

# Technology Plan



Sacramento City Unified

July 1, 2013 - June 30, 2016

This plan is for EETT and E-rate.

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## Background and Demographic Profile

Sacramento City Unified School District (SCUSD), established in 1854, is the 12th largest school district in California and one of the oldest in the western United States. SCUSD serves over 47,000 students on 82 campuses and is home to a 2010-11 California Distinguished School, two 2010-11 California Achievement Award schools and the only public Waldorf-inspired high school in the nation. Alumni from SCUSD's schools range from U.S. Supreme Court Justice Anthony Kennedy to nationally renowned political scholar Dr. Cornel West. Recent graduates are currently attending Harvard, Stanford, UC Berkeley, UC Davis and host of other prestigious universities.

Our Board-adopted mission statement promises the community that our students will “graduate as globally competitive life-long learners, prepared to succeed in a career and higher education institution of their choice to secure gainful employment and contribute to society.”

Sacramento is one of the most racially diverse cities in the United States and SCUSD's student population reflects this diversity: 37 percent Hispanic or Latino; 18 percent Asian; 2% Pacific Islander; 16 percent African American; and 19 percent white. About 6 percent of students are of two or more races or ethnicities. Residents within SCUSD speak more than 40 languages; 38 percent of students do not speak English at home and 24% of students are designated as English Language Learners. Sacramento is also high-poverty school district with over 72% of students eligible for free or reduced price lunches. Twelve percent of all students receive special education services.

Since the adoption of *Strategic Plan 2010-2014: Putting Children First* in the spring of 2010, SCUSD has launched several initiatives to meet commitments to the community in three focus areas: Career- and College-Ready Students; Family and Community Engagement; and Organizational Transformation. Some initiatives include:

- **High School Graduate Profile.** The profile identifies the skills and competencies that all SCUSD graduates need to demonstrate to ensure their success in college and career and serves as the umbrella under which the district's work will be done. These skills and competencies have been adapted from a diverse array of sources including the Common Core Standards for Mathematical Practice and ELA Capacities, the Partnership for 21st Century Skills, and the Social Emotional Learning Competencies.
- **Common Core Standards.** To be successful in an ever-shrinking, increasingly competitive global economy, our high school graduates will need to move on to higher education or career training: Community college, a four-year university, vocational school or an apprenticeship. SCUSD is preparing students to choose the path that is right for them by implementing the California Common Core State Standards, new educational goals that promote critical thinking, problem solving, teamwork and communication.
- **Linked Learning.** Approximately 3,000 students are enrolled in academies throughout the district linking them to professions and colleges. SCUSD has committed to aggressively pursue the development of pathways in its 9-12 system and has set the ambitious goal of having at least 60% of all its high school students enrolled in pathways by the 2016-17 school year. Most of the district's five comprehensive high schools offer

Linked Learning pathway opportunities. In addition, five small high schools opened in the last decade, all are designed around specific industry sectors or work-based learning opportunities.

- **Social and Emotional Learning.** SCUSD is committed to the development of social and emotional competence district and school-wide. Social emotional learning is a process for learning life skills, including how to deal with oneself, others and relationships, and work in an effective manner. Our goal is to make social and emotional learning an essential part of every child's education.
- **Project Green.** While preparing students for the 21st century, SCUSD is also working to ensure that the world they inherit in years ahead is clean, healthy and safe. The heart of this work is Project Green, a grassroots, green school movement that student-centered. Based on the strength of the Project Green initiative and on the district's commitment to greening its schools, SCUSD was awarded at US Green Building Council (USGBC)'s Center for Green Schools Fellow in January 2011. SCUSD is the only school district on the West Coast – and one of only two in the United States – to have a sustainability director fully funded by USGBC.

## 1. Plan Duration

### **July 1, 2013 - June 30, 2016**

In an attempt to keep up with the constantly changing world of information and technology, Sacramento City Unified School District is shifting from using technology as a tool for student information consumption to using technology more creatively to demonstrate what students know as a result of their instructional activities. The focus, in alignment with the new Common Core State Standards, the SCUSD Strategic Plan, and inquiry-based design methodology, is to create a real-world and rigorous learning environment for teaching and learning. Our goal is to create an inquiry-based learning environment in which students respond authentically to the learning, as well as understand how they learn. Over the next three years the District will guide teachers in making a transition from using technology for skill acquisition to one in which the technology provides increased functional improvement in the classroom, allowing the student to use the technology to define and re-define the instructional tasks in the technology-embedded learning environment.

## 2. Stakeholders

Stakeholders		
Name	Position	CDS
Jared Bayless	Corporate/Non-Profit	AMS.NET
Rich Bennet	Parent	
Karen Breese	Office Technician	Sacramento Sacramento City Unified
DiAnne Brown	Grant Writer	Sacramento Sacramento City Unified
Reginald Brown	Site Administrator	Sacramento Sacramento City Unified Martin Luther King, Jr.
Becky Bryant	District Administrator	Sacramento Sacramento City Unified
Gerardo Castillo	District Administrator	Sacramento Sacramento City Unified
Maggie Chan	Student	Sacramento Sacramento City Unified Will C. Wood Middle
Alain Contreras	District Administrator	Sacramento Sacramento City Unified
Nicole Croucre	Corporate/Non-Profit	Apple
Gregg Descheemaeker	Corporate/Non-Profit	Intel
Susan Lytle Gilmore	District Administrator	Sacramento Sacramento City Unified
Terrence Gladney	Parent	
Melody Hartman	District Administrator	Sacramento Sacramento City Unified
Reed Jackson	Parent	
Terry Kritsepis	District Administrator	Sacramento Sacramento City Unified
Andrea Landis	Webmaster	Sacramento Sacramento City Unified
John McCurry	Corporate/Non-Profit	CISCO
Theresa McEwen	District Administrator	Sacramento Sacramento City Unified
Thomas McEwen	District Administrator	Sacramento Sacramento City Unified



Diep Nguyen	Student	Sacramento Sacramento City Unified Will C. Wood Middle
Mark Rand	Corporate/Non-Profit	Apple
Olivine Roberts	District Administrator	Sacramento Sacramento City Unified
Jon Rudolph	Technology Support Staff	Sacramento Sacramento City Unified
Nick Saechow	District Administrator	Sacramento Sacramento City Unified
Nathaniel Starace	Classroom Teacher	Sacramento Sacramento City Unified C. K. McClatchy High
Joseph Stymeist	District Administrator	Sacramento Sacramento City Unified
Cody Tuyen	Student	Sacramento Sacramento City Unified Will C. Wood Middle
Kamaljit Pannu	Site Administrator	Sacramento Sacramento City Unified Camellia Elementary
Jeremy Predko	District Administrator	Sacramento Sacramento City Unified
Mao Vang	District Administrator	Sacramento Sacramento City Unified
Liberty Van Natten	Parent	
Elizabeth Vigil	Site Administrator	Sacramento Sacramento City Unified California Middle

The District Technology Plan Committee consisted of a team of volunteers who met in collaboration to create a new vision for technology use in the Sacramento City Unified School District. The members of the Committee included students, teachers, administrators, parents and industry partners. The Committee was responsible for reviewing the current state of technology in the district, re-visioning the implementation of technology at sites and in classrooms to advance student learning and thus build a plan that achieved that vision.

