is needed in order to reduce competition for the same students and develop successful programs. For the last 5+ years, a literacy program for English language learner adults has been conducted through the SSUSD Adult School Program. This program is offered 2-3 times per week and serves between 60 and 90 adults each semester. Homework assistance and childcare for children of participants is offered through district categorical funding. Computer labs have been utilized for adult instruction. In addition, computer access classes have been offered, by request, to ELL parents. SSUSD works with Cerro Coso Community College and community literacy agencies, such as Altrusa, to advertise their programs and promote overall adult literacy in our community.

## Section 9: Research

### 9a- Summary of Relevant Research and How it Support Curriculum and Professional Development Plans

Sierra Sands Unified uses as much research as possible when making thoughtful decisions concerning all aspects of its programs. The development of our Technology plan and related goals is no exception. Listed below is some of the pertinent technology research that was used to form the basis of this plan. In addition, other research may be found embedded in this document (in italics on pages 8, 30 and 32).

The Williams, Kirst, Haertel et.al. study examined 257 California elementary schools with similar student populations (high percentages of low income students and English Learners) to determine which educational practices are most strongly associated with higher levels of student achievement (using 2005 API results). The four practices most highly correlated with higher API scores were: implementing a coherent, standards-based instructional program (including use of pacing schedules); ensuring availability of instructional resources (up-to-date materials and supplementary instruction for struggling students); using assessment data to improve student achievement and instruction; and prioritizing student achievement. SSUSD is focused on these practices in its day to day operation and long term planning.

Honey (1999) found that technology improves student performance when teachers, the school community, and school and district administrators support the use of technology. Student performance on standardized tests in the areas of writing and mathematics will increase if there is “(a) integration of technology with instruction, (b) extensive professional development for teachers, and (c) computer use at home and school” combined with “school site leadership; effective school improvement plans; a strong emphasis on student creativity and expression of ideas; and an emphasis on different points of entry into a task for students working at different ability levels.” In addition, Technology can improve student motivation, attitude, and interest in learning. Coley, Cradler, and Engel (1997) found that “computer-based instruction can individualize instruction and give instant feedback to students” thereby increasing student motivation to learn. In addition, “student attitude toward learning and self concept were both found to be consistently increased in a technology rich environment.” (Sivin-Kachala & Bialo, 1994) These principles are employed in our emphasis on integration of technology to improve instruction in the Curriculum and Professional Development components.

*The Apple Classrooms of Tomorrow (ACOT) project made conclusions about professional development in technology that are relevant to any professional development model that is being developed.* Some of the findings include:

- Teachers tend to go through five stages as they integrate the computer into their teaching: entry, adoption, adaptation, appropriation and invention.
- Engaging teachers in ongoing conversations and reflection are critical elements for creating change (constructivist learning).
- Collaborative learning helps eliminate ‘isolation.’
- Encouraging mentoring and taking on leadership roles ultimately affects a school’s climate and mission in a positive manner.
- Teachers who have access to appropriate hardware and software are more likely to integrate technology into their practice than those who do not have access.

- Teachers who are provided with time for exploration, learning new skills, and planning are more likely to change than those who are not.
- Teachers who have someone to turn to when technology does not work are more likely to risk new approaches than those who do not have technical and mentor support.

The Federal No Child Left Behind (NCLB) Title II, Part D goals require “assisting fourth through eighth grade students with crossing the digital divide with the integration of grade level appropriate technology proficiencies that ensure all students are technologically literate by the time they finish the eighth grade, regardless of the student’s race, ethnicity, gender, family income, geographic location, or disability.” SSUSD understands and strives for equitable access to technology for all students and ensuring that our teachers and students are literate as defined by new and emerging technologies. “Today, our students typically begin their information experiences in front of a global electronic library of billions of pages of information (the Internet), where material can be published by just about anyone, on just about anything, and for just about any reason. If our students have been taught only to read and understand information, they could be in serious trouble, possibly even in danger. Accessing information in an increasingly digital and networked world requires a range of skills of which decoding text is only a small part.” (Warlick, Armstrong 2004)

“Workforce skills are mastered with technology use. When content and strategies meet accepted education standards, research shows that technology increases mastery of vocational and work force skills and helps students prepare for work when emphasized as a problem-solving tool. Integration of technology with thematic and interdisciplinary projects enhances learning. Programs such as Tech Prep help students learn how to conduct themselves in actual work environments.” (CARET, 2002) SSUSD has always actively supported career readiness for our students and provides up to date industry specific equipment and technology within the parameters of the budget.

**9b Plans to use Technology to Extend or Supplement the District’s Curriculum with Rigorous Academic Courses and Curricula, including Distance-Learning Technologies**

SSUSD offers a wide range of diverse and rigorous courses despite its remoteness from larger urban areas. A wide range of advanced placement, foreign language, extensive Career Technical Education and STEM courses, and fine and performing arts are offered in addition to the core English, math, social studies, and science coursework. Many of our students have opportunities to take community college courses while still in high school. Our local college is a leader in on-line instruction due to its extensive service area (18,000 square miles).

At this time some SSUSD teachers are using on-line support and instruction with some of their classes but this is still very limited. During the implementation of this technology plan, the district will be researching ways to offer coursework utilizing technology. This effort will look at many models ranging from selected instruction or assistance delivered through on-line methods to supplement traditional “in the seat” classes, one or two courses offered for credit recovery or acceleration, and ultimately the possibility of offering a complete range of courses to create a “virtual school” as an alternative model. The infrastructure presented in this plan is robust enough to support online coursework.

## Appendices

Appendix A	Education Technology Plan 2006-2011 Benchmark Review
Appendix B	EETT Plan Requirement (CDE)
Appendix C	Criteria for EETT-Funded Technology Plans- Requirements/Matrix
Appendix D	SSUSD EdTechProfile Data (10/10)
Appendix E	Sierra Sands Unified School District Acceptable Use Policy
Appendix F	CTAP Proficiencies Checklists
Appendix G	Research Bibliography
Appendix H	Certification Regarding Lobbying, Debarment, Suspension and Other Responsibility Matters, and Drug-Free Workplace Requirements

**APPENDIX A**  
Education Technology Plan Benchmark Review  
2006-2011

# Appendix A – Education Technology Plan Benchmark Review

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

For the grant period ending June 30, 2011

IDENTIFYING INFORMATION:
CDS # <u>15-73742</u>
<b>Applicant Name: SIERRA SANDS UNIFIED SCHOOL DISTRICT</b>
<p>The <i>No Child Left Behind Act</i> 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 to better 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.</p>

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

The Curriculum section of the 2006-2011 technology plan addressed components including the use of software in teaching and management, the implementation of district plans, and meeting accountability targets. Teachers are becoming more proficient in using technology and have increased their personal use of technology in classroom applications involving processes such as word processing, research, analyzing data, and graphically presenting information in greater numbers compared to 2006 data. (Appendix D- EdTechProfile data) The percent of teachers who have students using educational technology components within the classroom, as measured by EdTechProfile, doubled between 2004 and 2006 and then stabilized. However, the percentage of teachers who never have students use specific technologies has decreased 10% or more for almost all categories. Student work and projects demonstrate the use of technology from PowerPoint presentations to video productions to computer aided design. School libraries and media centers are used to access technology resources K-12. At an elementary school you might find a kindergarten or first grade student and parent accessing Accelerated Reader before school. A fifth grade student spends his recess taking an AR test and checks out yet another book to read and obtains personalized math worksheets from Accelerated Math during class. Students come to the interactive white board in their classroom and work on a team project. At the middle schools, students use the computers to complete a research project and in Gateway to Technology classes use Inventor to translate their design ideas into a prototype design. At Burroughs HS, students have access to computers in the library/media center and labs as well as the classrooms. Outstanding student projects are completed at a high level of proficiency and professional quality. ROP and Career Technical Education courses offer state of the art technology such as Computer Alignment Machines and CNC Lathes and Mills. Mesquite H.S. students can access technology in their classroom and in the computer lab and receive personalized math instruction using ALEKS. Students have access to Cerro Coso Community College classes on their campus through Virtual Class. All SSUSD staff members now have

access to e-mail and are using technology to maintain on-line records and increase accessibility for parents.

The 2006-2011 technology plan called for the institution or implementation of many projects. During the course of the Technology Plan, leadership committees were established and guided the district in its curricular efforts. The Local Education Agency Plan and Single Plans for Student Achievement were created and revised yearly. The district utilized Edusoft “State Analysis,” “Benchmark,” and “Teacher Tools”, finalized benchmarks K-5 and began the secondary benchmarking process. We offer extensive intervention programs K-12 including CAHSEE support. ESL Adult Literacy classes have been established and enroll 60+ students each semester. Classes have increased access to technology, as do parent through computer classes and parent portals. Establishment of district technology standards for students continues to be a goal.

Despite ever increasing performance targets, SSUSD continues to perform well in federal and state accountability systems. District growth API has increased from 754 in 2006 to 788 in 2010. As of Fall 2010 neither the district nor its Title 1 schools are in Program Improvement. In English/language arts, 54.5% of our students are proficient or above, and 57.9% are proficient or above in math. Over 80% of our 10<sup>th</sup> grade students pass the CAHSEE exam during initial administration. At this time, the district is implementing a Year 3 improvement plan due to difficulty in meeting all three English Language Learner federal AMAOs each year.

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

In order for staff members to use available technology, professional development must be available to meet identified needs. According to the annual EdTechProfile survey, completed by 77% of our teachers in 2009-2010, our teachers have grown tremendously in their personal technology proficiency (see Appendix D of the 2011-2016 plan). General computer knowledge, word processing, Internet, e-mail, and records management skills are areas where teachers feel most confident. Use of electronic research tools, managing and aligning technology resources with lesson content, and assessing student proficiency are topics for future professional development. Professional development has occurred for administrative, certificated and classified staff members.

