Technology Plan

Sacramento
Office of Education **County**

Sacramento County Office of Education

July 1, 2013 - June 30, 2016

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This plan is for E-Rate.

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Introduction

The mission of the Sacramento County Office of Education, a customer-driven educational leader and agent for change in the county, region and state, is to support the preparation of students for a changing and global twenty-first century society through a continuously improving system of partnerships and coordinated services for our diverse community.

The Sacramento County Office of Education (SCOE) is one of fifty-eight county offices located throughout the state of California. The 650 full-time and over 950 temporary/part-time staff of SCOE work year-round providing services which complement and supplement those offered by public school districts in the County of Sacramento. SCOE directly educates more than 30,000 children and adults, and provides support services to thirteen school districts.

Programs operated by SCOE provide full-time and part-time education to students in specialized programs that are most cost-effective to operate on a regional basis:

- Juvenile Court Schools (JCS) for incarcerated youth in county institutions such as El Centro Jr. /Sr. High School (B.T. Collins Juvenile Center) and Morgan Jr./Sr. High.
- Community Schools (CS), which serve "high risk" students who have been expelled from area schools or who have unique educational needs (E. L. Hickey CS, Gerber CS, North Area CS, CARE Intervention Program)
- Special Education classes and services are provided to students residing in all 13 school districts in Sacramento County. The options available to students include enrollment in the Infant Program, Severely Handicapped Program, Resource Specialist Program, the Emotionally Disturbed Program and instruction provided through a variety of Designated Instructional Services.
- The Sly Park Environmental Education Center located in the El Dorado National Forest for upper elementary grade students.
- The Sacramento Regional Occupational Programs (ROP) providing school-to-work opportunities for high school and adult learners.
- Project Teach staff collaborates with homeless shelters, transitional housing programs and community agencies to serve children and their families to prevent non-enrollment in school while in transition.

Sacramento County Office of Education believes that technological tools, software, and infrastructure systems are mandatory components that significantly enhance teaching and learning context. SCOE maintains that staff development in the use of technology is one of the foundational pieces from which student achievement will move forward. SCOE's vision for technology in educational programs includes:

- Effective educational technology, dependent on all children having access to, and being ready to use, engaging, technology-supported learning opportunities and assessment.

Technology is bringing new approaches to teaching, learning and assessment that provide more opportunities to ensure that all students can successfully engage and participate in an academically rigorous environment.

Technology's tremendous influence on society has changed what children and adults need to know and be able to do in order to ensure their future success as learners within our classrooms and as members of our communities.

SCOE Student Programs

The Sacramento County Office of Education operates four major programs for students: Juvenile Court Schools, Community Schools, Special Education Programs, and the Sacramento Regional Occupational Program (ROP). In addition, SCOE operates the Sly Park Environmental Education Center, a residential outdoor school for middle elementary students visiting from Sacramento and surrounding counties, and Project Teach, a program that assists children and their families who are experiencing homelessness.

School	Enrollment Fall 2012	Total Students Served 2011-2012	Certificated Teachers (FTE)**
SCOE Community Schools	* 277	* 479	**15
SCOE Juvenile Court Schools	* 970	* 1,456	**14
SCOE Special Education	* 296	* 573	**56
Sacramento Regional Occupational Programs	N/A	*** 7,871	**3
District Total	* 1,543	*10,379	**88
County Total	N/A	N/A	N/A

*Data reported to CALPADS from our SIS (Power School)
**Data reported by SCOE Human Resources Department
***Students in many ROP programs are enrolled outside SCOE Programs

Juvenile Court Schools

The Sacramento Juvenile Court Schools provide a support network of quality services that promote educational excellence. In partnership with families, the probation department, and the business community, we recognize the need for continued quality review and the development of productive ways of working together to meet the educational needs of our changing student population.

SCOE provides classroom instruction to students incarcerated in Sacramento County Probation Department youth facilities. In 2012-13, SCOE's Juvenile Court Schools provided 244 days of year-round instruction to high-risk, incarcerated students in two Probation Department facilities. All teachers hired by the SCOE Juvenile Court School program hold a valid California teaching credential. The two court school programs are El Centro (Juvenile Hall) and Morgan Alternative Center.

Adequate yearly progress indicators implemented under the Alternative Schools Accountability Model (ASAM) are: (1) credit completion, (2) completion of the General Education Development, certificate (GED), and (3) mathematics enhancement. Individualized learning plans based upon results from student assessments are developed to ensure quality education is provided for each student. Differentiated instruction is a primary method of delivery. The Juvenile Court Schools incorporates the LINKS (Leadership in everyday life, Ingenuity in thought and practice, Navigating choices, Keeping promises, Sufficiency in preparation) philosophy to deliver an educational program and support structure that targets the individual learning gaps/needs of students to prepare them for successful transition from El Centro and reduce recidivism. LINKS also helps students with career and vocational goals and training through specifically designed ROP courses for our at-risk students.

Students enrolled in the Juvenile Court Schools program are initially assessed to determine their academic level, and are then placed in appropriate curriculum and software programs that support English Language Arts and Math. During the program year, students work to meet the necessary graduation and minimum proficiency examination requirements and, where successful, are awarded high school diplomas from the Sacramento County Board of Education. SCOE's Course of Study for high school students has been revised this year to carefully align itself with the surrounding high school districts. Additionally, the California Achievement Test, Sixth Edition (CAT/6) is administered to students.

The Juvenile Court Schools are located in facilities that are under the supervision of the Sacramento County Probation Department. Dropout rates are not applicable to those settings, as school districts are responsible for reporting dropout rates for returning students. After being released from the Juvenile Center and other Probation Department-operated facilities, most students return to school programs in their own communities, and from there may be referred to and enrolled in SCOE Community Schools.

Community Schools

The Community Schools of the Sacramento County Office of Education work in partnership with parents, families, school districts, community agencies and the business community to provide a quality educational support network that promotes academic excellence, social competence and employment readiness while addressing the needs of high-risk youth.

Community Schools provide an alternative educational program for youth leaving incarceration and students expelled and/or referred from various school districts in Sacramento County, as provided in the California Education Code. Community School sites currently serving local districts are Gerber Community, Elinor Lincoln Hickey Jr./Sr. High School, and North Area Community School. During the 2012-13 school year, the Community Schools implemented a new program - CARE Intervention. CARE is a partnership between SCOE and the local school

that provides support and tailored instruction for students who have specific educational and behavioral needs. CARE classrooms are located on public school campuses. SCOE provides enrichment activities, mentoring, and individualized instruction for enrolled students. CARE students access districts' technology resources as well as those provided by SCOE.

In addition, this program provides an educational alternative for high-risk students referred by their home districts. The Sacramento County Community Schools classes use a standards-based curriculum and integrate life skills, technology and career technical education and training into the curriculum. SCOE's Course of Study for high school students has been revised this year to carefully align itself with the surrounding high school districts. All 15 teachers hired by the SCOE Community School program hold a valid California teaching credential.

Many of the students enrolled in the Sacramento County Office of Education Community Schools are one or more academic years behind their peers. Upon receiving transcripts from districts, students enrolled in the Community Schools program are assessed to determine their academic skill levels. With the assistance of the two Academic Intervention teachers, students are then placed in appropriate classes with curriculum and software programs that support any English Language Arts and Math deficiencies discovered.