Administrators from a variety of departments across the district collaborated and gave valuable, authentic input into the design, purpose and creation of the plan. Committee meetings were held monthly and included focus groups as well as whole committee collaboration. Each focus group met weekly and sometimes bi-weekly depending on the progress of the Technology Plan's completion. Notes were taken at all meetings, both committee and focus group. In addition, feedback forms were completed at committee meetings and conclusions were shared-out via emails, in subsequent committee meetings and in focus groups. Opportunities were given for questions and constructive feedback, and all information was recorded and considered in the writing of the plan. Information from the monthly committee meetings was shared with stakeholders via email, recapitulation of meeting conclusions and during focus group weekly

meetings. The process of writing this Technology Plan, from beginning to end, was positive and constructive and served to unite stakeholders in the District with the clear goal of providing technologically rich learning experiences as our students continue into the 21st Century.

### 3. Curriculum

- 3a. Description of teachers' and students' current access to technology tools both during the school day and outside of school hours.

The Sacramento City Unified School District recognizes that we are living in a time of change. According to *Did you Know/Shift Happens*, “the amount of technical information is doubling every two years” for “...students starting a 4<sup>th</sup> year technical degree...half of what they learn in their first year of study will be outdated by their third year of study.” In an attempt to keep up with the changing world of information and technology, Sacramento City Unified School District is shifting from using technology as a tool for student information consumption to using technology more creatively to demonstrate what students know as a result of their instructional activities. The focus, in alignment with the new Common Core State Standards, the SCUSD Strategic Plan, and inquiry<sup>2</sup>-based design methodology, is to create a real<sup>2</sup>-world and rigorous learning environment for teaching and learning. Our goal is to create an inquiry<sup>2</sup>-based learning environment in which students respond authentically to the learning, as well as understand how they learn.

(Source: <http://shifthappens.wikispaces.com/file/view/DidYouKnow20Sources.pdf/30923971/DidYouKnow20Sources.pdf> accessed 3/22/2013)

The previous Technology Plan indicated that our students were primarily using technology to find information on the Internet or be led through “curriculum software” to amend gaps in their understanding of the content. Students were also characterized as mastering “productivity software suites” such as Microsoft Office for relevant technology integration. Previously, students were passive learners of the content and the technology was taught for skill mastery. Over the next three years, the District will guide teachers in making a transition from using technology for skill acquisition to one in which the technology provides increased functional improvement in the classroom, allowing the student to use the technology to define and re<sup>2</sup>-define the instructional tasks in the technology<sup>2</sup>-embedded learning environment.

Dr. Ruben R. Puentedura provides a suitable framework for moving the technology from Substitution to Augmentation to Modification and finally Redefinition (SAMR). In the SAMR classroom, students are actively engaged in the content with the technology to frame questions, tasks, assignments and assessments in a more profound and relevant way. The technology allows for significant functional improvement of the teaching and learning tasks, improvement that was not possible without the technology.

(Source: <http://www.hippasus.com/rpweblog/archives/2012/12/12/SAMRInPractice.pdf> accessed 4/1/2013)

This current Technology Plan expects the teacher and student to become more actively engaged in their learning, where the technology is a tool to demonstrate highly rigorous conceptual understanding of the curriculum through the creation of a variety of media products, as well as how their content will be published to demonstrate their response to audience, task, or purpose. This shift not only encompasses a change in teaching practices, but it requires a different model for choosing and providing technology tools to the schools sites. Collaboration among departments at the District level is now required to support this shift and this collaboration is

occurring between the Technology Services department and the Academic Office. Since the writing of the previous Technology Plan, the District office has been reorganized to facilitate this shift. In alignment with Pillar III of the District's Strategic Plan, "Organizational Transformation," Technology Services and the Academic Office are providing the framework and guidance to school sites to create a rigorous and relevant 21st century model for the District's site instructional leaders, teachers and students.

This work has begun in two Proof of Concept Schools in our District: California and Rosa Parks Middle Schools are both engaged in a project with Technology Services and the Academic Office. The Proof of Concept (POC) project is an integration of 21st century hardware, such as MacBooks and iPads, relevant software and expert professional development by Apple Inc., as well as ongoing coaching, support, and mentoring from the Academic Office. The two schools have experienced expert professional development to familiarize themselves with the digital media content creation tools, as well as to thoughtfully integrate this technology into units of study in alignment with Common Core State Standards and site-specific instructional objectives. On-site coaching, support and feedback occurs weekly with both of the school sites in the project.

Students in this project are using print and digital media to create digital media content that demonstrates their deep conceptual understanding of the content taught. Students are creating: iBooks (interactive books), podcasts (audio and enhanced), digital narratives (still images and video), screen casts (video recording of student work), persuasive iMovie projects, blogs or wikis, and tutorials for fellow students. These projects are posted in Edmodo, a safe social network, where students and teachers collaborate and communicate regarding the content created, providing feedback, critique and support. Students are using apps from the iTunes store. On the MacBooks, students are using the iLife Suite (iMovie, iPhoto, Garage Band and iTunes) as well as iBooks author and the Microsoft Office Suite (Word, Excel, and Power Point). This Technology Plan lays out a bold roadmap for continuing this work at all District school sites over the next four years.

### **Section 3.a:**

*Access to technology* varies across the District by school site, as some sites have invested in student-centric content creation technology and other sites have invested in productivity technology suites and hardware, such as classroom response systems, interactive white boards (IWB) or additional desktop computers for student access in the classroom. Technology access in the libraries and media centers varies by school site as well. Some libraries have computer access for an entire class within the library (often a computer lab is adjacent to the library) and some sites have a limited amount of technology to access the resources of the library. Access to technology tools for English Learners (EL) is also greatly varied. Some sites provide access to a computer lab with the general population while other sites have used EL funds to purchase technology tools for the purpose of English language acquisition. For example, several elementary school sites have purchased iPods for the use of building spoken language fluency, foundational skill practice and digital media content creation using assorted applications.

Technology is made accessible to students before and after school through a variety of District and public resources. Many sites, at the teacher's discretion, allow students access to computers and technology both before and after school. In addition, most SCUSD schools are located within walking distance to public libraries and community centers which offer wireless internet

access as well as computers. Elementary schools have both before and after school programs while middle and high schools offer after school programs and extracurricular programs.