- Several staff members have taken courses or completed master's degrees in Educational Technology. Many of our new teachers have completed technology training through their pre-service college coursework.
- Eleven-week CTAP Level 1 and 2 classes have been offered yearly until state budget concerns affected funds in 2009-2010. Tech 5 courses for new teachers are offered locally through KCSOS.
- Workshops on a variety of topics, such as Renaissance Place, Aeries, and ABI gradebook, have been offered at full day professional development days and in two- to four-hour :Monday Tech Training” workshops. Workshops and conferences continue to be attended on a variety of technology topics including MS Office, digital photography, as well as district adopted programs.

- On-line training, videoconferencing, and webinars are increasingly used by administration and teaching staff to reduce the need for expensive travel to meetings and provide access to certification programs (i.e. EL certification).
- Edline is used to provide instant access to a variety of teaching resources (i.e. EL resources and teaching strategies).
- One-on-one coaching has been used for a variety of trainings, including Edusoft implementation, Eagle training, and ABI grade book.

There was some reduction in technology professional development after 2007-2008 due to funding concerns (state budget and reduced EETT funds) but the district continues to actively seek out opportunities and funding for technology-based training.

### INFRASTRUCTURE ACCOMPLISHMENTS

The Technology Dept. is an established department composed of six people; two computer repair technicians, one software support technician, one telecommunication specialist, one network service technician and a Director of Technology. In addition, the Coordinator of Special Projects assists with educational technology implementation and professional development. Since inception of the plan, we have developed and expanded a web based service request system, a tech alert system, a district intranet, a district website, a district datacenter, several district applications, consolidated servers and began virtualizing many district servers, applications and workstations. Site web pages are now hosted on the Edline application suite which allows all sites and individual teachers/staff members to maintain their own web pages and update content. Edline also allows for “permissions-based” access for students and parents. This access allows both students and parents to login to a secure section of the school’s Edline site in order to see private reports on progress and attendance as well as keep track of assignments and test dates. Increased communication between school and home is the goal of this system. All staff members have access to e-mail through either the network or web based exchange server. All students have access to email as well using the Gaggle.net “student-safe” email system. The SSUSD’s Eagle database (Aeries) is fully instituted and data input is standardized across all sites. All teachers now use the ABI (Aeries Browser Interface) system. The ABI system is part of the Aeries database system and is a web based application that all teachers can use to update attendance and grades. Currently, all secondary schools also have implemented the Parent Account Management System (PAMS) that allows students and parents to securely access a portion of the ABI system in order to see grades and attendance in real time. Increased communication between school and home is the goal of this system as well. The Tech Department continues to use a number of tools such as LANDesk in order to streamline service responses and increase help desk capabilities. LANDesk has the ability to remotely manage and troubleshoot all district connected computers. LANDesk also provides the ability to accurately maintain software inventories and track licensing compliance. The district Wide Area Network (WAN) received a major upgrade in the spring of 2006. All sites were upgraded to a point-to-point licensed wireless radio system. This increased uptime and solidified our district wide network by establishing a reliable and robust network to all sites. Traffic across the network has been solid ever since and has allowed the district to move forward with a number of technologies that rely on solid network connections to operate. In Spring of 2009, a district-wide wireless infrastructure was implemented. This wireless infrastructure effectively established a wireless “umbrella” at all school sites and provides tremendous potential for growth and future technologies. The system is currently utilized by teachers and administrators for various purposes, but will serve a larger role in the future as we look at implementing our “one to one” initiative, as well as other future technologies. All Wired

and Wireless access is filtered and meets or exceeds all CIPA regulations. Firewalls and other security procedures have been put into place.

Through the Modernization efforts, four sites have been converted to a Voice over IP (VoIP) telephone system. The remaining sites continue to run on the legacy analog phone system. All sites, regardless of system, have phones and communication in every room, including classrooms. The completion of the VoIP system district wide is high priority as it will save the district a considerable amount of money each year. In addition, a school messenger system has been implemented in order to communicate regular messages such as attendance, or special events to parents, as well as emergency notifications. Security systems such as Video Surveillance and Intrusion Alarm system have been installed. Necessary classroom equipment such as computers, printers, digital projectors, and interactive whiteboards have been obtained by group purchases and CMAS contracts through site, district, and categorical funding as appropriate. Modernization efforts have also helped to obtain and install various technological components such as whiteboards, smart classrooms, and projectors.

**APPENDIX B**  
**EETT Plan Requirements (CDE)**

## APPENDIX B- EETT Plan Requirements (CDE)

California Department of Education (<http://www.cde.ca.gov/ls/et/ft/eettfortechplans.asp>)  
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### ***EETT: Technology Plan Requirements***

The specific technology plan content requirements for formula and competitive grant applications for Title II, Part D in No Child Left Behind (Sec. 2414) shall include each of the following:

- (1) A description of how the applicant will use Federal funds under this subpart to improve the student academic achievement, including technology literacy, of all students attending schools served by the local educational agency and to improve the capacity of all teachers teaching in schools served by the local educational agency to integrate technology effectively into curricula and instruction.
- (2) A description of the applicant's specific goals for using advanced technology to improve student academic achievement aligned with challenging State academic content and student academic achievement standards.
- (3) A description of the steps the applicant will take to ensure that all students and teachers in schools served by the local educational agency involved have increased access to educational technology, including how the agency would use funds under this subpart (such as combining the funds with funds from other sources), to help ensure that—
  1. students in high-poverty and high-needs schools, or schools identified under section 1116, have access to technology; and
  2. teachers are prepared to integrate technology effectively into curricula and instruction.
- (4) A description of how the applicant will—
  - (A) identify and promote curricula and teaching strategies that integrate technology effectively into curricula and instruction, based on a review of relevant research, leading to improvements in student academic achievement, as measured by challenging State academic content and student academic achievement standards; and
  - (B) provide ongoing, sustained professional development for teachers, principals, administrators, and school library media personnel serving the local educational agency, to further the effective use of technology in the classroom or library media center, including, if applicable, a list of the entities that will be partners with the local educational agency involved in providing the ongoing, sustained professional development.
- (5) A description of the type and costs of technologies to be acquired under this subpart, including services, software, and digital curricula, and including specific provisions for interoperability among components of such technologies.
- (6) A description of how the applicant will coordinate activities carried out with funds

provided under this subpart with technology-related activities carried out with funds available from other Federal, State, and local sources.

(7) A description of how the applicant will integrate technology (including software and other electronically delivered learning materials) into curricula and instruction, and a timeline for such integration.

(8) A description of how the applicant will encourage the development and utilization of innovative strategies for the delivery of specialized or rigorous academic courses and curricula through the use of technology, including distance learning technologies, particularly for those areas that would not otherwise have access to such courses and curricula due to geographical isolation or insufficient resources.

(9) A description of how the applicant will ensure the effective use of technology to promote parental involvement and increase communication with parents, including a description of how parents will be informed of the technology being applied in their child's education so that the parents are able to reinforce at home the instruction their child receives at school.

(10) A description of how programs will be developed, where applicable, in collaboration with adult literacy service providers, to maximize the use of technology.

(11) A description of the process and accountability measures that the applicant will use to evaluate the extent to which activities funded under this subpart are effective in integrating technology into curricula and instruction, increasing the ability of teachers to teach, and enabling students to meet challenging State academic content and student academic achievement standards.

(12) A description of the supporting resources (such as services, software, other electronically delivered learning materials, and print resources) that will be acquired to ensure successful and effective uses of technology.

**APPENDIX C**  
**EETT Plan Requirements/Matrix**  
**Location of Plan Elements (by page number)**

## Appendix C – Criteria for EETT Funded Technology Plans

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

1. PLAN DURATION CRITERION	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
	5	The technology plan describes the districts use of education technology for the next three to five years. (For new plan, description of technology plan development in the first year is acceptable). Specific start and end dates are recorded (7/1/xx to 6/30/xx).	The plan is less than three years or more than five years in length.  Plan duration is 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
	5	The planning team consisted of representatives who will implement the plan. If a variety of stakeholders did not assist with the development of the plan, a description of why they were not involved is included.	Little evidence is included that shows that the district actively sought participation from a variety of stakeholders.
3. CURRICULUM COMPONENT CRITERIA Corresponding EETT Requirement(s): 1, 2, 3, 8, 10, and 12 (Appendix D).	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
<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>	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.