The GED examination process is an option for some students unable to meet the necessary graduation requirements. Community School students participate in the GED examination after obtaining the basic preparation skills. In addition, Community Schools incorporates the LINKS philosophy to deliver an educational program and support structure that targets the individual learning gaps/needs of students to prepare them for successful transition from the program and reduce recidivism. Students are eligible to participate in ROP training that is specifically designed for at-risk youth. Community School students meeting the necessary graduation and minimum proficiency examination requirements are awarded high school diplomas from the Sacramento County Board of Education. School districts are responsible for reporting dropout rates for returning students. After their participation in the Community School program, most students return to school programs in their communities.

Special Education Department

The mission of the Special Education Department is to provide a free and appropriate public school program emphasizing academic, personal, vocational, motor development, and social growth in order to prepare students with exceptional needs for employment, productive citizenship, and independent living. All individuals have the right to a quality of life that includes personal choice, dignity, privacy, and respect. SCOE is committed to providing educational programs and integrated life opportunities to enable individuals to maximize their potential as members of society.

Students with special needs may receive specialized educational services through their twenty-first year. SCOE provides 40 special day classroom settings on approximately 23 sites within the school districts, and six special education preschool teachers in 12 inclusion settings. Throughout the course of a school year, the Special Education Department serves approximately 2,000 students and provides Special Education programs and services to thirteen school districts within Sacramento County. In 2012, the department included approximately 75 staff members in

instructional, support and administrative positions. Programs are located on school campuses throughout Sacramento County and include the following:

- Infant Development Program (IDP)
- Severely Handicapped Preschool Programs (SH)
- Severely Handicapped (SH)
- Emotionally Disturbed (ED)
- Resource Specialist Programs (RSP)
- Designated Instructional Services (DIS) (i.e. language, speech and hearing; school social work; vision, orientation and mobility; transitional and career technical; and nursing services)

For infants and toddlers, Special Education student achievement is individually reviewed every six months using an Individualized Family Service Plan (IFSP). Students enrolled in programs for ages three through twenty-two have an Individual Education Program (IEP), which is reviewed annually. Both the IFSP and the IEP include the student's present level of academic performance, and a list of identified goals, outcomes and related services.

The SCOE Infant Development Program (IDP), Severely Handicapped (SH) and Emotionally Disturbed (ED) programs serve students in homes located throughout Sacramento County. There are thirty sites for children and families participating in the SH Program and five sites for students enrolled in the ED program.

Students with severe disabilities may have alternate forms of assessment, including developmental checklists, critical living skills or standardized tests of adaptive behavior.

Students who are served on a regular school campus may participate in the statewide STAR (Standardized Testing and Reporting) and CAT/6. Students who are unable to participate in the CAT/6, even with accommodations, are given an alternate assessment called the CAPA (California Alternate Performance Assessment). These tests are intended to measure the effectiveness of the school's total academic program.

Special Education's programs for Emotionally Disturbed students are on six campuses. Four elementary programs and one high school program are in local public school districts. They have six credentialed Special Education teachers and one administrator. Twelve para-educators and a number of support staff help provide additional assistance in implementing goals of student IEPs and support standards-based curriculum. Bannon Creek/Spinelli Elementary and Galt High School ED programs implemented the SCOE-adopted course of study and curriculum.

Leo A. Palmiter Jr./Sr. High School provides education to students with special needs and a primary disability of emotional disturbance. The students are referred directly from the local school districts of Sacramento County that are unable to provide the more highly-structured, supportive program that is available at Palmiter. Students receive on-site counseling from the school social worker and site-based mental health therapy from Sacramento County Mental Health. Students are provided a standards-based educational program that is supported by a strong vocational/school-to-world emphasis. In addition to a Workability Program, as in SCOE's Juvenile Court and Community schools, the LINKS philosophy is incorporated into Palmiter's school mission. Palmiter students may enroll in four ROP courses specifically designed for ED and Community School students. Services are provided to students based on their IEPs. Nine

classrooms serve seventh through twelfth grade students with an average class size of ten students per teacher and para-educator.

SCOE's Severely Handicapped program for students with severe disabilities provides a free and appropriate public school program emphasizing academic, personal, vocational, motor development, and social growth to prepare students with exceptional needs for employment, productive citizenship, and independent living. Instruction is based on the Special Education Alternative Curriculum Guide developed by the Special Education Administrators of County Offices (SEACO) organization. This curriculum guide is aligned with California Content Standards and enables students with moderate to severe disabilities to access the seven core curriculum areas outlined in the California State Frameworks. The M.O.V.E. (Mobility Opportunities Via Education) Curriculum has been implemented throughout the SH programs where applicable. The SH program consists of thirty-two classes located at twenty-five different sites throughout the county. Seven of these classes serve preschool age children; seven are located on elementary campuses, five on middle school campuses and six on high school campuses. Three programs specifically serve young adults up to the age of twenty-two. One class is located on the campus of California State University – Sacramento (CSUS), and two classes, one in a separate site and one on a high school campus, are located within the Elk Grove Unified School District. One middle school class specifically serves students with autism. Each class is staffed with one teacher and a minimum of two para-educators. The SH program has three principals. Additional para-educator support may be added as needed, depending on the needs of students enrolled. Other services, such as nursing consultation, speech and language or occupational therapy, are provided to students as needed based on their IEP.

It is a goal of the Special Education Department to provide the instructional programs and specialized services that enable students with special needs to complete their education. Dropout rates are not applicable for students enrolled in the SCOE Special Education programs. Through the IEP process, students may transfer to different County Office programs or be referred back to their home districts for services. School districts are responsible to report dropout rates for students returning to district-operated programs.

All students with special needs must have equal access to all technology and electronic learning resources appropriate for their needs. As IEP needs dictate, SCOE will provide students with the appropriate and necessary adaptive technology. Appropriate training will be provided for the staff.

Regional Occupational Programs

The Sacramento County Regional Occupational Program (ROP) prepares people for work in many of today's biggest growth industries. For more than 30 years, ROP has been a leader in providing high-quality tuition-free career preparation training in 80 occupational areas in the Sacramento Area. ROP offers its students a broad educational base through its combination of traditional classroom instruction and 'real world' internships with over 5,000 businesses in and around Sacramento County.

The SCOE Regional Occupational Program provides career technical training to high school students and adults. Its mission is to enable students and employers to successfully participate in and meaningfully contribute to the evolving twenty-first century workplace. ROP collaborates

with eleven school districts in three counties that coordinate their own programs but are under the umbrella of SCOE. Most ROP courses have two components: the traditional instructional classroom and the industry internship (community classrooms). Upon successful completion of an ROP course, students receive a certificate. To help augment the LINKS program, SCOE has created a number of ROP classes specifically designed for Juvenile Court, Community School, and ED students.

Sly Park Environmental Education Center

The Sly Park Environmental Education Center is a different kind of learning environment where the classroom is the outdoors and the students actively engage in field studies in the El Dorado National Forest. This type of experiential, environmental education is significant and valuable because children learn best when actively immersed. The best place to learn about the forest is in the forest. Children learn about connections in the natural world, the value of natural resources, and the importance of conservation to the future. Annually, over 7,500 elementary students from Sacramento and surrounding counties take part in the Sly Park Experience during the school

Sly Park is fully accredited through the California Department of Education and its affiliate, the California Outdoor School Administrators (COSA) organization. The experienced, professional staff consists of seven teachers, a dozen support staff, and a director.