SCUSD Computer Data	
Total # of Computers for Instructional Use	9,487
Total # of Internet Connected Computers in Classrooms	9,487
Total # of Computers for 1-3 years old	4,576
Total # of Computers for Instructional Use 4-6 years old	2,358
Total # of Computers for Instructional Use 7-10+ years old	2,360
Total # of Computers for Instructional Use of unknown age	193
Total # of SBAC Compliant Devices	4,123
Student to Computer Ratio of SBAC Compliant Devices	11:1
Internet Access Connection Speed (DSL, T-1, >T-1)	Minimum 1000 mbps

Students with special needs who are receiving special education services may be eligible to receive specific assistive technology or alternative augmentative communication tools to assist them in accessing the curriculum. Students thought to need this additional support are referred for an assessment through their Individualized Education Program (IEP) team. This assessment takes into account all technology currently available to the student to access the curriculum and the need for any additional technology to meet the students' unique learning needs.

The typical elementary school has a computer lab that is for technology enrichment of the curriculum. Students interact in this lab at least once, but more typically twice a week with technology support personnel or a classroom teacher. Each elementary school classroom has at least one teacher computer that is connected to the network, the Internet and to a classroom projector, and many have invested in document cameras. Some elementary schools have invested in interactive white board (IWB) technology for student and teacher presentations or small group work. School sites that have invested in content creation technology may also share mobile devices on mobile carts for creation of multimedia projects that demonstrate their understanding of the content.

The typical middle school in the District has at least two computer labs available for teacher use for research, presentation creation or other content-enrichment activities. Each middle school classroom has one teacher computer that is connected to the network, the Internet and to a classroom projector. Most of the middle schools in the District have invested in interactive white board (IWB) technology for student and teacher presentations or small group work. The middle

schools in SCUSD have invested more heavily in technology that supports student-centric content creation than any other segment, and therefore have made it a priority to add hand-held devices, mobile devices such as tablets and laptops for mobile cart technology that travels across the campus.

The typical comprehensive high school in the District has at least two computer labs available for teacher use for research, presentation creation or other content- enrichment activities. Each high school classroom has at least one teacher computer that is connected to the network, Internet, and to a classroom projector. In addition, the high school segment has technology-based courses to support the career and college ready-mandate that use state of the art computers, professional grade software, and high-end, industry standard equipment to expose the teachers and the students to technology for college and career readiness.

The After School Programs (ASP) allow for expanding the access and use of technology for its participants through additional weekly sessions in the available computer labs across the District. In addition, many programs use this opportunity to provide participants with additional time to engage in more targeted academic interactions through web-based programs such as I-Ready and Dibels. At the middle school level, programs provide students with access to computers to complete homework assignments as well as in the development of student-led service learning projects.

3b. Description of the district's current use of hardware and software to support teaching and learning.

*The use of technology* across the District varies by site. Across the District all of the school sites are using at least one Internet and network-connected computer per classroom, allowing the teacher to access District email or the student information system for attendance, grades, or student specific information (such as contact information) as needed. Most of our schools across the District use an LCD projector and a document camera per classroom for displaying media, information, instructions, or teacher or student-created content to the entire classroom. Roughly one-quarter of our classrooms have access to: an interactive white board (IWB), a wireless slate (for teacher or student mobility), or a classroom response system. These technologies support teacher-led instruction or they are used for assessment or interactivity within the classroom.

The use of curriculum software for activities and assessment is commonplace in our elementary schools; typically these students access a computer lab for this activity twice a week for at least forty-five minutes. The focus of this curriculum software is typically for English Language Arts and Mathematics and is in alignment with California State Content Standards and the California Standards Test. Middle schools and high schools use their computer labs for research, presentation creation or other content-enrichment activities. The high school segment has technology-based courses that expose the students to technology for career and college readiness. This includes instruction in:

- Computer Aided Drafting/Design (CADD) at: Hiram Johnson High School, John F. Kennedy High School, New Technology High School, and the School of Engineering and Sciences, using AutoCad, Pro Engineer, and Solidworks software

- Digital media production at: C. K. McClatchy High School, Hiram Johnson High School, John F. Kennedy High School, Luther Burbank High School, Rosemont High School, and New Technology High School, using Adobe Creative Suite Master Collection software
- Robotics, manufacturing, and design at: Hiram Johnson High School, John F. Kennedy High School, and the School of Engineering and Sciences, using AutoCad, Pro Engineer, Solidworks software and Computer Numerical Control (CNC) devices such as routers, laser engravers/cutters, 3D printers, and plasma cutters.

Mobile technology has emerged in many of our middle schools, some of our elementary schools, and a few of our high schools. With this laptop and tablet-based technology integration students are engaged in using media content creation software or media content creation apps (software for mobile devices). The media created by students demonstrates their understanding of the academic content area or cross-curricular content areas being studied. The content is typically shared in class as a presentation, or shared online in a safe social network that limits access to that content to the teacher, students or parents of that classroom. Typical extension activities for these media-rich classrooms allow students to interact with the content created by their peers for feedback, critique or assessment.

In addition, all sites have a variety of technology resources, both software and hardware that are utilized for English Language Learners and students with special needs. One school has a specific program for blind students that utilize "talk-to-type" software as well as Braille machines and textbooks. Due to the large size of SCUSD and the diversity of needs across school sites, each site utilizes the following software applications as they choose. In addition, each school site is given the opportunity to purchase software or subscribe to online programs at their discretion and based on the site's individual needs.

All SCUSD's High Schools have access to and/or utilize the following software programs:

- Microsoft Excel
- Microsoft PowerPoint
- Microsoft Word
- iPhoto
- iMovie
- AutoCad
- CADD
- Pro Engineer
- Solidworks
- Adobe Creative Suite
- CNC Devices
- 3D Printers
- Plasma Cutters
- Additional software programs which vary by site

All SCUSD's Middle Schools have access to and/or utilize the following software programs:

- Microsoft Excel
- Microsoft PowerPoint
- Microsoft Word
- iPhoto
- iMovie
- AutoCad
- Adobe Creative Suite
- Orchard
- STAR
- Accelerated Reader
- Additional software programs which vary by site

All SCUSD's Elementary Schools have access to and/or utilize the following software programs:

- Microsoft Excel
- Microsoft PowerPoint
- Microsoft Word
- iPhoto
- iMovie
- Orchard
- Kidspiration
- Inspiration
- STAR
- Accelerated Reader
- Additional software programs which vary by site

3c. Summary of the district's curricular goals that are supported by this tech plan.

The District's curricular goals are outlined in the SCUSD Strategic Plan: *Putting Children First*. "Pillar I: College and Career Ready Students" seeks to "Provide students with a relevant, rigorous and well rounded education that includes 21st Century career exploration, visual and performing arts that meets four-year college and university requirements". The District is committed to promoting research-based curriculum, continuous improvement in the design and delivery of intentional instruction, and integration of multidimensional formative assessments, as well as supporting services that remove the obstacles to learning from pre-school to post-secondary.