<p><b>c. Summary of the district’s curricular goals that are supported by this tech plan.</b></p>	<p><b>10</b></p>	<p>The plan summarizes the district’s curricular goals that are supported by the plan and referenced in district document(s).</p>	<p>The plan does not summarize district curricular goals.</p>
<p><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></p>	<p><b>10</b></p>	<p>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.</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>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></p>	<p><b>14</b></p>	<p>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.</p>	<p>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.</p>
<p><b>f. List of goals and an implementation plan that describe how the district will address the appropriate and ethical use of information technology in the classroom so that students can distinguish lawful from unlawful uses of copyrighted works, including the following topics: the concept and purpose of both copyright and fair use; distinguishing lawful from unlawful downloading and</b></p>	<p><b>20</b></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>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)</p>			
<p><b>g. List of goals and an implementation plan that describe how the district will address Internet safety, including how to protect online privacy and avoid online predators. (AB 307, optional in 2007-08 tech plan, required in all tech plans 2008-09 and after)</b></p>	<p><b>21</b></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><b>h. Description of or goals about the district policy or practices that ensure equitable technology access for all students.</b></p>	<p><b>23</b></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>
<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>24</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</b></p>	<p><b>24</b></p>	<p>The plan delineates clear goal(s), measurable objective(s), annual benchmarks, and an</p>	<p>The plan suggests how technology will be used, but is not specific enough to know what</p>

<p><b>implementation plan to use technology to improve two-way communication between home and school.</b></p>		<p>implementation plan for using technology to improve two-way communication between home and school.</p>	<p>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>26</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>
<p><b>4. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 5 and 12 (Appendix D).</p>	<p><b>Page in District Plan</b></p>	<p><b>Example of Adequately Addressed</b></p>	<p><b>Example of Not Adequately Addressed</b></p>
<p><b>a. Summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development.</b></p>	<p><b>27</b></p>	<p>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.</p>	<p>Description of current level of staff expertise is too general or relates only to a limited segment of the district's teachers and administrators in the focus areas or does not relate to the focus areas, i.e., only the fourth grade teachers when grades four to eight are the focus grade levels.</p>
<p><b>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</b></p>	<p><b>30</b></p>	<p>The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing teachers and administrators with sustained, ongoing professional development necessary to reach the Curriculum Component objectives (sections 3d through 3j) of the plan.</p>	<p>The plan speaks only generally of professional development and is not specific enough to ensure that teachers and administrators will have the necessary training to implement the Curriculum Component.</p>

objectives (Sections 3d through 3j) of the plan.			
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.	31	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.
<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. Describe the existing hardware, Internet access, electronic learning resources, and technical support already in the district that will be used to support the Curriculum and Professional Development Components (Sections 3 & 4) of the plan.	32	The plan clearly summarizes the existing technology hardware, electronic learning resources, networking and telecommunication infrastructure, and technical support to support the implementation of the Curriculum and Professional Development Components.	The inventory of equipment is so general that it is difficult to determine what must be acquired to implement the Curriculum and Professional Development Components. The summary of current technical support is missing or lacks sufficient detail.
b. Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed by the district's teachers,	34	The plan provides a clear summary and list of the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support the district will need to support the implementation of the district's Curriculum and Professional	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

<b>students, and administrators to support the activities in the Curriculum and Professional Development Components of the plan.</b>		Development Components.	Components and the listed equipment. Future technical support needs have not been addressed or do not relate to the needs of the Curriculum and Professional Development Components.
<b>c. List of clear annual benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components as identified in Section 5b.</b>	<b>37</b>	The annual benchmarks and timeline are specific and realistic. Teachers and administrators implementing the plan can easily discern what needs to be acquired or repurposed, by whom, and when.	The annual benchmarks and timeline are either absent or so vague that it would be difficult to determine what needs to be acquired or repurposed, by whom, and when.
<b>d. Describe the process that will be used to monitor Section 5b &amp; the annual benchmarks and timeline of activities including roles and responsibilities.</b>	<b>39</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.
<b>6. 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>	<b>39</b>	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>	<b>40</b>	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</b>	<b>42</b>	Plan recognizes that	Replacement policy is

<b>district's replacement policy for obsolete equipment.</b>		equipment will need to be replaced and outlines a realistic replacement plan that will support the Curriculum and Professional Development Components.	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>	<b>43</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.
<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>	<b>43</b>	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>	<b>43</b>	Evaluation timeline is specific and realistic.	The evaluation timeline is not included or indicates an expectation of unrealistic results that does not support the continued implementation of the plan.
<b>c. Describe the process and frequency of communicating evaluation results to tech plan stakeholders.</b>	<b>46</b>	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.
<b>8. EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS TO MAXIMIZE THE USE OF TECHNOLOGY</b>	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>

<p><b>CRITERION</b> Corresponding EETT Requirement(s): 11 (Appendix D).</p>			
<p><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></p>	<p>47</p>	<p>The plan explains how the program will be developed in collaboration with adult literacy providers. Planning included or will include consideration of collaborative strategies and other funding resources to maximize the use of technology. If no adult literacy providers are indicated, the plan describes the process used to identify adult literacy providers or potential future outreach efforts.</p>	<p>There is no evidence that the plan has been, or will be developed in collaboration with adult literacy service providers, to maximize the use of technology.</p>
<p><b>9. EFFECTIVE, RESEARCHED-BASED METHODS, STRATEGIES, AND CRITERIA</b> Corresponding EETT Requirement(s): 4 and 9 (Appendix D).</p>	<p><b>Page in District Plan</b></p>	<p><b>Example of Adequately Addressed</b></p>	<p><b>Not Adequately Addressed</b></p>
<p><b>a. Summarize the relevant research and describe how it supports the plan's curricular and professional development goals.</b></p>	<p>47</p>	<p>The plan describes the relevant research behind the plan's design for strategies and/or methods selected.</p>	<p>The description of the research behind the plan's design for strategies and/or methods selected is unclear or missing.</p>
<p><b>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></p>	<p>49</p>	<p>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).</p>	<p>There is no plan to use technology to extend or supplement the district's curriculum offerings.</p>

**APPENDIX D**  
**Sierra Sands Unified School District**  
**EdTechProfile Results (10/2010)**

**APPENDIX D**  
 Sierra Sands Unified School District  
 TEACHER PROFICIENCY and USE OF TECHNOLOGY IN THE CLASSROOM  
 #'s in ( ) are from 2006 to be used as comparison with 2009/2010 results in **Bold**

TEACHER PROFICIENCY

Skill areas	Not applicable/ or have no skills	Beginning User	Intermediate User	Proficient User	Total responses
General computer knowledge	(1%) <b>1%</b>	(18%) <b>11%</b>	(48%) <b>51%</b>	(34%) <b>37%</b>	208
Word Processing (i.e., Word)	(3%) <b>0%</b>	(10%) <b>11%</b>	(29%) <b>29%</b>	(58%) <b>60%</b>	206
Internet Skills	(4%) <b>2%</b>	(30%) <b>20%</b>	(42%) <b>46%</b>	(25%) <b>32%</b>	206
E-mail Skills	(3%) <b>1%</b>	(29%) <b>20%</b>	(38%) <b>34%</b>	(30%) <b>44%</b>	206
Presentation software (i.e., PowerPoint)	(23%) <b>13%</b>	(31%) <b>30%</b>	(20%) <b>19%</b>	(26%) <b>39%</b>	206
Spreadsheet Software (i.e., Excel)	(18%) <b>10%</b>	(35%) <b>35%</b>	(28%) <b>31%</b>	(20%) <b>24%</b>	206
Database software (i.e., Access)	(30%) <b>22%</b>	(35%) <b>27%</b>	(21%) <b>29%</b>	(14%) <b>22%</b>	206
Manage and align tech. resources with lesson content–know student level of tech. prof. (9a)	(14%) <b>3%</b>	(43%) <b>46%</b>	(36%) <b>39%</b>	(7%) <b>12%</b>	206
Knowledge of research and best practices in technology in education. (9b)	(14%) <b>11%</b>	(29%) <b>44%</b>	(50%) <b>36%</b>	(7%) <b>9%</b>	206
Record management and communication (9d)	(4%) <b>2%</b>	(82%) <b>25%</b>	(5%) <b>41%</b>	(9%) <b>32%</b>	206
Online collaboration (9e)	(14%) <b>2%</b>	(21%) <b>41%</b>	(50%) <b>23%</b>	(14%) <b>33%</b>	206
Evaluation of materials and tech. resources (9f)	(29%) <b>11%</b>	(36%) <b>39%</b>	(29%) <b>34%</b>	(7%) <b>16%</b>	206
Evaluation and selection of educ. software (9g)	(20%) <b>12%</b>	(54%) <b>45%</b>	(23%) <b>38%</b>	(1%) <b>5%</b>	206
Use of electronic research tools (9h)	(24%) <b>23%</b>	(52%) <b>40%</b>	(16%) <b>28%</b>	(8%) <b>9%</b>	206

Source- EdTechProfile data- 10/2010

APPENDIX D (continued)

How often do you use the following technology tools for <b>classroom instruction</b> ?						
	Daily	2-4 days/ wk	Between once a week and monthly	Less than monthly	Available but do not use	Not Available
Computers/ scanners/printers	(54%) <b>90%</b>	(15%) <b>7%</b>	(14%) <b>1%</b>	(8%) <b>2%</b>	(5%) <b>0%</b>	(4%) <b>0%</b>
Internet	(16%) <b>84%</b>	(15%) <b>9%</b>	(23%) <b>4%</b>	(10%) <b>2%</b>	(16%) <b>1%</b>	(22%) <b>0%</b>
E-mail	(13%) <b>87%</b>	(11%) <b>7%</b>	(12%) <b>4%</b>	(11%) <b>1%</b>	(28%) <b>1%</b>	(26%) <b>0%</b>
Hand held electronic. devices	(4%) <b>17%</b>	(1%) <b>4%</b>	(5%) <b>9%</b>	(8%) <b>7%</b>	(7%) <b>7%</b>	(76%) <b>55%</b>
Video based presentations (VCR/DVD, LCD projectors)	(11%) <b>24%</b>	(12%) <b>21%</b>	(34%) <b>32%</b>	(26%) <b>12%</b>	(9%) <b>4%</b>	(8%) <b>6%</b>
Video based creations (video or digital camera)	(4%) <b>6%</b>	(8%) <b>10%</b>	(23%) <b>21%</b>	(25%) <b>22%</b>	(27%) <b>21%</b>	(15%) <b>19%</b>

Source- EdTechProfile data- 10/23/2010

APPENDIX D (continued)

Technology tools are used for instruction in the following subjects: ( )= 2006 data for comparison

	Daily or 2-4 times per week	Never
Reading/Language Arts	(47%) <b>49%</b>	<b>6%</b>
Mathematics	(40%) <b>42%</b>	<b>7%</b>
Science	(17%) <b>26%</b>	<b>9%</b>
History/Social Science	(14%) <b>26%</b>	<b>9%</b>
PE/Health	(3%) <b>6%</b>	<b>16%</b>
Fine Arts	(6%) <b>10%</b>	<b>14%</b>

Technology Tools are used **daily or 2-4 times per week** for the following purposes:

Create Instructional materials	(66%) <b>77%</b>
Deliver classroom instruction	(39%) <b>58%</b>
Manage student grades and attendance	(65%) <b>88%</b>
Communicate with colleagues	(37%) <b>93%</b>
Communicate with parents or students	(25%) <b>62%</b>
Gather information for planning purposes	(39%) <b>36%</b>
Access model lesson plans and best practices	(23%) <b>43%</b>

**32%** (24%) report using an **electronic information system** to make decisions in lesson design and implementation.

**80% use data** to assess student performance and communicate student progress.

**74%** (67%) use **voice mail** daily or 2-4 times per week to support and improve home to school communication.

**54%** (18%) use **school web pages** with class related information daily or 2-4 times per week to support and improve home to school communication. **58%** (48%) use an **electronic grading system**. None use **videoconferencing**.