Sly Park has several specialized learning centers that make the program unique and enriching: Weather, Astronomy, Challenge, Animals, Native American, and Science. Miles of hiking trails, from moderately difficult to wheelchair accessible, lead through a variety of forest habitats.

A major theme in the Sly Park experience is learning about people: collaborating, making friends, and living and getting along with others. These life skills are encouraged through weekly awards programs. One such award, the "Naturalist of the Week", has been recognized nationally. The curriculum at Sly Park is correlated with California State Department of Education adopted standards, frameworks, and guides, and is adapted to Sly Park's unique outdoor forest setting. Sly Park's credentialed teaching staff leads instruction.

Project TEACH

Project TEACH was formed to meet the challenges of promoting the educational success of children who are experiencing homelessness. It collaborates with shelters, transitional housing programs, and community agencies to serve children and their families. In addition, Project TEACH outreaches to motels, serves families temporarily staying with relatives or friends, and receives self-referrals. As a liaison between parents and schools, Project TEACH assists with enrollment, attendance, and academic success. At times, Project TEACH has helped students within SCOE school programs.

Project TEACH staff consists of one program coordinator and one credentialed teacher. Project TEACH also coordinates services with school districts, including the collection of data from each liaison. In Sacramento County alone, during the 2011-12 school year, 11,772 children experiencing homelessness were served in collaboration with the local educational agencies.

II. Goals and Strategies

List goals and realistic strategy for using telecommunications and information technology to improve education services.

The Sacramento County Office of Education works to support and assist the educational community to help students meet the high expectations that ensure their success as lifelong learners. SCOE believes that educational strategies that integrate technology into current content standards with the addition of the Common Core Standards, are necessary for students to acquire essential academic skills, to prepare for future careers and be active 21st Century learners.

Review of student data and input from program administrators and staff indicate a need to continue the emphasis on State Standards while moving towards implementation of Common Core Standards in the content areas of English/Language Arts and Mathematics during the next year. CST results for 2012 show that most SCOE Student Program students in grades 7-12 are at *Basic, Below Basic* and *Far Below Basic* in all content areas (the majority falling in the Below Basic categories).

The Juvenile Court and Community School programs, Palmiter ED program and SCOE ROP, have identified a need for these programs to work more collaboratively to support and enhance the standards and objectives found in each other's curriculum. Both the JCCS and Palmiter ED programs incorporate LINKS (*Leadership in everyday life, Ingenuity in thought and practice, Navigating choices, Keeping promises, Sufficiency in preparation*) philosophy, which bridges academic and vocational interests for at-risk youth, which is embedded throughout each program. Additionally, JCCS ROP teachers will be utilizing a new software program, Kuder, which will help provide planning academic and vocational goals for students. Due to common academic and behavioral issues of students in both the Palmiter ED and JCCS programs, the curriculum and technology resources used in JCCS are somewhat mirrored throughout the SCOE ED (Palmiter) programs. JCCS programs have adopted NWEA assessments to use as ASAM indicators. After initial assessment by SCOE teachers, students are placed appropriately in comprehensive software programs such as Compass Learning to help them improve deficiencies in English Language Arts and Mathematics. The homeroom teachers in the Palmiter ED program use NWEA in the same fashion along with other assessments identified in the IEPs to place students in specialized software (Compass Learning) or district approved textbooks. Due to the transient nature of both student populations, students are assessed every ninety days for growth, and appropriate adjustments are made on a student's Individual Learning (ILP) or Individualized Education Plan (IEP). District program goals, as stated in Single Site Plans, are to improve student ELA and Mathematics scores by 5 points (on NWEA assessments) while enrolled in our programs for 90 instructional days. Students, particularly in the JCCS, return to home districts within one or two semesters, so benchmarks for each year of the plan may address different student cohorts. Also, depending on abilities, students can be placed in Odysseyware online-based curriculum to meet academic goals for credit recovery as well as learning content standards for ELA, Mathematics, and other courses. Students are often placed in online resources

such as Compass Learning, Odysseyware, or Accelerated Reading to help in the acquisition of basic skills in English/Language Arts, Reading, and Mathematics.

Several of SCOE's Special Education ED (Emotionally Disturbed) and Severely Handicapped (SH) classrooms for elementary, middle, and high school students are located on the campuses of the local school district or regional centers. Students adhered to the curriculum and resources that are provided by each district. Teachers within these programs do utilize SCOE resources such as technology to additionally support their students' academic goals. SCOE's SH (Severely Handicapped) program teachers use adaptive technology resources for students as identified in their IEPs to teach language and communication skills. A number of SH teachers utilize software such as Boardmaker, iOS apps, and M.O.V.E. curriculum to help students acquire necessary skills addressed in their IEPs.

SCOE currently uses multiple technology tools to keep track of student progress and grades, attendance, and other equally important data. All SCOE Juvenile Court, Community, and ED programs use the PowerSchool Student Information System. Special Education programs employ Special Education Information Systems (SEIS) to help with record-keeping and for writing Individualized Learning Plans (IEPs). ROP programs use Administrative Software Applications Program (ASAP) for its recordkeeping. ED Program teachers and support staff have begun using Schoolwide Information System (SWIS) to track and report behavioral data. All teachers and support staff have received training on using these tools. These digital tools simplify teachers' abilities to collect, evaluate, and use date effectively to develop individualized student goals, inform instruction, and communicate student progress with families.

Sacramento County Office of Education District Curricular Goals:

1. All students within Juvenile Court*, Community*, and Special Education ED school programs will demonstrate adequate progress toward state standards in the areas of English/Language Arts and Mathematics.

2. All Special Education (SH) students will demonstrate adequate progress in meeting IEP goals for functional literacy in English Language Arts, Mathematics, and Life Skills (including communication skills).

Student progress goals are commensurate with the number of days in the classroom.

Goal 1: *Student achievement in Juvenile Court, Community Schools, and Special Education ED programs will increase with the use of technology to improve teaching and learning as supported by district curricular goals.*

Objective 1.1: All students enrolled in our programs for 90 days or more will improve their reading and math scores as measure by NWEA, district and Individual Learning Plan assessment tools, and Individual Education Plan designated assessments.

Benchmarks:
- Year 1: Students enrolled 90 days or more, after using technology specifically addressing English/Language Arts and Math Standards, will improve 5 points or more on the NWEA assessments.

- Year 2: Students enrolled 90 days or more, after using technology specifically addressing English/Language Arts and Math Standards, will improve 5 points or more on the NWEA assessments.
- Year 3: Students enrolled 90 days or more, after using technology specifically addressing English/Language Arts and Math Standards, will improve 5 points or more on the NWEA assessments.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
Teachers assess students using NWEA upon entering specified school program	Within one week of program placement (year-round sites) or Fall Semester.	Classroom teacher	Review of assessment and student ILP notated.	NWEA assessment, student ILP notations
Students placed in age/grade appropriate resources such as Edge curriculum, Compass Learning, Odysseyware courses, Accelerated Reading, and other district supported curriculum and digital resources.	Fall Semester (or ongoing throughout year)	Classroom teacher	Teacher observations and check for understanding methods to ensure appropriateness of resource.	Classroom lesson plans/activity logs, assessments built within specified resources.
Ninety-day NWEA assessments for individual students to evaluate growth and progress.	Ongoing	Classroom teacher	Student attendance from Power School; ILP notation of earlier assessments reviewed.	NWEA Assessments; student ILPs and activity logs from designated resources.
Teacher reports created regarding classroom assessments and evaluations, provided to site/district administration for review. District and program administrators evaluate growth to prepare reports for Assistant Superintendent of Student Programs.	Spring/Summer Semester	Teacher / Site and district administration.	Reports run from Power School and NWEA	NWEA reports, Power School, yearly district reports.