The District's focus is on delivering student-learning experiences that not only provide significant and meaningful connections but are grounded in the knowledge and skills students will need for success in a conceptual age. These learning experiences will be driven by high standards that ensure academic rigor in a thinking curriculum. Students engage in 21st century text --print text as well as digital text'--such as webpages, blogs or wikis; audio, images, or video, which can be photos, graphics, maps, charts, animation, or podcasts. To create college and career-and-ready students, the work is most exemplified by SCUSD's draft "Graduate Profile" in which five domains inform the accomplishments of a graduating student from our schools. These domains inform the actual experiences from pre-school to the twelfth grade and describe how a successful graduate should be able to demonstrate career-and-college readiness.

In order to prepare students to meet the expectations outlined in Pillar I and the Graduate Profile SCUSD has aggressively begun the shift to implementing the Common Core State Standards (CCSS). A key framework used to influence the Graduate Profile is the Common Core College and Career descriptors that students "use technology and digital media strategically and capably". Successful students should be able to "employ technology thoughtfully to enhance their reading, writing, speaking, listening and language use." Students will "adapt their communication in relation to audience, task, purpose and discipline" These descriptors not only inform teaching with technology on the District, but inform learning as well.

In union with this Common Core implementation, the District engages in an inquiry-based methodology in developing new teaching practices. In "inquiry cycles", using collectively designed criteria, teachers collaboratively:

- examine student work;
- calibrate their findings;
- align results to the expected evidence;
- generate questions that will help inform the instructional moves needed to elevate students' thinking, plus pose to students in order to provoke a deeper understanding and revise their work;
- and engage in reflective practice to determine if a revision of the task and / or instructional plan is warranted.

The integration of Common Core and inquiry-based design and reflective practices provide the necessary framework for boosting student achievement, and provides opportunities to integrate technology, thoughtfully, contextually, within the teaching and learning environment necessary to prepare students for college-and-career readiness across all grades.

At the high school level, SCUSD has adopted the Linked Learning approach as its radical strategy for transforming the teaching and learning. This approach, which is designed to prepare students for success beyond high schools, has been demonstrated to raise student achievement and increase high school graduation rate and transition to postsecondary education. Linked Learning Pathways provide a rigorous UC a-g aligned course, a demanding technical sequence in conjunction with industry partners, and a work-based learning component. This is an added complement to the implementation of Common Core State Standards. The District is moving expeditiously to integrate these two major bodies of work: Linked Learning (the "how") and

CCSS (the “what”) within a personalized learning environment that combines the delivery of education both within and beyond the traditional classroom environment.

In the formulation of this Technology Plan, key stakeholder groups were convened to focus on specific areas: curriculum and instruction, professional development, infrastructure and hardware, and budget. Each stakeholder group followed a different process; however, the curriculum and instruction and professional development groups convened to shape a vision to guide SCUSD’s Academic Office. Sixty-eight District employees and community partners were invited to participate in the weekly meetings. After eight meetings, the Academic Office Technology Plan stakeholder group recognized that technology that allowed the students to, through the creation of digital media, demonstrate that their deep conceptual understanding of the content was in alignment with the District’s Strategic Plan, current Common Core expectations, and desire to bring a rigorous and relevant 21st century teaching and learning environment to all of our schools.

SCUSD's current board policy on the Use Of Technology And Instruction (BP1662.7) And Student Use Of Technology (BP6163.4) were revised in 2002, but currently do not reflect the use of technology by students and teachers. After the adoption of the Technology Plan, the District plans to draft a new board policy which reflects the current technology needs and usage, will inform local improvement plans, immediate intervention plans and School Quality Reviews (SQR). In addition, the District is moving toward a 1:1 student to technology ratio in order to meet the curricular needs of the Common Core State Standards as well as ensuring access to technology for all students.

- 3d. 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.

Sacramento City Unified School District is shifting teaching practices to be more relevant to the college and career-ready mandate. To that goal the District expects students to not only access information, print or digital, for their learning activities, but to create their own digital content that will demonstrate their learning in a single, focused curricular area, as well as across curricular areas.

Through the implementation of Common Core Standards, the accompanying instructional shifts and practices, inquiry cycles, and Linked Learning, SCUSD will thoughtfully integrate technology to create a more rigorous and performance-based instructional repertoire for teaching and learning with technology. SCUSD is beginning a focused shift in technology from a model that supports student and teacher access to information to one in which teachers and students will also create performance-based digital media to demonstrate their deep understanding of the curriculum. As the District’s growth continues, the integration of digital media to create media content will move beyond a singular content area to at least two integrated content areas

District-wide. Linked Learning Pathways require digital tools to aid the integration across more than two content areas, depending on the Pathway and staffing.

**Goal 3d.1: To increase student achievement, teachers and students will use technology to improve teaching and learning in alignment with the District's curricular goals.**

Objective 3d.1.1: By 2016, 50% of students will use text, both print and digital, to create digital content that demonstrates their deep conceptual understanding of a *single focused content area*, including Math or English Language Arts.

**Benchmarks:**

- Year 1: By 2014, 30% of students will use text, both print and digital, to create digital content that demonstrates their deep conceptual understanding of a *single focused content area*, including Math or English Language Arts.
- Year 2: By 2015, 40% of students will use text, both print and digital, to create digital content that demonstrates their deep conceptual understanding of a *single focused content area*, including Math or English Language Arts.
- Year 3: By 2016, 50% of students will use text, both print and digital, to create digital content that demonstrates their deep conceptual understanding of a *single focused content area*, including Math or English Language Arts.

**Goal 3d.2: To increase student achievement, teachers and students will use technology to improve teaching and learning in alignment with the district's integrated curricular goals.**

Objective 3d.2.1: By 2016, 35% of all students will use technology to create digital curricular content that demonstrates their deep conceptual understanding of at least *two focused content areas*, including Math or English Language Arts.

**Benchmarks:**

- Year 1: By 2014, 15% of students will use text, both print and digital, to create digital content that demonstrates their deep conceptual understanding of a at least *two focused content areas*, including Math or English Language Arts.
- Year 2: By 2015, 25% of students will use text, both print and digital, to create digital content that demonstrates their deep conceptual understanding of a at least *two focused content areas*, including Math or English Language Arts.
- Year 3: By 2016, 35% of students will use text, both print and digital, to create digital content that demonstrates their deep conceptual understanding of a at least *two focused content areas*, including Math or English Language Arts.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Research, evaluate and provide a Learning Management System (LMS) for a blended learning environment to support cross-curricular content creation. (3d.1 & 3d.2)	January 2014 and annually thereafter.	Academic Office, Budget and Technology Services	Analysis of Learning Management System, analysis of student work, teacher created instructional content and assessment results.	Learning Management System, student work and teacher created instructional content and CST and SBAC assessment results
Identify and expand 21st Century tools available for increased communication and collaboration for all SCUSD schools. (3d.1 & 3d.2)	December 2013 through June 2016	Academic Office and Technology Services	Analysis of meeting notes, agendas and teacher surveys.	Meeting notes, agendas and teacher surveys.
Provide rubrics/evaluation tools for teachers and administrators as a guide for evaluating student created digital media content. (3d.1 & 3d.2)	November 2013 and annually thereafter.	Academic Office	Analysis of teacher surveys for effectiveness.	Rubrics, tools and teacher surveys.
Create guiding information available on the District website for the use of software, applications, digital texts and informational resources to guide implementation. (3d.1 & 3d.2)	September 2013 through June 2016	Academic Office, Technology Services and Communications Department	Analysis of use by teachers and site administrators.	District webpage use analytic tool.
Acquire free and paid digital text for all school sites. (3d.1 & 3d.2)	September 2013	Academic Office	Create a list of free and paid digital text available for teaching and learning that is available on the District's website.	Monitor the use of free and paid digital text through teacher and site administrator surveys.