**36%** (2%) report using low to high level **assistive technologies** in their classroom.

Technology tools are used by students in computers labs **37%** (36%), library media centers **26%** (27%), and classrooms **37%** (37%) of the time.

APPENDIX D (continued)

Computers and peripherals are used for classwork by <b>students</b> in the following tasks		
	Daily - 2-4 times per week	Never
Word processing	(18%) <b>15%</b>	(32%) <b>31%</b>
Reinforcement and practice	(34%) <b>38%</b>	(33%) <b>23%</b>
Research using Internet or CD-ROMs	(8%) <b>13%</b>	(42%) <b>32%</b>
Creating reports or projects	(7%) <b>7%</b>	(40%) <b>33%</b>
Demonstrations or simulations	(6%) <b>6%</b>	(56%) <b>46%</b>
Correspondence w/experts, authors, students from other schools via e-mail or Internet	(3%) <b>6%</b>	(76%) <b>62%</b>
Solving problems or analyzing data	(13%) <b>11%</b>	(57%) <b>48%</b>
Graphically presenting information	(8%) <b>8%</b>	(58%) <b>48%</b>

How often do your classroom assignments require <b>students</b> to use available technology tools to complete the assignments						
	Daily	2-4 days/ wk	Between once a week and monthly	Less than monthly	Available but do not use	Not Available
Computers/ Scanners/printers	(30%) <b>30%</b>	(15%) <b>17%</b>	(19%) <b>20%</b>	(21%) <b>13%</b>	(10%) <b>8%</b>	(5%) <b>12%</b>
Internet	(7%) <b>20%</b>	(6%) <b>9%</b>	(19%) <b>24%</b>	(19%) <b>20%</b>	(26%) <b>16%</b>	(24%) <b>9%</b>
E-mail	(5%) <b>9%</b>	(3%) <b>5%</b>	(5%) <b>11%</b>	(11%) <b>15%</b>	(39%) <b>34%</b>	(38%) <b>24%</b>
Hand held electronic devices	(2%) <b>4%</b>	(1%) <b>4%</b>	(5%) <b>4%</b>	(5%) <b>5%</b>	(14%) <b>15%</b>	(78%) <b>68%</b>
Video based presentations (VCR/DVD, LCD projectors)	(4%) <b>11%</b>	(8%) <b>15%</b>	(22%) <b>19%</b>	(26%) <b>21%</b>	(25%) <b>19%</b>	(17%) <b>15%</b>
Video based creations (video or digital camera)	(2%) <b>3%</b>	(3%) <b>4%</b>	(9%) <b>8%</b>	(20%) <b>22%</b>	(36%) <b>29%</b>	(30%) <b>34%</b>

PROFESSIONAL DEVELOPMENT

Technology training needs: **77%** (75%) of respondents wanted training in integrating technology into the curriculum as opposed to basic computer/technology skills. **23%** (25%)

Small group training **62%** (63%) is preferred over one-on-one informal **17%** (20%) and on-line web based training **21%** (18%). Preferred times for training are during the school day **32%** (39%), summer time **21%** (27%), and after school **35%** (18%). Evenings **6%** (9%) and weekends **6%** (7%) are the least preferred times.

**16%** (25%) report participating in 40 or more hours of formal professional development in the last three years with **17%** participating in 21-40 hrs.

**APPENDIX E**  
**Sierra Sands Unified School District Acceptable Use Policy**

## APPENDIX E

### **BP 6163.4(a)** **Instruction**

#### **STUDENT USE OF TECHNOLOGY**

The Governing Board intends that technological resources provided by the district be used in a responsible and proper manner in support of the instructional program and for the advancement of student learning.

*(cf. 0440 - District Technology Plan)*  
*(cf. 1113 - District and School Web Sites)*  
*(cf. 4040 - Employee Use of Technology)*  
*(cf. 6010 - Goals and Objectives)*  
*(cf. 6162.7 - Use of Technology in Instruction)*  
*(cf. 6163.1 - Library Media Centers)*

The Superintendent or designee shall notify students and parents/guardians about authorized uses of district computers and consequences for unauthorized use and/or unlawful activities.

*(cf. 5125.2 - Withholding Grades, Diploma or Transcripts)*  
*(cf. 5144 - Discipline)*  
*(cf. 5144.1 - Suspension and Expulsion/Due Process)*  
*(cf. 5144.2 - Suspension and Expulsion/Due Process: Students with Disabilities)*  
*(cf. 5145.12 - Search and Seizure)*

#### **On-Line Services/Internet Access**

The Superintendent or designee shall ensure that all district computers with Internet access have a technology protection measure that blocks or filters Internet access to inappropriate content, including material that is obscene, child pornography, or harmful to minors, and that the operation of such measures is enforced. (20 USC 7001, 47 USC 254)

The Board desires to protect students from access to harmful matter on the Internet or other on-line services. The Superintendent or designee shall implement rules and procedures designed to restrict students' access to harmful or inappropriate matter on the Internet. He/she also shall establish regulations to address the safety and security of students when using electronic mail, chat rooms and other forms of direct electronic communication.

Disclosure, use and dissemination of personal identification information regarding students is prohibited.  
Staff shall supervise students while they are using on-line services and may ask teacher aides and student aides to assist in this supervision.

**BP 6163.4(b)**

**STUDENT USE OF TECHNOLOGY**

Before using the district's on-line resources, each student and his/her parent/guardian shall annually sign and return an Acceptable Use Agreement specifying user obligations and responsibilities. In that agreement, the student and his/her parent/guardian shall agree to not hold the district responsible and shall agree to indemnify and hold harmless the district and all district personnel for the failure of any technology protection measures, violations of copyright restrictions, users' mistakes or negligence, or any costs incurred by users.

*(cf. 6162.6 - Use of Copyrighted Materials)*

In order to help ensure that the district adapts to changing technologies and circumstances, the Superintendent or designee shall regularly review this policy, the accompanying administrative regulation and other procedures. He/she shall also monitor the district's filtering software to help ensure its effectiveness.

*Legal Reference:*

EDUCATION CODE

- 48980 *Required notification at beginning of term*
- 51006 *Computer education and resources*
- 51007 *Programs to strengthen technological skills*
- 51870-51874 *Education Technology*
- 51870.5 *Student Internet access*
- 60044 *Prohibited instructional materials*

**PENAL CODE**

- 313 *Harmful matter*
- 502 *Computer crimes, remedies*
- 632 *Eavesdropping on or recording confidential communications*

**UNITED STATES CODE, TITLE 20**

- 6801-6979 *Technology for Education Act of 1994*
- 7001 *Internet safety policy and technology protection measures, Title III funds*

**UNITED STATES CODE, TITLE 47**

- 254 *Universal service discounts (E-rate)*

**CODE OF FEDERAL REGULATIONS, TITLE 16**

- 312.1-312.12 *Children's online privacy protection*

**CODE OF FEDERAL REGULATIONS, TITLE 47**

- 54.520 *Internet safety policy and technology protection measures, E-rate discounts*

*Management Resources:*

**CDE PUBLICATIONS**

*K-12 Network Technology Planning Guide: Building the Future, 1994*

**CDE PROGRAM ADVISORIES**

*1223.94 Acceptable Use of Electronic Information Resources*

**WEB SITES**

*Federal Communications Commission: <http://www.fcc.gov>*

*U.S. Department of Education: <http://www.ed.gov>*

*Commission on Online Child Protection: <http://www.copacommission.org>*

*CDE: <http://www.cde.ca.gov>*

*American Library Association: <http://www.ala.org>*

*CSBA: <http://www.csba.org>*

Policy  
adopted: October 18, 2001

**SIERRA SANDS UNIFIED SCHOOL DISTRICT**  
Ridgecrest, California

**AR 6163.4(a)**  
**Instruction**

**STUDENT USE OF TECHNOLOGY**

The principal or designee shall oversee the maintenance of each school's technological resources and may establish guidelines and limits on their use. He/she shall ensure that all students using these resources receive training in their proper and appropriate use.