Goal 2: *All Special Education SH students will increase their functional communication skills in the areas of writing, oral expression, and/or reading comprehension with the assistance of technology tools as measured and identified in their IEPs.*

Objective 2.1: By June 2014, all Special Education SH students will increase their functional communication skills by 30% as measured by instruments identified in their IEPs.

Benchmarks:

- Year 1: By June 2014, all Special Education SH students will increase their functional communication skills by 10% as measured by instruments identified in their IEPs.
- Year 2: By June 2015, all Special Education SH students will increase their functional communication skills by 20% as measured by instruments identified in their IEPs.
- Year 3: By June 2016, all Special Education SH students will increase their functional communication skills by 30% as measured by instruments identified in their IEPs.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
Teachers, who acquire iPads and other adaptive technology devices for assisting students acquiring communication skills, receive training and orientation to devices and apps.	Beginning Fall Semester of each year of plan	Site/Program Administrator	Budget/grants awarded to designated teacher/program for specific tool.	Purchase order, training agenda/sign-in sheet.
Assessment of students' communication skills with identified instrument; students receive appropriate technology device as identified in IEP.	Fall Semester or as indicated by IEP timeline	Teacher and Resource Specialists	IEP assessment instrument	IEP assessments and reports
End of year assessment to measure communication skills growth of SH student.	Spring or IEP timeline	Teacher and Resource Specialists	Continuous observation of student	IEP assessments and reports; parent/guardian surveys or observations noted.

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

All students within SCOE Student Programs have access to technology throughout the school week, either in their homeroom classes, ROP classes, or computer labs located on their school campuses. Besides online curriculum resources, students access the Internet for research projects. SCOE students do adhere to the "*Student Use of Technology*" Agreement policy, which is signed when enrolled in our school programs. The acceptable use policy does stipulate students may not plagiarize work without permission and abide by copyright laws. (Appendix A)

ROP Teachers within the SCOE Juvenile Court and Community School were trained this past fall to use the Common Sense Media lessons to educate students about the appropriate and ethical use of information technology in the classroom and beyond. All Juvenile Court, Community, and Palmiter Special Education teachers will become familiar during the next year about integrating the lessons within Common Sense Media's Scope & Sequence sections - *Information Literacy* and *Creative Credit and Copyright*. All teachers will utilize grade appropriate lessons within these sections to help students distinguish lawful from unlawful uses of copyrighted works, including the concept and purpose of both copyright and fair use. Teachers will also use digital resources from the California Learns Instructional Resource Portals and CTAP to use with students to provide additional support to teach concepts.

Goal 1: *All students within the Juvenile Court, Community, and Palmiter Special Education Programs will learn to distinguish lawful from unlawful uses of copyrighted works, including the concept and purpose of both copyright and fair use.*

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
Teachers will be introduced to Common Sense Media curriculum centering on the scope and sequence sections on Information Literacy and Creative Credit and Copyright and how to use grade appropriate lessons and activities.	Fall 2013 and each year following.	Program Administrators and site principals	Site Principals/Program Administrators will help set dates & times of instruction with classroom teachers each semester	In-service and meeting agendas, sign-in sheets,
Students will be introduced concepts of copyright and fair use using lessons and activities from Common Sense Media, California Learns, and CTAP.	Fall, Spring 2013, each year following	Classroom Teachers and support staff.	Principals will review lesson plans; survey students to check for understanding each semester.	Student surveys, classroom projects

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)

Providing students with a safe, secure learning environment is paramount with the Sacramento County Office of Education. Our district makes it a priority the all students' online experience is a positive learning experience and safe. SCOE has multiple anti-spam and web filtering programs that are continuously updated and maintained. Student access to inappropriate web sites is blocked and monitored. The Juvenile Court School programs have very limited access to the Internet, but do have access to online resources such as Odysseyware, Compass Learning, Accelerated Reading, and other educational resources approved by school administration. Students within the Community and ED programs have moderate access to the Internet. Students within the CARE classrooms have access through the hosted districts' servers and abide by their acceptable use policies.

SCOE Juvenile Court and Community ROP teachers received training Fall of 2012 and began presenting grade appropriate lessons from Common Sense Media (CSM) on Internet Safety, including how to protect online privacy and avoid online predators. All SCOE Juvenile Court, Community, and Palmiter Special Education teachers and support staff will be introduced to Common Sense Media curriculum during the 2013-14 school year. CSM's scope and sequence sections cover grade appropriate lessons in the areas of Internet Safety, Privacy & Security, Relationships and Communication, Digital Footprint and Reputation, and Cyberbullying. Teachers will also be able to use additional resources about Internet Safety from CTAP and the California Learns Instructional Resource Portal to help support instruction. Students will receive grade appropriate instruction on how be safe online, protect online privacy, avoid online predators, as well as learning to have acceptable online behavior. All SCOE students will be better prepared to live and work as responsible 21st Century citizens.

Goal 1: *All SCOE students will learn how to be safe online, including to protect online privacy, avoiding online predators, as well learning what it means to be respectful and responsible citizen in a digital world.*

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
SCOE Teachers receive orientation to Common Sense Media curriculum and other resources to help develop and implement Internet Safety Instruction within their classrooms.	Fall 2013, and each year of plan	Site and Program Administration	In-service agendas, sign-in sheets	Teacher sign-in sheets,
Teachers integrate grade appropriate Internet Safety lessons and activities into curriculum.	Fall 2013, and continuous throughout each year of plan	Teachers, Site Administrators	Lesson Plans, Classroom Observations notations	Lesson plans, teacher surveys

Students receive age appropriate instruction on Internet Safety.	Fall 2013, and continuous throughout each year of plan	Teacher	Teacher observation, lesson plans, student surveys	Lesson Plans, student assessment/surveys

III. Professional Development

Provide a professional development strategy to ensure that staff understands how to use these new technologies to improve education services.

The Sacramento County Office of Education maintains one computer lab at the district office, which has 32 student computers, 1 teacher workstation, a projector, speakers, document camera, and whiteboard. Departments use the computer labs routinely to provide staff development and training for a variety of websites and technologies that are needed to provide education services at SCOE. SCOE School Program teachers also are able to schedule trainings on staff development days at school sites that have computer labs.

The Computer, Network and Telecommunication Support Department also routinely offer staff training for the telephone and email systems utilized by all SCOE employees. The department also offers other training when requested and from time to time contracts with outside training agencies to provide technology training in the SCOE lab so that a number of SCOE employees can attend the trainings without having to travel to another location. These trainings are open to all SCOE teachers as well.

In addition, the CTAP (www.myctap.org) department offers both county-wide and regional trainings on a variety of technologies that help improve education services for not only SCOE but for all educational agencies in Region 3. A number of trainings are offered online to help teachers utilize Web 2.0 tools and other digital resources to enhance their lessons and engage students. SCOE's Instructional Technology and Learning Resources department will continue to provide teacher training through their TechConnect 2.0 program (www.techconnect20.com). TechConnect 2.0 provides SCOE and regional teachers with resources and workshops that will enable them to connect the best technology tools for designing common core lesson plans. SCOE teachers can also join TechConnect 2.0's online community to collaborate and learn from other teachers.