- 3e. 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.

Students graduating from high school today must have technology and information literacy skills in order to be successful in technology rich work environments and/or to be successful in their post-secondary education. Students in today's classrooms are increasingly required to demonstrate comprehension and understanding of the content by producing media based papers, presentations and visual displays. Students must learn how to acquire, manage and analyze large

quantities of information from multiple sources and do it quickly. SCUSD teachers will work together to teach the essential knowledge and skills that prepare students to locate, analyze, evaluate, interpret and communicate information and ideas in an information-intensive environment. Authentic practice of these skills will enable our students to realize their potential as informed citizens who think critically and solve problems.

**Goal 3e.1: Students will acquire technology and information literacy skills that will ensure success in school, college and the workplace.**

Objective 3e.1.1: By June 2016, 100% of students currently enrolled in SCUSD schools will demonstrate mastery of the skills needed to locate, interpret and communicate information and ideas in an information-intensive environment for each grade level, as measured by District assessments.

**Benchmarks:**

- Year 1: By June 2014, 60% of students currently enrolled will demonstrate mastery of the skills needed to locate, interpret and communicate information and ideas in an information-intensive environment for each grade level, as measured by District assessments.
- Year 2: By June 2015, 80% of students currently enrolled will demonstrate mastery of the skills needed to locate, interpret and communicate information and ideas in an information-intensive environment for each grade level, as measured by District assessments.
- Year 3: By June 2016, 100% of students currently enrolled will demonstrate mastery of the skills needed to locate, interpret and communicate information and ideas in an information-intensive environment for each grade level, as measured by District assessments.

<b>Implementation Plan</b>				
<b>Activity</b>	<b>Timeline</b>	<b>Person(s) Responsible</b>	<b>Monitoring &amp; Evaluation</b>	<b>Evaluation Instrument</b>
Raise teacher awareness of the need for students to acquire technology and information literacy skills	August 2013 through June 2016	Site Administrators and Classroom Teachers	Classroom teachers will evaluate student progress and modify as needed to attain the goals.	Student work, Teacher feedback, relevant research
Provide Technology training for teachers through a "train the trainer" model as well as through web based, on-demand activities utilizing Atomic Learning and Cisco's "Show-and-Share."	August 2013 through June 2016	Assistant Superintendent of Information Education Technology and Technology Services	Analysis of Technology training feedback forms	Technology training feedback forms

Formalize ways for students to acquire information literacy skills in-line with the Common Core State Standards	August 2013 and monthly thereafter	Classroom Teachers, Department Chairs, Site Administrators	Classroom teachers and Site Administrators will evaluate student progress and modify as needed to attain the goals.	Student work, Teacher feedback, relevant research
Explore the use of online rubrics to assess information literacy	July 2013 and annually thereafter	Classroom Teachers, Department Chairs, Site Administrators	Department Chairs, Site Administrators and Classroom Teachers, will evaluate student progress and modify as needed to attain the goals.	Student performance on assessments, Teacher feedback, relevant research
Integrate elements of digital identity and global communication in classes which address Societal Issues	July 2013 and monthly thereafter	Department Chairs, Classroom Teachers	Classroom teachers and Department Chairs will evaluate student progress and modify as needed to attain the goals.	Student work, Teacher feedback
Develop grade-appropriate student standards to guide educators in teaching 21st century skills	August 2013 and annually thereafter	Department Chairs and Teachers	Classroom teachers will evaluate student progress and modify as needed to attain the goals.	Student work, Teacher feedback
Investigate the use of free online assessment tools for information literacy and choose appropriate tools for the piloting of student assessments	July 2013 and quarterly thereafter	Classroom Teachers	Classroom teachers and Department Chairs will evaluate student progress and modify as needed to attain the goals.	Teacher feedback, relevant research

- 3f. 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

Sacramento City Unified School District's teachers have valuable experience teaching about plagiarism of the written word, especially in the context of library research. District parent/student handbooks explicitly define a policy regarding the consequences of plagiarism, and students are well aware of the meaning and the unethical nature of using the work of others without permission. However, copyright confusion is prevalent as it relates to media. Many teachers may be hesitant to use media with their students because they are afraid of violating copyright law. Yet media literacy is embedded in nearly all Common Core Curriculum frameworks. The purpose of media literacy education is to ensure 21st century learners develop the habits of inquiry and skills of expression needed to be critical thinkers, effective communicators and active citizens in today's world. Media literacy education is critically dependent on educators' abilities to use and manipulate copyrighted materials from digital media, mass media and

popular culture, and students are creating their own content as well. It is imperative that students and teachers understand the concepts of copyright law and Fair Use.

**Goal 3f.1: All students will be able to distinguish lawful from unlawful uses of copyrighted works, including the following topics: the concept and purpose of both copyright and fair use; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; and avoiding plagiarism.**

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Update present Internet Acceptable Use Policy (AUP) to include copyright, plagiarism and unlawful downloading. Parents and students sign each year.	September 2013 and annually thereafter.	Technology Services Director	Review of AUP	AUP
Teacher training on creating information literacy curriculum which includes copyright laws, fair use and cyber ethics	Fall 2013 through Summer 2016	Site Administrators and Technology Services	Evaluation and analysis of feedback forms, sign-in sheets and surveys given at trainings	Feedback forms, sign-in sheets and surveys
Students receive lessons on copyright, fair use, plagiarism and unlawful downloading from classroom teachers	Fall 2013 through summer 2016	Site Administrators and Teachers	Analysis of assessment results	Assessment of student understanding of copyright, fair use, plagiarism and unlawful downloading
Students incorporate appropriate copyright and fair use into their work.	Winter 2013 through Summer 2016	Classroom teachers	Analysis of student work	Student work
Annually, the District will evaluate the student post assessment data to determine modifications to the instructional program to better ensure the understanding of copyright and fair use, legal and illegal downloading and avoiding plagiarism.	Annually, every spring	Academic Office	Principals will review student data and lead staff in program modification.	Assessment data

The District will investigate and implement appropriate and ethical use of information technology such as Common Sense Media and iKeepSafe curriculum.	Fall 2013 through 2016	Academic Office	Evaluation and analysis of curriculum	Feedback from staff
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3g. 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)

During the 2011/12 school year the SCUSD Board adopted a district bullying policy and implementation plan that included:

- Forming a district-wide committee focused on bullying, cyber-bullying, and harassment
- Implementing district-wide protocols on bullying, including a district hotline
- Hiring a Bullying Prevention Specialist to oversee the program and to coordinate with site and district administrators on bullying prevention policies and activities
- Implementing *Steps to Respect* bullying prevention curriculum at select schools
- Providing training and professional development regarding bullying and cyber-bullying for district and site administrators, school staff, and parents
- Expanding partnerships with city, county, and community to address bullying and cyber-bullying

In addition, the District's Technology Services Department manages a rigorous content filter (CISCO's Ironport) which is designed to address internet safety, protect online privacy and protect students and the District as a whole from online predators. Furthermore, the district also has a current "Acceptable Use Policy" which addresses CIPA requirements.