*(cf. 0440 - District Technology Plan)*  
*(cf. 4040 - Employee Use of Technology)*  
*(cf. 4131- Staff Development)*  
*(cf. 4231 - Staff Development)*  
*(cf. 4331 - Staff Development)*  
*(cf. 6162.7 - Use of Technology in Instruction)*

At the beginning of each school year, parents/guardians shall receive a copy of the district's policy and administrative regulation regarding access by students to the Internet and on-line sites. (Education Code 48980)

*(cf. 5145.6 - Parental Notifications)*

**On-Line/Internet Services: User Obligations and Responsibilities**

Students are authorized to use district equipment to access the Internet or on-line services in accordance with user obligations and responsibilities specified below and in accordance with Governing Board policy and the district's Acceptable Use Agreement.

1. The student, in whose name an on-line services account is issued, is responsible for its proper use at all times. Students shall keep personal account numbers, home addresses and telephone numbers private. They shall use the system only under their own account number.
2. Students shall use the district's system only for purposes related to education. Commercial, political, and/or personal use of the district's system is strictly prohibited. The district reserves the right to monitor any on-line communications for improper use.

**AR 6163.4(b)**

**STUDENT USE OF TECHNOLOGY**

3. Students shall not access, post, submit, publish or display harmful or inappropriate matter that is threatening, obscene, disruptive or sexually explicit, or that could be construed as harassment or disparagement of others based on their race/ethnicity, national origin, gender, sexual orientation, age, disability, religion or political beliefs.

*(cf. 5145.3 - Nondiscrimination/Harassment)*

*(cf. 5145.7 - Sexual Harassment)*

*(cf. 5145.9 - Hate-Motivated Behavior)*

*Harmful matter* includes matter, taken as a whole, which to the average person, applying contemporary statewide standards, appeals to the prurient interest and is matter which depicts or describes in a patently offensive way sexual conduct and which lacks serious literary, artistic, political or scientific value for minors. (Penal Code 313)

*Personal information* includes the student's name, address, telephone number, Social Security number, or other individually identifiable information.

5. Students shall not use the system to encourage the use of drugs, alcohol or tobacco, nor shall they promote unethical practices or any activity prohibited by law or Board policy.

*(cf. 3513.3 - Tobacco-Free Schools)*

6. Copyrighted material shall not be placed on the system without the author's permission. Students may download copyrighted material for their own use only.

*(cf. 6162.6 - Use of Copyrighted Materials)*

*AR 6163.4(c)*

## **STUDENT USE OF TECHNOLOGY**

7. Students shall not intentionally upload, download or create computer viruses and/or maliciously attempt to harm or destroy district equipment or materials or manipulate the data of any other user, including so-called "hacking."

*(cf. 5131.5 - Vandalism, Theft and Graffiti)*

8. Students shall not read other users' electronic mail or files. They shall not attempt to interfere with other users' ability to send or receive electronic mail, nor shall they attempt to delete, copy, modify or forge other users' mail.
9. Students shall report any security problem or misuse of the services to the teacher or principal.

The district shall block student access to all electronic mail, chat rooms, and other forms of direct electronic communication except by special request of staff to access a particular web site for a specific educational activity.

The district reserves the right to monitor any on-line communications for improper use. Electronic communications and downloaded material, including files deleted from a user's account, may be monitored or read by district officials to ensure proper use of the system.

*(cf. 5145.12 - Search and Seizure)*

The principal or designee shall make all decisions regarding whether or not a student has violated Board policy or the district's Acceptable Use Agreement. The decision of the principal or designee shall be final.

Inappropriate use shall result in a cancellation of the student's user privileges, disciplinary action and/or legal action in accordance with law and Board policy.

*(cf. 5144 - Discipline)*

*(cf. 5144.1 - Suspension and Expulsion/Due Process)*

*(cf. 5144.2 - Suspension and Expulsion/Due Process (Students with Disabilities))*

Regulation  
approved: October 18, 2001

**SIERRA SANDS UNIFIED SCHOOL DISTRICT**  
Ridgecrest, CA

**SIERRA SANDS UNIFIED SCHOOL DISTRICT  
Electronic Information Resource Contract**

Student: \_\_\_\_\_ Site: \_\_\_\_\_ Date: \_\_\_\_\_

We are pleased to announce that Internet electronic information services are now available to students and teachers in our district who qualify. The Sierra Sands Unified School District strongly believes in the educational value of such electronic services and recognizes the potential of such to support our curriculum and student learning in our district. Our goal in providing this service is to promote educational excellence by facilitating resource sharing, innovation, and communication. Sierra Sands Unified School District will make every effort to protect students and teachers from any misuses or abuses as a result of their experiences with an information service. All users must be continuously on guard to avoid inappropriate and illegal interaction with the information service.

**Please read the document carefully. When signed by you and, if appropriate, your guardian/parent, it becomes a legally binding contract. WE must have your initials where indicated and your signature and that of your guardian/parent (if you are under 18) before we can provide you with an access account or user privileges.**

Listed below are the provisions of this contract. If any user violates these provisions, access to the information service shall be denied, and you shall be subject to disciplinary action.

*Terms and Conditions of This Contract*

1. **Personal Responsibility.** As a representative of this school, I will accept personal responsibility for reporting any misuse of the network to the system administrator or staff member in charge. Misuse can come in many forms, but it is commonly viewed as any message(s) sent or received that indicate or suggest pornography, unethical or illegal solicitation, racism, sexism, inappropriate language, and other issues described below. All the rules of conduct described in the District Policy BP 6163.4(a) apply when you are on the network.

*I have read and understand this provision.*

*Initial* \_\_\_\_\_

2. **Acceptable Use.** The use of my assigned account must be in support of education and research and with the educational goals and objectives of the Sierra Sands Unified School District (these may be found in the

district policies BP 6162.7 and BP 6163.4(a)). I am personally responsible for this provision at all times when using the electronic information service.

- a. Uses of other organization's networks or computing resources must comply with rules appropriate to that network.
- b. Transmission of any material in violation of local, state, or federal rules or regulations is prohibited. This includes, but is not limited to: copyrighted material, threatening or obscene material, or material protected by trade secret.

***E(1) 6163.4(b)***

**Electronic Information Resource Contract** (continued)

- c. Use of commercial activities by for-profit institutions is generally not acceptable.
- d. Use of product advertisement or political lobbying is also prohibited.

*I have read and understand this provision.*

3. **Privileges.** The use of the information system is a privilege, not a right, and inappropriate use shall result in a cancellation of those privileges. Each person who receives an account will participate in a discussion with a site faculty member as to proper behavior and use of the network. The administration, staff, or faculty will decide what is appropriate use and their decision is final. The administration, staff, or faculty of Sierra Sands Unified School District may request that the system administrator deny, revoke, or suspend specific user accounts.

*I have read and understand this provision.*

4. **Network Etiquette and Privacy.** You are expected to abide by the generally accepted rules of network etiquette. These rules include (but are not limited to) the following:
  - a. **BE POLITE.** Never send, or encourage others to send, abusive messages.
  - b. **USE APPROPRIATE LANGUAGE.** Remember that you are a representative of our school and district on a non-private system. You may be alone with your computer, but what you say and do can be viewed globally! Never swear, use vulgarities, or any other inappropriate language. Illegal activities of any kind are strictly

forbidden.

- c. PRIVACY. Do not reveal your home address or personal phone number or the addresses and phone numbers of students or colleagues.
- d. ELECTRONIC MAIL. Electronic mail (e-mail) is not guaranteed to be private. Messages relating to, or in support of, illegal activities must be reported to the authorities.
- e. DISRUPTIONS. Do not use the network in any way that would disrupt use of the network by others.
- f. OTHER CONSIDERATIONS:

**Do** be brief. Fewer people will bother to read a long message.

**Do** minimize spelling errors, and make sure your message is easy to understand and read.

**Do** use accurate and descriptive titles for your articles. Tell people what it is about before they read it.

**Do** get the most appropriate audience for your message, not the widest.

**Do** remember that humor and satire are very often misinterpreted.

*E(1) 6163.4(c)*

### **Electronic Information Resource Contract** (continued)

**Do** remember that if you post to multiple groups, specify all groups in a single message.

**Do** site references for any facts you present.

**Do** forgive the spelling and grammar errors of others.

**Do** keep signatures brief.

**Do** remember that all network users are human beings. Don't "attack" correspondents; persuade them with facts.

**Do** post only to groups you know.

*I have read and understand this provision.*

- 5. **Services.** The Sierra Sands Unified School District makes no warranties of any kind, whether expressed or implied, for the service it is providing. Sierra Sands Unified School District will not be responsible for any damages suffered while on this system. These damages include loss of data as a result of delays, nondeliveries, misdeliveries, or service interruptions caused by the system or your errors or omissions. Use of any information obtained via the information system is at your own risk. Sierra Sands Unified School District specifically disclaims any responsibility for the accuracy of information obtained through its

services.

*I have read and understand this provision.*

6. **Security.** Security on any computer system is a high priority because there are so many users. If you identify a security problem, notify the system administrator or staff member in charge at once. Never demonstrate the problem to other users. Never use another individual's account. All use of the system must be under your own account. Any user identified as a security risk shall be denied access to the information system.

*I have read and understand this provision.*

7. **Vandalism.** Vandalism is defined as any malicious attempt to harm or destroy data of another user or any other agencies or networks that are connected to the system. This includes, but is not limited to, the uploading or creation of computer viruses. Any vandalism shall result in the loss of computer services, disciplinary action, and legal referral.

*I have read and understand this provision.*

8. **UPDATING.** The information service may occasionally require new registration and account information from you to continue the service. You must notify the information system of any changes in your account information.