Student Programs and Special Education administration have summarize their administrators, teachers, and support staff as being proficient in basic computer applications, email, and using district supported digital resources such as student information systems. However, there will be additional technology introduced to various programs as funding becomes available. Listed below is a summary of professional development that will be needed for SCOE Student Program administrators, teachers and support staff over the next few years:

- The JCCS and ED programs eventually may replace outdated desktop computers with virtual desktops and have newer versions of productivity tools such as MS Office. Teachers and support staff may need training at this point but may utilize a peer-training model to learn to use new hardware and software.
- SCOE Teachers will need to use the extended features of PowerSchool, SEIS, SWIS, and other digital record keeping software to manage, review and evaluate student data.
- ROP teachers and school counselors will receive training in the use of Kuder software to help plan and chart students career and academic paths.

- ED teachers are planning to have more of an online presence to highlight school and classroom events for students and their families. ED teachers will need training on creating a school and classroom webpages.
- SH and other Special Education teachers are planning on implementing additional iPad initiatives as budgets allow which will require additional professional development.
- SCOE teachers will need training to help develop and integrate the instruction of digital citizenship within their curriculum, utilize the expanded features of various student information systems, and integrate technology effectively in common core lessons.
- As the district prepares teachers for the implementation of the Common Core State Standards, teachers will need to be trained to administer computer adaptive testing (CAT) for yearly mandatory summative assessments.

Goal 1: *Replace existing lab computers with either new computers or virtual machines. Offer more training opportunities to staff to fully utilize the lab's capabilities and provide more technical training opportunities to administrative staff and teachers.*

Objective 1.1: Identify funding sources to purchase replacement computers. Identify external agencies/companies who can provide training in the SCOE lab at a reasonable cost. Utilize SCOE employees to provide technical training when feasible.

Benchmarks:

- Year 1: Identify funding sources for lab computer replacement.
- Year 2: Purchase new computers and install them. Contract with training companies to provide technical training when internal SCOE staff does not have the time or experience necessary to provide such training.
- Year 3: Continue with training of staff and teachers.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
Identify funding sources for lab computer replacements (virtual machines)	Fall, Spring 2013	CNTS staff, Director of Tech Services, Assistant Superintendent of Technology	Price quotes, purchase and work orders	Work order with completion of installation
Purchase and installment of virtual desktop machines.	Spring 2013	CNTS staff, Director of Technology Services	Work order confirmation of installations. Training schedules and sign-ins.	Work order of installation; Training sign-in sheets.
Training of software applications; orientation to virtual desktop machines	Spring 2013, ongoing each year of plan	Director of Technology, Support trainers	Training schedules and descriptions posted	Training sign-in sheets

Goal 2: *SCOE JCCS and Special Education teachers will learn to use the extended features of PowerSchool, SEIS, SWIS, and other digital record keeping online software to manage, review, and evaluate student data.*

Objective 2.1: All SCOE teachers will learn to effectively use current student information systems and digital record-keeping resources to evaluate student achievement to help create individual academic and behavioral goals for their students.

Benchmarks:
- Year 1: 50% of all SCOE teachers will learn to effectively use current district student information systems and digital record-keeping resources to evaluate student achievement to help create individual academic and behavioral goals for their students.
- Year 2: 75% of all SCOE teachers will learn to effectively use current district student information systems and digital record-keeping resources to evaluate student achievement to help create individual academic and behavioral goals for their students.
- Year 3: 100% of all SCOE teachers will learn to effectively use current district student information systems and digital record-keeping resources to evaluate student achievement to help create individual academic and behavioral goals for their students.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
Teachers will be in-serviced with their programs SIS and other digital record-keeping resources.	Fall, and on-going each year of plan as needed.	Site and Program Administrators	ILPs and IEPs, student activity logs, in-service sign-in sheets and agendas	In-service sign-in sheets, agendas, teacher surveys

Goal 3: ROP teachers and school counselors will receive training in the use of Kuder software to help plan and chart students' career and academic paths.

Objective 3.1: All ROP teachers and Student Program counselors will use the Kuder software for student career and academic planning.

Benchmarks:
- Year 1: All ROP teachers and Student Program counselors will use the Kuder software for student career and academic planning.
- Year 2: New ROP teachers, Student Program counselors, and support staff will use the Kuder software for student career and academic planning.
- Year 3: New ROP teachers, Student Program counselors, and support staff will use the Kuder software for student career and academic planning.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
ROP Teachers, Student Program counselors will receive training to use Kuder software.	Summer/Fall 2013	Director of JCCS, JCCS Curriculum Specialist	Training agenda, sign-in sheets	Sign-in sheets
Implementation of Kuder with JCCS students	Fall 2013, and each semester of plan	ROP Teachers, Counselors, and Curriculum Specialist	Kuder reports generated to summarized students in system.	Kuder summary reports

Goal 4: *Palmiter ED principal and teachers will establish an online presence to communicate with students and their families about events and activities at their school sites and classrooms. A school website will be created with classroom webpages.*

Objective 4.1: Palmiter ED Program administrator and 50% of all teachers will learn how to create and maintain a school website with classroom webpages to better communicate with students and their families about school events and classroom activities.

Benchmarks:
- Year 1: Palmiter ED principal and 20% of all teachers will learn how to create and maintain a school website with classroom webpages to better communicate with students and their families about school events and classroom activities.
- Year 2: Palmiter ED principal and 30% of all teachers will learn how to create and maintain a school website with classroom webpages to better communicate with students and their families about school events and classroom activities.
- Year 3: Palmiter ED principal and 50% of all teachers will learn how to create and maintain a school website with classroom webpages to better communicate with students and their families about school events and classroom activities.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
Principal and Teachers will be review possible resources to create online presence such as Google Sites, Weebly, Edublogs, and other web development resources. Select resource.	Fall/Spring 2013	Program Principal	Meeting agenda and roster, log of resources reviewed	Meeting notes with resource summary; if needed subscription purchased (PO) and registration of resource.
Training of selected resource and creation of school website and teacher pages.	Spring/Summer 2013-14, continuous throughout plan	Site Principal and classroom teachers	Website available online for students and families; teacher webpages created.	Website URL, notice to stakeholders

Goal 5: *All SCOE Student Programs and Special Education teachers will learn digital citizenship concepts and integrate lessons and activities within their curriculum to instruct their students about Internet Safety, address the appropriate and ethical use of information technology, and the concept and purpose of copyright and fair use. Teachers will be introduced to Common Sense Media curriculum centering on the scope and sequence sections on Information Literacy and Creative Credit and Copyright, Internet Safety, Privacy & Security, Relationships and Communication, Digital Footprint and Reputation, and Cyberbullying to create grade appropriate lessons and activities.*

Objective 5.1: All SCOE JCCS and Special Education teachers will integrate digital citizenship lessons and activities within their curriculum.

Benchmarks:

- Year 1: 50% of all JCCS and Special Education teachers will integrate digital citizenship lessons and activities within their curriculum.
- Year 2: 75% of all JCCS and Special Education teachers will integrate digital citizenship lessons and activities within their curriculum.
- Year 3: 100% of all JCCS and Special Education teachers will integrate digital citizenship lessons and activities within their curriculum.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
Teacher in-serviced on new CIPA requirements and introduced to Common Sense Media's digital citizenship curriculum.	Fall 2013, and each year of plan	Site and Program Administrator	In-service agenda and sign-in sheets	In-service sign-in sheets
Students receive instruction on Internet Safety, copyright, appropriate use of technology, and other digital citizenship concepts.	Fall, Spring (each year of plan)	Classroom Teacher	Classroom lesson plans, student projects, student surveys/assessments	Student surveys/assessments

Goal 6: *SCOE JCCS and ED teachers will learn to integrate technology within their lessons to support students' acquisition of the common core standards.*

Objective 6.1: 50% of all JCCS and ED teachers will create one lesson that integrates technology to support students' acquisition of the common core standards.