**Goal 3g.1: All students will be able to apply internet safety rules included in the district's Acceptable Use Policy, including how to protect their online privacy, avoid online predators and understand the forms and implications of cyber bullying.**

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Advisory Committee meetings to address issues related to bullying, cyber-bullying and harassment	July 2013 through June 2016	Director of Integrated Support Services, Student and Family Coordinator II and committee members	Analysis of surveys and feedback forms.	Surveys, feedback forms and sign-in sheets.



Creating and staffing a District hotline for the reporting of harassment and/or cyber-bullying	July 2013 through June 2016	Integrated Support Services personnel	Recording incidences, taking appropriate actions based on the Strategic Plan and monitoring the action(s) effectiveness.	Records of hotline incidence reports. Follow-up with incidence reporters (when applicable/available).
Oversee the Bullying Prevention Specialist's effectiveness of expanding and developing new strategies for cyber-bullying prevention	July 2013 through June 2016	Director of Integrated Support Services	Analysis of surveys, evaluation forms and incidence reports	Surveys, evaluation forms and incidence reports.
Training sessions on cyber-bullying including but not limited to recognizing its different forms and how to respond, report and prevent it	July 2013 through June 2016	Trainers in Integrated Support Services	Analysis of sign-in sheets and evaluation forms.	Sign-in sheets and evaluation forms.
Continue and expand the implementation of the "Steps to Respect" curriculum to additional SCUSD schools.	July 2013 through June 2016	Bullying prevention specialist and teachers	Analysis of Teacher, Administrator and student evaluation/feedback forms	Evaluation/feedback forms designed to assess the effectiveness of the "Steps to Respect" curriculum.
Continue CIPA's requirements for the protection of online privacy and avoid online predators through the use of CISCO's Ironport content filter	July 2013 through June 2016	Technology Services Network Specialists	Monitoring and analysis of Ironport content filter data	Ironport content filter
Create a plan to teach all SCUSD students about cyber bullying, internet safety and privacy and how to avoid online predators.	July 2013 and each year of plan	Director of Integrated Support Services, Bullying Prevention Specialist	Analysis of plan's implementation	Master schedule

### 3h. Description of the district policy or practices that ensure equitable technology access for all students.

Accessibility to technology is made available in fixed and mobile computer labs and classroom settings on a scheduled rotation, by appointment or drop-in basis. All school sites use technology in classrooms, libraries and computer labs and many SCUSD school libraries have several computers with network access to share learning resources, electronic catalogs and the Internet. After school programs also provide students with access to computers in a lab or library setting.

Students at many SCUSD school sites can bring their own laptops and other wireless devices. All students will have equal access to technology to support differentiated achievement of the academic standards in the classroom, District curricular goals, and ultimately for lifelong learning and success in our digital society.

Students with an active Individualized Education Program have appropriate access to technology hardware, peripherals, and software including assistive technology as deemed appropriate and defined by the IEP site team and students IEP goals.

Technology is consistently integrated into the ESL classroom. Beginning and early intermediate students use online software to build language skills. Intermediate to advanced students use computers to write essays and research information.

Over the course of the next four years, SCUSD plans to move to a 1:1 student to technology device accessibility ratio to meet the needs of upcoming Common Core State Standards and assessment requirements. All students will have equal access to technology to support differentiated achievement of the academic standards in the classroom, District curricular goals, and ultimately for lifelong learning and success in our digital society

- 3i. 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.

**Goal 3i.1: Replace Student Information System (SIS) and data management system to ensure proper student record keeping for informing student and program academic needs.**

Objective 3i.1.1: By 2016, 100% of SCUSD staff will use the district's SIS and data management system to provide access and obtain student and group data to inform decision-making with regard to student and program academic needs.

Benchmarks:

- Year 1: By June 2014, 80% of SCUSD staff will use the District's new SIS and data management system to provide access and obtain student and group data to inform decision-making with regard to student and program academic needs.
- Year 2: By June 2015, 90% of SCUSD staff will use the District's SIS and data management system to provide access and obtain student and group data to inform decision-making with regard to student and program academic needs.
- Year 3: By June 2016, 100% of SCUSD staff will use the District's SIS and data management system to provide access and obtain student and group data to inform decision-making with regard to student and program academic needs.
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Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Provide monthly updates to SCUSD staff on data collection and management	July 2013 through June 2016	Technology Services; Assessment, Research and Evaluation Services; Academic and Accountability Offices Personnel	Analysis of monthly reports	Meeting agendas and minutes
Create and implement a project management plan for the new student information system with selected vendor	July 2013 through June 2016	Technology Services Personnel	Analysis of meeting deliverables	Meeting deliverables in Project Management Plan
Create and implement a project management plan for the new data management system with selected vendor	July 2014 through June 2016	Staff from Technology Services and Assessment, Research and Evaluation Services	Analysis of meeting deliverables	Meeting deliverables in Project Management Plan
Staff will use the District's SIS and data management system to provide access and obtain student and group data	July 2013 through June 2016	SCUSD District staff and Technology Services	Analysis of data on District survey and system usage information	Data on District survey and system usage information
Provide professional development technology training to ensure all SCUSD staff will use the District's new SIS and data management system to provide access and obtain student and group data to inform decision-making with regard to student and program academic needs	January 2014 through June 2014	Technology Services	Analysis of training feedback forms	Training feedback forms

**Goal 3i.2: Provide technology tools to ensure that assessments are more efficient and supportive of teachers' efforts to meet student academic needs.**

Objective 3i.2.1: By June 2016, 100% of SCUSD schools will use technology to implement and administer benchmark and summative assessments.

Benchmarks:

- Year 1: By June 2014, 30% of SCUSD schools will use technology to implement and administer benchmark and summative assessments.
- Year 2: By June 2015, 60% of SCUSD schools will use technology to implement and administer benchmark and summative assessments.