*I have read and understand this provision.*

STUDENT

I understand and will abide by the provisions and conditions of this contract. I understand that any violations of the above provisions shall result in disciplinary action, the revoking of my user account, or user privileges, and appropriate legal action. I also agree to report any misuse of the information system to the Sierra Sands Unified School District. Misuse can come in many forms, but can be viewed as any messages sent or received that indicate or suggest pornography, unethical or illegal solicitation, racism, sexism, inappropriate language, and other issues described above. All the rules of conduct described in the district policy 6163.4(a) apply when I am on the network.

Student Signature \_\_\_\_\_ Date \_\_\_\_\_

PARENT OR GUARDIAN

Students under the age of 18 must also have the signature of a parent or guardian who has read this contract.

As the parent or guardian of this student, I have read this contract and understand that it is designed for educational purposes. I understand that it is impossible for Sierra Sands Unified School District to restrict access to all controversial materials, and I will not hold the district responsible for materials acquired on the network. I also agree to report any misuse of the information system to the Sierra Sands Unified School District system administrator or staff member/teacher in charge. Misuse can come in many forms, but can be viewed as any messages sent or received that indicate or suggest pornography, unethical or illegal solicitation, racism, sexism, inappropriate language, and other issues described above. I accept full responsibility for supervision if and when my child's use is not in a school setting. I hereby give my permission to issue an account for my child and certify that the information contained on this form is correct.

Parent or Guardian Name (please print): \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

SPONSORING TEACHER

I have read this contract and agree to promote this agreement with the student. Because the student may use the network for individual work or in the context of another class, I cannot be held responsible for the student use of the network. As the sponsoring teacher, I agree to instruct the student on acceptable use of the network and proper network etiquette. I also agree to report any misuse of the information system to the Sierra Sands Unified School District system administrator. Misuse can come in many forms but can be viewed as any messages sent or received that indicate or suggest pornography, unethical or illegal solicitation, racism, sexism, inappropriate language, and other issues described above.

Teacher's Name (please print): \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

SIERRA SANDS UNIFIED SCHOOL DISTRICT

version: October 18, 2001 Ridgecrest, California

**SIERRA SANDS UNIFIED SCHOOL DISTRICT**  
**Electronic Information Resource Contract**

**A. Introduction to the Parent or Legal Guardian:**

Electronic information resources are available to qualifying students in the Sierra Sands Unified School District. These resources include the use of the computer and access to the Local Area Network, Sierra Sands Wide Area Network, and Internet services. Our district goal, in providing electronic services to students, is to promote educational excellence by facilitating resource use, innovation, communication, and acceptable use.

The Sierra Sands Unified School District Internet system is being filtered by a proxy server. Student use of the Internet is monitored. Students who abuse acceptable use, which includes, but is not limited to, copyrighted material, threatening or obscene material, pornography, gambling, and inappropriate language will be subject to discipline.

To qualify for electronic information resource services, students must be willing to abide by the rules of acceptable use. Please work with us in helping your elementary school age child understand and abide by these simple but important rules of appropriate use. Thank you.

**B. For the Student - Acceptable Use:**

Acceptable use means that as a student in the Sierra Sands Unified School District, you will promise to use the computer and those special learning tools and programs, such as the Internet, with respect. Acceptable use means you will promise to abide by the school and district rules as outlined here and as will be taught to you by your teachers and computer specialists in your own classroom or school. You must understand that the use of these electronic teaching and learning tools is designed to support your education. If rules are broken, a student may lose his/her privilege in using the computer and the Internet. Please pay special attention to the following:

1. Be Polite and Show Respect: When using the computer to write, send, or to receive messages or information, always use kind and proper language and abide by the rules of friendliness. Treat others and equipment with respect. You may be alone in your use of the computer, but what you write or receive, using electronic machines, may be viewed by others with or without your knowledge. You must not vandalize or abuse the equipment. Show respect for property, others, and self. The computer and electronic resources belong to the school district.
2. Be Honest and Obey the Rules: Do not do things on the computer that would be against the rules, the law, or may be looked upon as dishonest. Use the computer and the Internet for appropriate educational purposes only.
3. Keep Personal Things Private: It is advised that students not tell or show others any personal or family information over the Internet, such as home address, phone numbers, passwords, personal photos when used with names, or Social Security numbers. Do not log on or use another person's account. Keep personal and electronic information private.

**SIERRA SANDS UNIFIED SCHOOL DISTRICT**  
**Electronic Information Resource Contract** (continued)  
**Required Signatures**

**C. My Promise to Follow the Rules:**

My parent or guardian has reviewed the Sierra Sands Unified School District Acceptable Use Agreement with me. I understand the importance of being polite, respectful, honest, and the need to obey the rules for the use of the computer and the Internet. I also know I should not give out personal information about my family or myself over the Internet. I understand that the computer, the Internet, and other electronic information resources are to be used for educational purposes. I also understand that if I break the rules, my use of these educational tools may be taken away from me and that other disciplinary or legal action may be taken. I PROMISE TO FOLLOW THE RULES.

Student Name (please print): \_\_\_\_\_

School: \_\_\_\_\_ Grade: \_\_\_\_\_ Teacher: \_\_\_\_\_

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**D. For the Parent or Legal Guardian:**

As the parent or legal guardian, I have read and I have reviewed with my elementary school age child the Sierra Sands Unified School District Acceptable Use Agreement. I understand that the use of these electronic information resources is for educational purposes. I recognize the District has initiated reasonable safeguards to filter and monitor inappropriate materials. I understand that while the District has also taken steps to restrict student access on the Internet to inappropriate information and sites, it is impossible to restrict access to all controversial materials. I further recognize that if my child does not abide by the rules of acceptable use, he/she may be disciplined. I will not hold the Sierra Sands Unified School District responsible for materials my child may acquire on the Internet. I hereby give permission to the Sierra Sands Unified School District to permit my child to have access to the Local and Wide Area Networks and the Internet.

Parent or Legal Guardian (please print): \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_ e-mail: \_\_\_\_\_

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

**APPENDIX F**  
**CTAP PROFICIENCY CHECKLISTS**



APPENDIX F

**Region 8**

(Kern, San Luis Obispo, Santa Barbara, Ventura Counties)

**Technology Certification Program  
Proficiency Checklist**

**Level One: Basic Proficiency**

**Objective:** To ensure educators are able to:

- Communicate and collaborate electronically
- Plan, design, and prepare for implementation of learning experiences.
- Evaluate and assess using technology tools.
- Each portfolio must include the proper application documents.
  - Certification application form
  - Current resume
  - Letter(s) of recommendation
  - Cover letter explaining the context of your professional position and work environment
  - Narrative describing each artifact contained in the portfolio
  - Proficiency checklist and associated artifacts
- There are two methods for describing the artifacts in your portfolio. With either method, *the narrative description should clearly describe how the artifact has met the requirements of the proficiency standard.* These two methods are:
  1. Narratives at the beginning of each proficiency section describing the artifacts in that proficiency; or
  2. Individual narratives placed on or with the artifacts themselves describing the artifacts.
- Proficiencies that can be satisfied through a demonstration of skills, e.g., 1.5-1.8, must be clearly identified by the signature and date of the trainer responsible for observing the required skills on the proficiency checklist.

Educators demonstrate Level One – “Basic Proficiency” by creating a portfolio demonstrating proficiencies set by the Advisory Committee and approved by a certified Level III trainer.

**Areas marked “Include in Portfolio” must have artifact(s) showing attainment of that proficiency in the portfolio. Submit signed-off Portfolio checklist and application with portfolio. All examples must be educationally relevant.**

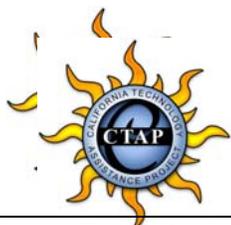
These proficiencies align to CTC Standard 9 (*see Appendices A and B at the end of document*). Appendices A and B are not required for Level 1 Certification, but are included solely for purposes of aligning to Standard 9.

<b>Prof. #</b>	<b>Proficiency Standards</b> (What educators should know)	<b>Clarifications and Examples</b> (Demonstrate by including in a portfolio. Please include materials specific to your area of educational expertise.)
<b>1.1</b>	Use computers to communicate through printed media.  [Standard 9d]	<ul style="list-style-type: none"> <li>• Use a word processing application to create and edit a document.</li> <li>• Demonstrate ability to change fonts and spell check.</li> <li>• Create newsletters, banners, signs and/or calendars incorporating graphics and charts.</li> </ul>

<b>Prof. #</b>	<b>Proficiency Standards</b> (What educators should know)	<b>Clarifications and Examples</b> (Demonstrate by including in a portfolio. Please include materials specific to your area of educational expertise.)
<b>1.2</b>	Send and reply to e-mail messages.  <i>[Standard 9e]</i>	<ul style="list-style-type: none"> <li>• Address an e-mail message.</li> <li>• Successfully send and reply to messages.</li> <li>• Send, receive and open attachments.</li> <li>• Explain the components of an Internet e-mail address.</li> </ul>
<b>1.3</b>	Demonstrate familiarity with a variety of computer-based collaborative tools.  <i>[Standard 9e]</i>	<ul style="list-style-type: none"> <li>• Threaded Discussions</li> <li>• Listservs</li> <li>• Online Chat</li> <li>• Audio/Video Conferencing</li> </ul>
<b>1.4</b>	Demonstrates knowledge of privacy, safety, copyright, and other legal and ethical issues.  <i>[Standard 9i]</i>	<p><b>Narratives should describe how each example meets the standard.</b></p> <ul style="list-style-type: none"> <li>• Demonstrate ability to discern what information is copyrighted and what is not from electronic resources, including software and copyright guidelines.</li> <li>• In narrative, describe your understanding of an AUP, CIPA, COPPA, copyright law and fair use policy in education.</li> </ul>
<b>1.5</b>	<i>Use a range of commands common across applications and platforms.</i>	<ul style="list-style-type: none"> <li>• Demonstrate ability to change software preferences and options.</li> <li>• Use cut, copy, paste between documents and applications.</li> <li>• Find and replace text.</li> <li>• Use “save as” for file management in various file formats.</li> <li>• Use appropriate printing procedures, including selecting a printer and appropriate pages to print.</li> </ul> <p><b>Include letter of recommendation, demonstrate and use Attestation Form, or include screen shot examples in the portfolio with narrative.</b></p>