Benchmarks:
- Year 1: 25% of all JCCS and ED teachers will create one lesson that integrates technology to support students' acquisition of the common core standards.
- Year 2: 50% of all JCCS and ED teachers will create one lesson that integrates technology to support students' acquisition of the common core standards.
- Year 3: 75% of all JCCS and ED teachers will create one lesson that integrates technology to support students' acquisition of the common core standards.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
Teachers will be introduced to CCSS.	Fall 2013, and each semester of plan	Site and Program Administration	Workshop/in-service agendas, sign-in sheets	Sign-in sheets
Teachers attend workshops/training to learn technology tools and resources to help support their use and integration in their lesson planning.	Continuous and ongoing throughout year as needed	Teacher, Site Administration	Registration and completion certification of workshop completion.	Certification of workshop/training completion.
Teachers create a common core lesson(s) that incorporates technology.	Spring, ongoing each semester of plan	Teacher / site administrator	Teacher lesson plans, student project	Lesson plans

Goal 7: *SH and Special Education teachers, as funding becomes available, will purchase and implement an iPad program to assist students with attainment of goals and objectives stated within their IEPs.*

Objective 7.1: SH and specified Special Education teachers will use iPads and appropriate "apps" with students to help students' acquisition of goals and objectives stated in their IEPs.

Benchmarks:
- Year 1: Develop a plan to use iPads in designated programs/classrooms, obtain funding to purchase iPads, and provide training for designated teachers to implement use within their classrooms.
- Year 2: Provide training to implement iPad initiative for designated program and classroom teachers and support staff. Implement students' use of iPads and appropriate apps.

- Year 3: Designated students use iPads and appropriate apps to help learn skills stated in their IEPs.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
Research use of iPads with special needs students; develop a implementation plan for their use; obtain funding to purchase	Spring/Summer 2013-14 and each year of plan as funding becomes available	Program Administrators and classroom teachers	Project proposal, purchase requisition/orders with funding source identified.	Project summary and purchase orders; inventory records
Training provided on use of iPad and appropriate apps	Spring/Summer 2013-14 and each year of plan as needed when funding is available	Program and site administrator	Training agenda and sign-in sheets	Sign-in sheets.
Implementation of iPad initiative with students.	Spring/Summer 2013-14 and each year of plan as funding becomes available	Teachers	IEP notation of student use and check-out log	Student activity logs and IEPs

IV. Infrastructure, Hardware, Technical Support, and Software

Provide an assessment of the telecommunication services, hardware, software, and other services that will be needed to improve education services.

Student Programs' Computer Access

Programs	Hardware available
Juvenile Court Schools: El Centro and Morgan	13 Classrooms – each classroom has 12-15 PC desktop computers; each teacher has their own desktop computer. There are several LCD projectors available for teachers to checkout.
Community Schools: • Gerber CS	1 computer lab w/15 PCs and LCD projector; 2 classrooms with 3-4 desktops PCs; each teacher has computer.
• Hickey CS	1 computer lab w/22 desktop PCs and LCD projector; 2 classrooms with 3-4 desktop PCs; LCD projector available for checkout; each teacher has a computer.
• North Area CS	2 classrooms with approximately 10 desktop PCs in each; 2 LCD projectors; each teacher has a computer.
• CARE CS (3)	Three classrooms: each teacher has their own computer; 1 Elmo projector; each classroom is located on various district campuses; each has access to use computer labs on site.
ED Programs: • Palmiter and Elementary ED	9 classrooms - each teacher has computer; 1 computer lab w/12 desktop PCs with LCD projector; each classroom has one student PC; LCD projectors available for checkout. Elementary ED classrooms are located on district campuses and have access to their computers and labs.
SH Programs: at various district campuses	Each Specialists/Teacher has their own computers; 12 iPads at varied locations + 7 iPads for student home use.

* Computers that are 48 months or older will be eventually replaced with virtual desktop machine for student and classroom use over the next three years.

Existing Hardware: Internet / Network Infrastructure:

All SCOE school sites and administrative sites connect into the David P. Meaney Educational Center for Internet services.

Network Transport and Delivery

The SCOE network infrastructure has a mixture of the following types of network transport and delivery media:

  - Private single mode long distance fiber optic cable, used to interconnect sites back to the DPMEC.

  - Multi-mode and single mode fiber, used to distribute network services at local sites.

  - OPT-E-Man: Fiber optic circuits, leased from local telephony service providers to interconnect sites back to the DPMEC.

  - ISDN data circuits, used to deliver telephone trunk lines into the SCOE phone system

  - T-1 data circuits, lower bandwidth leased data transport circuits used to interconnect sites back to the DPMEC when higher bandwidth options are not available.

Network Routing and Switching Equipment

The SCOE network infrastructure has am mixture of the following types of network routing and Switching Equipment:

  - HP ProCurve network switches, routers and wireless devices

  - Cisco network switches and routers

  - Juniper network switches and routers

  - Dell network switches and routers

  - Force 10 network switches and routers

  - Transition Networks media converters

  - Converter fiber optic media converters

Firewalls and Security Devices

The SCOE network infrastructure has a mixture of the following types of firewalls and security devices:

  - CheckPoint firewalls, VPN devices and policy servers

  - LightSpeed System Rocket content filtering devices

  - Barracuda email SPAM filter

- Sophos antivirus devices

- Airwatch mobile device management devices

<u>Telephone Equipment and Supporting Network Equipment</u>

The SCOE Network Infrastructure has am mixture of the following types of telephone equipment and supporting network equipment:

- ShoreTel desktop phones

- ShoreTel voice conference servers

- ShoreTel digital and analog phone switches

- ShoreTel system management services

Existing Internet Access: Currently, the Sacramento County Office of Education receives its Internet connectivity through the California K12 High Speed Network (K12HSN) and CENIC (Center for Educational Network Initiatives in California).

Current Bandwidth into the Internet is 10 Gbps with a backup alternate 1 Gbps connection that connects into the El Dorado County Office of Education for network redundancy. The up-stream Internet Service Provider for the Sacramento County Office of Education is the K12HSN and CENIC. K12HSN provides connectivity for all K12 Districts and County Office of Education sites in California. CENIC is the upstream provider for the K12HSN as well as all of the University of California system, the California State University system and the California Community College System as well as multiple private higher educational entities including Stanford University, USC (University of Southern California) and the San Diego Super Computing Center.

The Sacramento County Office of Education provides local on site support to the K12HSN and CENIC when requested to assist in supporting their network hardware that is located here at the David P. Meaney Educational Center.

The primary link into the K12HSN and CENIC utilize a private fiber optic circuit provided by Comcast as a result of a license agreement with the Sacramento Cable Commission.

The backup / secondary link to the K12HSN and CENIC unitize a leased line supplied by AT&T. Both the Primary and Secondary links are currently funded by the State of California as part of a statewide network supplying network access to all levels of California educational entities.

The Sacramento County Office of Education functions as the Internet service provider for the majority of all Sacramento County K12 Districts and Schools and provides support to these entities when requested.