- Year 3: By June 2016, 100% of SCUSD schools will use technology to implement and administer benchmark and summative assessments.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Create recommendations and a menu of technology tools that can access and support SBAC assessments	July 2013 through July 2014	Technology Services and Assessment, Research & Evaluation Services	SBAC pilot trials	Try different technology tools during SBAC pilots to ensure effectiveness
Train support teams at district level that will be able to assist school staff implement SBAC assessments	June 2014 through June 2016	Technology Services and Assessment, Research & Evaluation Services	School staff survey responses	Survey technology skills and knowledge required
Identify and evaluate each school's technology readiness for online testing that meet SBAC requirements	July 2013 through January 2014	Technology Services and Assessment, Research & Evaluation Services	Surveying actual computers and other technology tools available at each school	Criteria for technology tools needed
Implement and administer the Smarter Balanced Assessment Consortium's (SBAC) benchmarks and summative assessments	June 2015 through June 2016	Assessment, Research & Evaluation Services and site teachers and administrators	Analysis of data on SCUSD's implementation and administering of SBAC assessments	Data on SCUSD's implementation and administering of SBAC assessments
Provide professional development to assist in integrating technology tools, skills and strategies for CCSS and SBAC assessments and implementation.	June 2014 through June 2016	Technology Services and Assessment, Research & Evaluation Services	School staff survey responses	Survey on technology skills and knowledge required

List of clear goals, measurable objectives, annual benchmarks, and an implementation plan  
 3j. to use technology to improve two-way communication between home and school.

**Goal 3j.1: Use technology to increase and improve two-way communication between home and school.**

Objective 3j.1.1: By June 2016, 100% of teachers will publish coursework and student grades online and utilize District email and/or phone to improve two-way communication between home and school.

Benchmarks:

- Year 1: By June 2014, 60% of teachers will publish coursework and student grades online and utilize District email and/or phone to improve two-way communication between home and school.

- Year 2: By June 2015, 80% of teachers will publish coursework and student grades online and utilize District email and/or phone to improve two-way communication between home and school.
- Year 3: By June 2016, 100% of teachers will publish coursework and student grades online and utilize District email and/or phone to improve two-way communication between home and school.

<b>Implementation Plan</b>				
<b>Activity</b>	<b>Timeline</b>	<b>Person(s) Responsible</b>	<b>Monitoring &amp; Evaluation</b>	<b>Evaluation Instrument</b>
Collect data on how parents are accessing school information (voicemail, email, websites) in annual survey to parents	July 2013 through June 2016	District and site Administrators	Analysis of annual survey data	Annual survey to parents
Define expectations for teacher placement of course outlines, homework assignments and posting of grades online and refresh rates	July 2013	District Administrators	Evaluation of feedback from monthly site Faculty meetings and adjust expectations as needed.	Faculty meeting feedback forms and/or notes
Develop District-wide standards for electronic home/school communication	July 2013	District Administrators	Evaluate feedback from Teachers, Parents and Administrators and adjust standards as needed.	Feedback forms from monthly Faculty, Administrator and PTA meetings.
All District and school site Administrators will use Connect Ed, a mass communication system to inform parents, staff, students and the community when presented with time time-sensitive information or situations	July 2013 through June 2016	District and Site Administrators	Analysis of Parent Surveys	Annual Parent Survey
Teachers will publish coursework and grades online in-line with District expectations.	August 2013 through June 2016	Teachers and site Administrators	Monitoring of teachers' publishing of coursework and grades online	Data on individual teacher's online publication of coursework and grades

3k. 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.

Data will be collected on student attendance rates, discipline records, annual and benchmark assessment scores, CAHSEE pass and fail rates, as well as graduation and drop-out rates. It is

believed among many in the field of Education that if students are engaged and learning in school, then attendance rates will increase, discipline issues will decrease, assessment scores will improve and more students will graduate from high school. Analysis of this data by the Academic Office, Assessment, Research and Evaluation Services, Technology Services and school sites will be done to monitor whether the District's curricular goals and objectives are being met. By sharing the data analysis across departments and school sites, the District will be able to assess whether our curricular goals and objectives are being met and whether the processes for monitoring are successful and/or need adjustment.

The Chief Academic Officer and the Assistant Superintendent of Educational and Informational Technology will ensure that teachers are empowered to create a media- rich environment for acquiring text, as well as create digital media to demonstrate their understanding of that content. They will oversee the implementation of section 3 of this plan. Bi-monthly meetings between the Academic Office and Technology Services will provide an ongoing opportunity to progress monitor the implementation of these goals and this Technology Plan.

## 4. Professional Development

### 4a. Summary of teachers' and administrators' current technology skills and needs for professional development.

With professional development time needed to shift teaching practices in the District, in alignment with Common Core State Standards, SCUSD recognizes that technology professional development time is: 1) limited, and 2) must be embedded with the ongoing district-led and site-specific professional development offerings. SCUSD will integrate technology professional development within the ongoing professional development activities for Common Core English Language Arts, Common Core Mathematics, English Language Learners, Gifted and Talented Education, Career and Technical Education, Special Education and other professional development catalog offerings. This model assumes a basic level of technology expertise to function in these professional development activities. Teachers needing basic level how-to' knowledge will find support through the Technology Services department outlined in Section 5.

Technologies change rapidly and it is often impossible for teachers to keep current with the changes in the field of academic technology integration. It is SCUSD's goal to support teacher technology knowledge within the framework of Common Core unit design and the development of culminating activities. The integration of the curricular content, the pedagogical practices, and current technology provide teachers and students with a robust teaching and learning environment. In their seminal work, "Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge" Mishra and Koehler posit the TPCK model which provides a framework for the integration of technology (T), pedagogy (P) and content (C) knowledge (K), which

"...is the basis of good teaching with technology and requires an understanding of the representation of concepts using technologies; pedagogical techniques that use technologies in constructive ways to teach content; knowledge of what makes concepts difficult or easy to learn and how technology can help redress some of the problems that students face; knowledge of students prior knowledge and theories of epistemology; and knowledge of how technologies can be used to build on existing knowledge and to develop new epistemologies or strengthen old ones."

The TPCK model suggests that the intersection of technology, pedagogy and content is a robust teaching and learning environment where the technology helps the student construct meaning and the teachers build purposeful designed-based approaches to teaching and learning with technology. It is in alignment with this framework that SCUSD will integrate technology professional development in the existing professional development activities that also bolster content knowledge and pedagogical knowledge of the teaching staff.

(Source: Punya Mishra and Matthew J. Koehler, "Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge", Teachers College Record, Volume 108, Number 6, June 2006, pp. 1017-1054)

SCUSD will develop a relevant survey tool for assessing the needs of the teachers to support high quality 21st century teaching. The most recent in-house survey for administrators reflected a need for more hands-on, guided professional development within the context of the classroom and content area. Of those surveyed, 60% shared their need as “More training on how to incorporate technology into daily teaching and how to evaluate its effectiveness” and 52% suggested “Having a site leader to be utilized as a technology leader” has been the most useful strategy for increasing teacher effectiveness with technology. With this information, SCUSD plans to incorporate these strategies in our District-led professional development as well as seek expert support from a Technology Professional Development Specialist to increase the effectiveness of technology integration for classroom teachers, as well as site instructional leaders.