<b>Prof. #</b>	<b>Proficiency Standards</b> (What educators should know)	<b>Clarifications and Examples</b> (Demonstrate by including in a portfolio. Please include materials specific to your area of educational expertise.)
<b>1.6</b>	<i>Demonstrate competency in the operation and care of computer related hardware.</i>  [Standard 9c]	<ul style="list-style-type: none"> <li>• Connect and disconnect at least two peripherals and/or display devices.</li> <li>• Perform simple maintenance.</li> <li>• Install/load new software on computer and run successfully as district policy allows.</li> </ul>
<b>1.7</b>	Demonstrate knowledge of current basic computer hardware and software terminology.  [Standard 9c]	<p><b>Demonstrate the following skills:</b></p> <ul style="list-style-type: none"> <li>• Refer to components of a computer system by name.</li> <li>• Describe the basic processes and operations of a computer.</li> </ul> <p><b>Include letter of recommendation, demonstrate and use Attestation Form, or include examples in the portfolio with narrative.</b></p>
<b>1.8</b>	<i>Implement basic troubleshooting techniques for computer systems and related peripheral devices before accessing the appropriate avenue of support.</i>  [Standard 9c]	<p><b>Demonstrate the following skills:</b></p> <ul style="list-style-type: none"> <li>• Repair/troubleshoot basic platform-specific problems such as adjusting control panels, turning off extensions, removing start-up programs, ejecting stuck disks, and/or checking network and hardware connections as district policy allows.</li> <li>• Set up, activate, restart, shut down computer, and deal with freezes and hangs.</li> </ul> <p><b>Include letter of recommendation, demonstrate and use Attestation Form, or include screen shot examples in the portfolio with narrative.</b></p>
<b>1.9</b>	Know how to select software or electronic resources for their relevance, effectiveness, alignment with content standards, and value added to student learning. [Standard 9g]	<p><b>Include written explanation in portfolio</b> addressing how <i>each</i> example meets the standard.</p> <ul style="list-style-type: none"> <li>• Identify a piece of software or electronic resource that helps the applicant teach a state content standard <b>or</b> instructional objective. List and explain criteria for selection, including how software or resource supports instructional goal.</li> </ul>
<b>1.10</b>	Demonstrate competence in the use of electronic research tools.  [Standard 9h]	<ul style="list-style-type: none"> <li>• Launch browser, type URL and bookmark site.</li> <li>• Use two search tools to find specific information on an educational topic, using Boolean logic.</li> <li>• Describe one method that can be used to download information.</li> <li>• Use an electronic encyclopedia and/or periodical index to find appropriate information.</li> </ul>

<b>Prof. #</b>	<b>Proficiency Standards</b> (What educators should know)	<b>Clarifications and Examples</b> (Demonstrate by including in a portfolio. Please include materials specific to your area of educational expertise.)
<b>1.11</b>	Design or adapt a lesson that promotes the effective use of technology in teaching and learning.  <i>[Standard 9a]</i>	<ul style="list-style-type: none"> <li>• Content to be taught.</li> <li>• Alignment with the state content standards or instructional objectives.</li> <li>• Student learning styles and/or special needs.</li> <li>• Selection of relevant, effective software and hardware.</li> <li>• Technology resources and learning environments available in the classroom, library, media centers, and computer labs, and other locations.</li> <li>• Assessment of student learning.</li> </ul>
<b>1.12</b>	Use computer applications to manage records.  <i>[Standard 9d]</i>	<p><b>Include a range of screen shots and/or examples. Write a narrative addressing how the examples meet the standard.</b></p> <ul style="list-style-type: none"> <li>• Demonstrate skill in classroom record keeping. Possible artifacts could include: book checkout list, grade progress reports, class assignment summaries, missing work reports, and parent conference reports.</li> </ul> <p>(Reminder: While we expect completed forms--not blanks--be sure to protect student and staff identities in artifacts included in the portfolio.)</p>
<b>1.13</b>	Demonstrate an awareness of issues concerning the authenticity, reliability, and bias of the data gathered.  <i>[Standard 9h]</i>	<ul style="list-style-type: none"> <li>• Include artifacts <i>and</i> describe in narrative why information offered by a particular site on the Internet or other electronic resources may or may not be reliable</li> </ul>
Appendix A	Each candidate analyzes best practices and research findings on the use of technology and designs lessons accordingly.  <i>[Standard 9b]</i>	Locate relevant research on the use of technology in education. Include in narrative a summary of article(s) found, specifying how the research will influence the incorporation of technology into curriculum. Include either link or copy of research in portfolio.
Appendix 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. <i>[Standard 9f]</i>	Select 3 current educational technologies; write narrative including selection criteria used for evaluation. <ol style="list-style-type: none"> <li>1. Multimedia</li> <li>2. Internet resources</li> <li>3. Telecommunications</li> <li>4. Computer-assisted instruction</li> <li>5. Productivity tools</li> <li>6. Presentation tools</li> </ol>



Name \_\_\_\_\_

**Level Two: Professional Proficiency**

**Objective:** To ensure educators are able to apply educational technology skills in an educational setting (Of at least Level One Proficiency) to:

- Customize curriculum to enhance its relevance and value to a wider range of learning styles and abilities
- Improve student ability to access relevant technologies
- Use technology to more effectively meet individual student’s needs
  
- Each portfolio must include the proper application documents.
  - Certification application form
  - Current resume
  - Letter(s) of recommendation
  - Cover letter explaining the context of your professional position and work environment
  - Narrative describing each artifact contained in the portfolio
  - Proficiency checklist and associated artifacts
- There are two methods for describing the artifacts in your portfolio. With either method, *the narrative description should clearly describe how the artifact has met the requirements of the proficiency standard.* These two methods are:
  3. Narratives at the beginning of each proficiency section describing the artifacts in that proficiency; or
  4. Individual narratives placed on or with the artifacts themselves describing the artifacts.

Educators may demonstrate Level Two – “Professional Proficiency” by creating a portfolio demonstrating proficiencies set by the Advisory Committee and approved by a certified Level III trainer.

**Areas marked “Include in Portfolio” must have artifact(s) showing attainment of that proficiency in the portfolio. Submit signed-off Portfolio checklist and application with portfolio.**

**All examples must be educationally relevant.**

These proficiencies align to CTC Standard 16.

Prof. #	Proficiency Standards (What educators should know)	Clarifications and Examples (Demonstrate by including in a portfolio. Please include materials specific to your area of educational expertise.)
2.1	Communicates through a variety of electronic media.  <i>[Standard 16a]</i>	

Prof. #	Proficiency Standards (What educators should know)	Clarifications and Examples (Demonstrate by including in a portfolio. Please include materials specific to your area of educational expertise.)
2.2	Collaborates with others through electronic media and computer-based collaborative tools.  <i>[Standard 16b]</i>	
2.3	Collaborate with other teachers, mentors, librarians, resource specialists, and other experts to support technology-enhanced curriculum.  <i>[Standard 16c]</i>	<b><i>Include project/lesson, documents and/or examples clearly demonstrating proficiency. Write a narrative addressing how the examples meet the standard.</i></b> <ul style="list-style-type: none"> <li>• <i>Collaborate on lessons or projects that incorporate the use of technology (e.g. locally, interdisciplinary, cross-grade level, world-wide, etc.)</i></li> </ul>
2.4	Contribute to site-based planning or local decision-making regarding the use of technology and acquisition of technological resources.	<b><i>Include artifacts from meetings or examples clearly demonstrating proficiency. Write a narrative addressing how the examples meet the standard. Possible examples include:</i></b> <ul style="list-style-type: none"> <li>• <i>Participate in planning sessions with teachers, administrators and/or parents that involve the use or acquisition of technology at your site.</i></li> <li>• <i>Be an active member of your site's Technology Committee.</i></li> <li>• <i>Attend conferences and share information with site colleagues.</i></li> </ul>
2.5	<i>Demonstrate competence in evaluating the authenticity, reliability, and bias of the data gathered.</i>  <i>[Standard 16g]</i>	<b><i>Include project/lesson plan and student samples that demonstrate students were taught to evaluate authenticity of information from a variety of sources such as Internet, e-mail, books, periodicals, etc.</i></b>