Existing Electronic Learning Resources: Compass Learning, Renaissance Learning, Odysseyware, online GED software, Internet websites related to subjects and skills being taught in the classroom.

Existing Technical Support: The department that provides Technical Support to technology users located within SCOE and outside of SCOE is the CNTS (Computer, Network & Telecommunication Support) Department.

CNTS is staffed by the following FTE positions:

1 FTE Director

1 FTE LAN / WAN (Local Area Network / Wide Area Network) Coordinator

1 FTE Systems Administrator/Engineer

5 FTE Personal Computer Technology Support/Trainers

SCOE / CNTS currently supports approximately 1,500 computers organization-wide.

In addition, CNTS supports an extensive SCOE WAN and a metro area network providing connections for the majority of schools in Sacramento County. A consistent and ongoing funding stream to support this service is imperative.

The Sacramento County Office of Education's intent is to ensure that technology is a tool for teaching and learning, and to enhance all employees' ability to perform their duties in a manner consistent with current "Information Age" expectations.

To achieve this goal, teachers and staff must have access to reliable technology and supporting infrastructure to meet program curricular goals, objectives and activities. The CNTS department provides support for installation, maintenance, training, and support for the times when the technology fails to work as intended is critical.

WAN/LAN (Wide Area Network / Local Area Network) support and other duties as assigned are provided by 1 FTE Wide Area Network Coordinator and 1 FTE Network Administrator.

Primary SERVER / FIREWALL support in addition to managerial related duties are provided by 1 FTE Director.

Application, computer hardware, peripheral hardware, training, telephone / mobile telephone, and video conferencing support as well as other duties as assigned is provided by five FTE Personal Computer Technology Support/Trainers

The Sacramento County Office of Education CNTS department maintains technical support contracts on the following:

Lightspeed Systems - Network Content Filtering Device (This unit is the main component of our CIPA compliance)

Liebert UPS - Provides short-term battery backup for SCOE data center.

Juniper Networks - Multiple network switches

Dell LLC - Multiple network server and disk storage arrays

Check Point Firefly - Network security firewall, licenses, software and support.

Intermapper - Network traffic and device monitoring server software.

Diesel generator- Provides long-term backup electrical power to SCOE data center.

Regarding support and implementation of CIPA requirements:

The Sacramento County Office of Education provides for the safety and security of minors when using electronic mail, chat rooms, and other forms of direct electronic communications, unauthorized access including "hacking" and other unlawful activities by minors online, unauthorized disclosure, use, and dissemination of personal information regarding minors as well as restricting minors' access to materials harmful to minors in the following manner.

1: Educating minors and staff about appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms, as well as cyberbullying awareness.

2: Providing Technology Protection Measures in the form of LightSpeed Systems Content Filtering Appliances, CheckPoint Firewall Appliances and in some cases where appropriate computer hardware is configured to restrict all or a limited subset of network access privileges.

3: The Sacramento County Office of Education Board maintains Administrative Rules and Regulations 6130, which address all aspect of current CIPA requirements.

Provide an assessment of the telecommunication services, hardware, software, and other services that will be needed to improve education services.

Hardware Needed: The following Network Hardware is needed to support growth, replace existing equipment nearing the end of it's service cycle, and expand the network capabilities to meet the demand of a more network dependent educational environment and work environment:

Replacement Wireless Infrastructure across all SCOE sites.

58 Ruckus Zone Flex 7928 Wireless Access Points

1 Ruckus Zone Director 3000 Wireless Management Server

Total Cost: $43,808.64

Funding Sources: E-Rate and General Fund

Replacement Security Firewall located within the Data Center at the DPMEC.

1 Palo Alto PA-5050 Firewall

1 Threat Prevention Subscription for PA-505

1 Bundled Support Contract

1 Professional Services to assist with install

Total Cost: $72,671.20

Funding Sources: E-Rate and General Fund

Replacement Core Switching Infrastructure located within the Data Center at the DPMEC.

5 Juniper EX4200, 48T Network Switches

3 Juniper EX 4550 Network Switches

2 Juniper EX4550 8, Port 10GbE SFP+ Expansion Modules

12 Juniper SFP+ 10GBase, SR 10 Gigabit Ethernet Optics

4 Juniper SFP+ 10 Gigabit Ethernet LRM Optics

Total Cost: $92,339.87

Funding Sources: E-Rate and General Fund

Additional File Storage Disk Arrays located within the Data Center at the DPMEC.

2 Dell EqualLogic PS6510ES SAN Storage Array w/ 10GbE network interface

Total Cost: $117,518.06

Funding Sources: E-Rate and General Fund

Additional File File Server located within the Data Center at the DPMEC

4 Dell PowerEdge M620 Blade Servers for Dell M1000 Blade Chassis

Total Cost: $35,332.20

Funding Sources: E-Rate and General Fund

In addition to these specific hardware items that are needed beginning in the 2013/14 fiscal year, SCOE will also need to add additional firewalls at remote sites to create VPN tunnels to protect student data and utilize non-SCOE network connections.

Additional servers will need to be purchased over the next 3 years to support our growing virtual server and virtual desktop infrastructures.

Finally, SCOE will need to build and maintain a Disaster Recovery Site in an offsite remote location. This will require additional servers, storage arrays, networking equipment, firewalls and network optimization technologies so that SCOE's data will be protected in the event of a major disaster to our existing data center.

Electronic Learning Resources Needed: Renewal of subscriptions to online resources. Appropriate Apps for new iOS devices for Special Education and budget allows.

Networking and Telecommunications Infrastructure Needed: Additional Power over Ethernet (PoE) switches will need to be procured to install ShoreTel VoIP at all SCOE locations. Additional ShoreTel telephone "switches" will also need to be purchased for each site and installed.

SCOE is also in the process of converting all T1 sites to either leased fiber or dark fiber, whenever available. This will allow a greater utilization of network resources located at SCOE, faster Internet access, the delivery of SCOE's VoIP phone system, and the eventual delivery of SCOE's virtual desktops to each site.

Physical Plant Modifications Needed: None at this time.

Technical Support Needed: Professional Services will be required to implement the new firewall system and SCOE staff will need professional development to maintain the system once it has been installed. Similar support may be needed if new types of network switches or servers are installed to support the needs of the organization.

Professional Development for CNTS staff to implement virtual desktops at all SCOE sites that have enough bandwidth which may include VMware training and Windows 8 training.

SCOE feels strongly that technical staff should receive regular professional development to maintain their skills and stay abreast of new and emerging technologies. Staff is encouraged to attend the yearly CETPA K-12 Technology conference in addition to other seminars or conferences in California that are related to their job duties and required skill sets.

Provide an assessment of the telecommunication services, hardware, software, and other services that will be needed to improve education services.

SCOE has a number of technology-related initiatives that will be implemented over the course of the next three years. They include upgrading and maintaining the network infrastructure, installing new firewall and wireless equipment, installing new virtual computer technologies, and supporting the new systems once they are installed.