Prof. #	Proficiency Standards (What teachers should know)	Clarifications and Examples (Demonstrate by including in a portfolio. Please include materials specific to your area of educational expertise.)
2.6	Design or adapt lessons that promote the effective use of technology in teaching and state content standards or instructional objectives.  <i>[Standard 16d]</i>	<ul style="list-style-type: none"> <li>• Content to be taught.</li> <li>• Alignment with the state content standards or instructional objectives</li> <li>• Student learning styles.</li> <li>• Selection of relevant, effective software and hardware.</li> <li>• Technology resources and learning environments available in the classroom, library, media centers, and computer labs, and other locations.</li> <li>• Assessment of student learning</li> <li>• Incorporate an Internet (or Internet derived) on-line project/lesson into a core subject, or incorporate a primary source document from the Internet into a curricular area.</li> </ul>
2.7	Designs, adapts, and uses lessons which develop student information literacy and problem solving skills as tools for lifelong learning  <i>[Standard 16d]</i>	<p><b>Include project/lesson plan and student samples that show students were taught to apply information literacy skills. Include all of the following:</b></p> <ul style="list-style-type: none"> <li>• <i>Develop and teach learning units or lessons that encompass information literacy skills, using technology to increase each student's ability to plan, locate, evaluate, select, and use information to solve problems and draw conclusions.</i></li> <li>• <i>Determine outcomes and evaluate the success or effectiveness of the process used.</i></li> <li>• <i>Develop and use a performance-based rubric for the project/lesson to demonstrate success.</i></li> </ul>
2.8	Demonstrate knowledge and understanding of the legal and ethical issues concerned with the use of computer-based technology.	<ul style="list-style-type: none"> <li>• Intellectual property concerns.</li> <li>• Privacy concerns.</li> <li>• Copyright issues.</li> <li>• Security and safety issues.</li> <li>• Use of proper "net etiquette".</li> <li>• School's/district's Acceptable Use Policy (AUP).</li> <li>• Appropriate citation of resources</li> </ul>

Prof. #	Proficiency Standards (What teachers should know)	Clarifications and Examples (Demonstrate by including in a portfolio. Please include materials specific to your area of educational expertise.)
2.9	Use a computer application to manipulate and analyze data.  <i>[Standard 16f]</i>	<p><b>Include artifacts that demonstrate these two key components of this standard: <i>manipulating and analyzing data.</i></b></p> <ul style="list-style-type: none"> <li>• Disaggregate data from multiple sources to compare or show student achievement among sub-groups; for example, state and local measures, classroom assessments, etc.</li> <li>• In narrative, draw conclusions from the data</li> </ul>
2.10	Use technology as a tool for assessing student learning and for providing feedback to students and their parents.  <i>[Standard 16f]</i>	<p><b>Write a narrative addressing how the examples meet the standard. Possible examples include:</b></p> <ul style="list-style-type: none"> <li>• Give an example of how technology was used to assess student learning in a lesson.</li> <li>• Electronic portfolios.</li> <li>• Student multimedia projects with a rubric.</li> <li>• Video of student performance.</li> <li>• Student web pages with a rubric.</li> <li>• Individual learning reports for parents and students.</li> <li>• Classroom website</li> </ul>
2.11	Locate or develop Internet-based learning exercises and research projects relevant to lesson plans and incorporate them into course curricula.  <i>[Standard 16e]</i>	<p><b>Demonstrate the following skills:</b></p> <p>Incorporate an Internet (or Internet derived) on-line project/lesson into a core subject, or incorporate a primary source document from the Internet into a curricular area (Photos, text, songs, etc. from National Archives, Smithsonian, Library of Congress, or similar resource.) Include a range of examples in portfolio.</p> <p>Include a range of examples in portfolio.</p>

### **What does a Level Three Mentor or Leader do?**

A certification in Level Three gives you the responsibility of helping educators obtain certification in Level One and Level Two proficiencies. As a level three mentor or leader, you will examine portfolios, explain proficiency requirements, participate in proficiency and assessment discussions, and act as a resource for educators and others interested in meeting the proficiencies. Leaders take on the role of planning and management as described below.

### **What is the difference between a Level Three Mentor and a Leader?**

The requirements and responsibilities of Mentors and Leaders are outlined below. All Level Three certified persons are given a personal certification number and are authorized to sign off portfolios for Level One and Level Two.

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### **The Level Three Mentor Level Three: Mentor Proficiency**

Objective: To facilitate the attainment of Basic Proficiency (Level One) and Professional Proficiency (Level Two) among teaching professionals by modeling technology integration to all current educators. Be a role model in the use of educational technology, and those skills pursuant to site and district level staff development workshops and local peer-to-peer mentoring.

#### ***Educators wishing to apply for Level Three - Mentor certification must do the following:***

- Complete an application
- Submit three letters of recommendation. At least one letter must come from a district level supervisor, (e.g., district technology coordinator, director, assistant superintendent, or curriculum director)
- Submit a portfolio that meets the portfolio requirements to the Advisory Committee by one of the submission dates.

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### **The Level Three Leader Level Three: Leadership Proficiency**

Objective: To increase the number of educators who possess superior knowledge, skill, and inclination, vis-à-vis the application of education technology to enhance teaching and learning on an institution-wide basis. In addition, these educators are able to:

Assist in the development, revision and implementation of technology plans

Assist site, district, and/or county office of education administrative support personnel in the ongoing management of network platforms, including local trouble-shooting, user assistance services, and Web site development and management

Serve as a credible public advocate who can promote acceptance and support of technology in all curricula

***Educators wishing to apply for Level Three - Leadership certification must do the following:***

Complete an application

Submit three letters of recommendation. At least one letter must come from a district level supervisor, (e.g., district technology coordinator, director, assistant superintendent, or curriculum director)

Submit a portfolio that meets the portfolio requirements to the Advisory Committee by one of the submission dates.

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**To get started, Download one of these PDF documents (requires Adobe Acrobat Reader):**

**[Level Three Mentor Checklist](#)**

**[Level Three Leader Checklist](#)**

**APPENDIX G**  
**Research Bibliography**

**APPENDIX G**  
**BIBLIOGRAPHY**

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**APPENDIX H**  
**Certification Regarding Lobbying, Debarment, Suspension and Other  
Responsibility Matters, and Drug-Free Workplace Requirements**

## Appendix H – Certifications

### Certification Regarding Lobbying, Debarment, Suspension and Other Responsibility Matters, and Drug-Free Workplace Requirements

Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in pertinent regulations before completing this form. Signature of this form provides for compliance with certification requirements under 34 CFR Part 82, “New Restrictions on Lobbying,” and 34 CFR Part 85, “Government-Wide Debarment and Suspension (non procurement) and Government-Wide Requirements for Drug-Free Workplace (grants).” The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Education determines to award the covered transaction, grant, or cooperative agreement.

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1. **LOBBYING**—This certification is required by Section 1352, Title 31, of the U.S. Code, and 34 CFR Part 82, for persons entering into a grant or cooperative agreement over \$100,000 as defined at 34 CFR Part 82, Sections 82.105 and 82.110.
  - a. The applicant certifies that:
    - (1) No federal appropriated funds have been paid or will be paid by, or on behalf of, the undersigned to any person for influencing or attempting to influence an officer or employee of an agency, a member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the making of any federal grant; the entering into of any cooperative agreement; or the extension, continuation, renewal, amendment, or modification of any federal grant or cooperative agreement.
    - (2) If any funds other than federal appropriated funds have been, or will be, paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form -LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.
    - (3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including sub-grants, contracts under grants and cooperative agreements, and subcontracts) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, Title 31, U.S. Code.

**2. DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS—**

This certification is required by executive Order 12549, Debarment and Suspension, and other responsibilities implemented at 34 CFR Part 85, for prospective participants in primary covered transactions, as defined at 34 CFR Part 85, Sections 85.105 and 85.110.

a. The applicant certifies that it and its principals:

- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency.
- (2) Have not within a three-year period preceding this application been convicted of, or had a civil judgment rendered against them, for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
- (3) Are not presently indicted for, or otherwise criminally or civilly charged by, a governmental entity (federal, state, or local) with commission of any of the offenses enumerated in paragraph (a) (2) of this certification.
- (4) Have not within a three-year period preceding this application had one or more public transactions (federal, state, or local) terminated for cause or default.

b. Where the applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.

**3. DRUG-FREE WORKPLACE (GRANTEES OTHER THAN INDIVIDUALS) —**

This certification is required by the Drug-Free Workplace Act of 1988, and implemented at 34 CFR Part 85, Subpart F, for grantees, as defined at 34 CFR Part 85, Sections 85.605 and 85.610.

- a. The applicant certifies that he or she will continue to provide a drug-free workplace by:
- (1) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition.
  - (2) Establishing an ongoing drug-free awareness program to inform employees about:
    - (a) The danger of drug abuse in the workplace.
    - (b) The grantee's policy of maintaining a drug-free work place.
    - (c) Any available drug counseling, rehabilitation, and employee assistance programs.
    - (d) The penalties that may be imposed upon employees for drug-abuse violations occurring in the workplace.
  - (3) Making it a requirement that each employee engaged in performance of the grant be given a copy of the statement required by paragraph (1).
  - (4) Notifying the employee in the statement required by paragraph (1) that, as a condition of employment under the grant, the employee will: (a) abide by the terms of the statement; and (b) notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction.
  - (5) Notifying the agency, in writing, within 10 calendar days after receiving notice under subparagraph (4)(b) from an employee or otherwise receiving actual notice of such conviction. The grantee must provide notice, including position title, to: Director, Grants, and Contracts Service, U.S. Department of Education, 400 Maryland Avenue, S.W. (Room 3124, GSA Regional Office Building No. 3),

Washington, D.C. 20202-4571. Notice shall include the identification number(s) of each affected grant.

(6) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (4), with respect to any employee whom is so convicted:

- (a) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
- (b) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement, or other appropriate agency.

(7) Making a good-faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (1), (2), (3), (4), (5), and (6).

b. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of performance  
(street address, city, county, state, zip code):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**ENVIRONMENTAL TOBACCO SMOKE ACT—This certification is required by the Pro-Children Act of 1994, (also known as Environmental Tobacco Smoke), and implemented as Public Law 103-277, Part C which requires that:**

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

Sierra Sands Unified School District  
NAME OF APPLICANT

Joanna Rummer- Superintendent  
PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE

(original signature on file)  
SIGNATURE

March 29, 2006  
DATE