Year 1 Benchmark: New Palo Alto firewall installed and configured. New Juniper switches installed and configured. New Dell servers and storage area networks (SAN) installed. New wireless system installed. Install VoIP system at Highlands High School. Research upgrading BESTNet to 10 gigabits and convert to SFP+ fiber optics solution. Research converting remaining T-1 lines to higher bandwidth fiber optic solutions.		
Recommended Actions/Activities	**Timeline**	**Person(s) Responsible**
Palo Alto is installed, configured and operational.	By August, 2013	Bob Carter and Jerry Jones
New Juniper switches are installed in data center.	By December, 2013	Bob Carter

New Dell servers and SAN are installed and configured.	By December, 2013	Jerry Jones
New Wireless system is installed at all SCOE sites and configured.	By June, 2014	Bob Carter
Install VoIP phones at Highlands High School.	By December, 2013	Bob Carter, Travis Ketchum and Jerry Jones
Research, design, and present to stakeholders a plan to upgrade the 10 Gbit network switching infrastructure of BESTNet Core Switches. (BESTNet - SCOE managed network that directly supports Sacramento County School districts Internet connectivity and connection into CENIC/K12HSN).		Bob Carter
Research, design, and present to stakeholders a plan to convert any remaining media converter based CWDM solutions for BESTNet sites to a switch-to-switch SFP or SFP+ solution. Wavelength-division multiplexing (WDM) is a technology, which multiplexes a number of optical carrier signals onto a single optical fiber by using different wavelengths (i.e. colors) of laser light. (SFP) small form-factor pluggable is a compact, hot-pluggable transceiver used for both telecommunication and data communications applications.		Bob Carter
If possible and fiscally sound, convert existing T-1 WAN links to higher bandwidth fiber optic solutions using either the BESTNet infrastructure or a LECs. Local Exchange Carriers (LECs) is a regulatory term in telecommunications for the local telephone companies. The existing T-1 WAN links are located at the following sites: Ralph Richardson, Bannon Creek, Galt High School Special Ed, Jessie Baker, Bradview C&I Warehouse, Hiram Johnson Infant Center, Dry Creek.		Bob Carter

Year 2 Benchmark: Begin upgrading 10 Gigabit network switches on BESTNet network. Convert remaining media converter CWDM solutions to switch-to-switch connections. Implement sFLOW network monitoring system. Begin converting SCOE WAN sites to encrypted VPN systems. Continue converting T-1 WAN links to higher bandwidth network connections. Install 250 virtual computers to replace existing computers that are 7 years old or older at SCOE sites.

Recommended Actions/Activities	Timeline	Person(s) Responsible
Begin the process of upgrading the 10 Gbit network switching infrastructure of BESTNet Core Switches. This consists of installing SFP+ Modules and corresponding transceivers into existing switching infrastructure.		Bob Carter

Recommended Actions/Activities	Timeline	Person(s) Responsible
Begin the process of converting any remaining media converter based CWDM solutions for BESTNet sites to a switch-to-switch SFP or SFP+ solution.		Bob Carter
Implement a sFLOW network monitoring system for all SCOE LAN/WAN links. sFlow is a technology for monitoring network, wireless, and host devices.		Bob Carter
Begin the process of converting all SCOE owned WAN sites located outside of the SCOE protected network to secure encrypted VPN solutions. A virtual private network (VPN) extends a private network across public networks like the Internet. This will require a site based VPN appliance compatible with our SCOE network firewall security systems.		Bob Carter
Continue, if possible and fiscally sound, convert existing T-1 WAN links to higher bandwidth fiber optic solutions using either the BESTNet infrastructure or a LECs.		Bob Carter
Install, configure and maintain virtual 250 virtual computers at SCOE sites.	By June, 2014	Jerry Jones and CNTS Tech Staff

Year 3 Benchmark: Complete 10 gigabit upgrade for BESTNet core switches. Complete process of converting CDWM solutions to switch-to-switch connectivity. Upgrade core routing equipment located at main SCOE sites. Complete the conversion of T1 sites to higher bandwidth and use VPN technology to provide SCOE programs with SCOE network resources even if they are located on another district's campus. Install virtual computers, as needed at remote and local SCOE sites.

Recommended Actions/Activities	Timeline	Person(s) Responsible
Continue and possibly complete the process of upgrading the 10 Gbit network switching infrastructure of BESTNet Core Switches. Upgrade would include all interconnectivity between routers/switches and links into selected local school districts.		Bob Carter
Continue the process of converting any remaining media converter based CWDM solutions for BESTNet sites to a switch-to-switch SFP or SFP+ solution.		Bob Carter
Upgrade Key CORE Routing/Switching equipment located within the SCOE Data Center and at possible main SCOE sites, (Cy Young, Missile Way, Palmiter/Hickey, El Centro)		Bob Carter
Continue the process of converting all SCOE owned WAN sites located outside of the SCOE protected network to secure encrypted VPN solutions. A virtual private network (VPN) extends a private network across public networks like the Internet. This will require a site based VPN appliance compatible with our SCOE.		Bob Carter

Continue, if possible and fiscally sound, convert existing T-1 WAN links to higher bandwidth fiber optic solutions using either the BESTNet infrastructure or a LEC.		Bob Carter

V. Monitoring and Evaluation

Describe the evaluation process that enables the school to monitor progress toward the specific goals and make mid-course corrections in response to new developments and opportunities as they arise.

The Assistant Superintendent of Technology will present the Student Programs Technology Plan to the Superintendent and Cabinet for SCOE Board Approval by June 2013. Once the Board approves the technology plan, the Superintendent will send copies to each Assistant Superintendent within SCOE. The Assist Superintendent of Court/Community, ROP & CTE, the Assistant of Special Education, and the Assistant Superintendent of Technology Services will review the goals with their directors and program administrators.

Program administrators and directors will meet each semester to review educational and professional development goals set within this plan. They will make necessary adjustments to any goal, implementation plan and timeline as needed due to any time constraints or budgetary issues. They will provide a summary report to the Assistant Superintendent of Special Education and to the Assistant Superintendent of Student Programs. Each of the Assistant Superintendents will provide summary report to TARC (Technology Advisory and Review) Committee. TARC will add amended goals to technology plan at the end of each year.

Describe the evaluation process that enables the school to monitor progress toward the specific goals and make mid-course corrections in response to new developments and opportunities as they arise.

At the start of each school semester of plan, program directors and site administrators will review the educational and professional goals, timelines and implementation schedules. At the end of each semester, they will make a checklist of any benchmarks reached and make necessary amendments to goals due to time constraints and/or budgetary issues. Program directors will report findings to their Assistant Superintendent. The Assistant Superintendent of Court/Community Schools & ROP/CTE and the Assistant Superintendent of Special Education will provide a summative report to TARC in early June.

At the beginning of June each year of plan, the Director of Computer, Network, and Technology Services CNTS) will provide a summative report of stated goals, implementation schedule and timelines with any revisions or completions to the Assistant Superintendent of Technology Services. The Assistant Superintendent of Technology Services will provide summative report to TARC.

At the end of June, TARC will review and provide summative reports detailing the progress of stated educational, professional development, and hardware/infrastructure goals to Superintendent and SCOE Cabinet. The Superintendent will provide the SCOE Board and SCOE

stakeholders with summative report on the progress of goals set within SCOE Student Programs Technology Plan.

The plan must include an evaluation process that enables the school to monitor progress toward the specific goals and make mid-course corrections in response to new developments and opportunities as they arise.

This section will be used by each of the SCOE Student Programs to evaluate and report the review of their program goals.

*Title of Goal:

      Annual Review of Goals Year One:

      Annual Review of Goals Year Two:

      Annual Review of Goals Year Three:

Education Technology Plan Review System (ETPRS)
Contact Information

County & District Code: 34 - 10348

School Code (Direct-funded charters only):

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