In proposal form, SCUSD is seeking to boldly move all 82 of its campuses to a 1:1 student to computer ratio within four years. In order to accommodate this increase in technology, the District will propose an embedded professional development educator for the entire course of the four-year implementation. The plan will seek to build vision for the district level administration and management, as well as the school site administration. At the site level, capacity building for each campus will utilize site instruction coordinators, lead teachers, department chairs, Pathway leads, Library Media Specialists, and teacher aides. The goal, at the district level, is to build a 21st century vision for technology integration, and at the site level, to build site capacity to engage in this work within four years. As this plan is currently a proposal at the District Office, SCUSD will amend this Technology Plan when the proposal receives approval. The goals and objectives below support the current plan to increase student achievement in section 3d, as well as provide a simple framework should the plan be approved.

- 4b. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing professional development opportunities based on your district needs assessment data (4a) and the Curriculum Component objectives (sections 3d through 3j) of the plan.

**Goal 4b.1: Teachers will increase their capacity to integrate technology and digital media into the teaching and learning in their classrooms.**

Objective 4b.1.1: By June 2016, 75% of all teachers will be able to facilitate a rigorous learning environment, through professional development, that *utilizes* digital media to support the Common Core State Standards to increase student achievement.

**Benchmarks:**

- Year 1: By June 2014, 35% of all teachers will be able to facilitate a rigorous learning environment, through professional development, that utilizes digital media to support the Common Core State Standards to increase student achievement.
- Year 2: By June 2015, 50% of all teachers will be able to facilitate a rigorous learning environment, through professional development, that utilizes digital media to support the Common Core State Standards to increase student achievement.



- Year 3: By June 2016, 75% of all teachers will be able to facilitate a rigorous learning environment, through professional development, that utilizes digital media to support the Common Core State Standards to increase student achievement.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Align District-wide Teacher Professional Development Activities with Digital Media Teacher Expectations and Technology Teacher Needs Survey Results	December 2013 through June 2016	Academic Office, Assistant Superintendent of Curriculum and Instruction	Analysis of meeting Agendas and Documents, Professional Development Integration Plans	Meeting Agendas and Documents, Professional Development Integration Plans
Evaluate Survey Responses and Create a Plan of Action for Professional Development	November 2013	Academic Office, Assistant Superintendent of Curriculum and Instruction	Analysis of completed surveys	Complete surveys, Professional Development Agendas
Administer Technology Needs Survey for: 1) Administrators 2) Teachers	October 2013	Academic Office, Coordinator of Instructional Technology	Analysis of Surveys	Surveys
Create Technology Needs Survey for: 1) Administrators 2) Teachers	September 2013	Academic Office, Coordinator of Instructional Technology	Analysis of administrator and teacher surveys	District Administrators Survey, District Teacher Survey

**Goal 4b.2: Teachers will increase their capacity to integrate digital media into the teaching and learning in their classrooms to support deep conceptual understanding of that content.**

Objective 4b.2.1: By June 2016, 35% of all teachers will be able to facilitate a rigorous learning environment, through professional development, that utilizes digital media to *support deep conceptual understanding of that content* to support the Common Core State Standards to increase student achievement.

**Benchmarks:**

- Year 1: By June 2014, 25% of all teachers will be able to facilitate a rigorous learning environment, through professional development, that utilizes digital media to *support deep conceptual understanding of that content* to support the Common Core State Standards to increase student achievement.
- Year 2: By June 2015, 30% of all teachers will be able to facilitate a rigorous learning environment, through professional development, that utilizes digital media to *support deep conceptual understanding of that content* to support the Common Core State Standards to increase student achievement.
- Year 3: By June 2016, 35% of all teachers will be able to facilitate a rigorous learning environment, through professional development, that utilizes digital media to *support*

*deep conceptual understanding of that content* to support the Common Core State Standards to increase student achievement.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Align District-wide Teacher Technology Training Activities with Digital Media Content Creation Expectations and Technology Teacher Needs Survey Results	December 2013 through June 2016	Assistant Superintendent of Information Education Technology	Analysis of meeting Agendas and Documents, Technology Training Integration Plans	Meeting Agendas and Documents, Technology Training Integration Plans

**Goal 4b.3: Teachers will increase their capacity to integrate digital media into the teaching and learning in their classrooms to support deep conceptual understanding of that content as well as support student creation of digital media.**

Objective 4b.3.1: Objective: By 2016, 25% of all teachers will be able to incorporate digital media to support deep conceptual understanding of the Common Core State Standards to increase student achievement and to demonstrate that understanding through student-created digital media.

Benchmarks:

- Year 1: 15% of SCUSD teachers will be able to facilitate a rigorous 21st century learning environment that: 1) incorporates digital media to support deep conceptual understanding of the Common Core State Standards to increase student achievement and 2) fosters student-created digital media to demonstrate their deep conceptual learning.
- Year 2: 20% of SCUSD teachers will be able to facilitate a rigorous 21st century learning environment that: 1) incorporates digital media to support deep conceptual understanding of the Common Core State Standards to increase student achievement and 2) fosters student-created digital media to demonstrate their deep conceptual learning.
- Year 3: 25% of SCUSD teachers will be able to facilitate a rigorous 21st century learning environment that: 1) incorporates digital media to support deep conceptual understanding of the Common Core State Standards to increase student achievement and 2) fosters student-created digital media to demonstrate their deep conceptual learning.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Align District-wide Teacher Technology Training Activities with Digital Media Content Creation Expectations and Technology Teacher Needs Survey Results	December 2013 through June 2016	Assistant Superintendent of Information Education Technology	Analysis of meeting Agendas and Documents, Technology Training Integration Plans	Meeting Agendas and Documents, Technology Training Integration Plans

Align District-wide Technology Training Activities with Digital Media Leadership Expectations and Technology Administrators Needs Survey Results	December 2013 through June 2016	Assistant Superintendent of Information Education Technology	Analysis of meeting Agendas and Documents, Technology Training Integration Plans	Meeting Agendas and Documents, Technology Training Integration Plans
Conduct Technology Training for integrating 21st Century teaching and learning.	January 2014 through June 2016	Assistant Superintendent of Information Education Technology	Analysis of teacher Sign-ins, Meeting Agendas and Documents, Technology Training Evaluations	Teacher Sign-ins, Meeting Agendas and Documents, Technology Training Evaluations
Conduct Technology Training for Site Teacher Capacity Building.	January 2014 through June 2016	Assistant Superintendent of Information Education Technology	Analysis of teacher Sign-ins, Meeting Agendas and Documents, Technology Training Evaluations	Teacher Sign-ins, Meeting Agendas and Documents, Technology Training Evaluations

**Goal 4b.4: Teachers will have the knowledge and skills to create information literacy curriculum which includes copyright laws, fair use and cyber ethics as outlined in section 3f.**

Objective 4b.4.1: By June 2016, 100% of teachers will be provided with training on creating information literacy curriculum which includes copyright laws, fair use and cyber ethics.

Benchmarks:

- Year 1: By June 2014, 80% of teachers will be provided with training on creating information literacy curriculum which includes copyright laws, fair use and cyber ethics.
- Year 2: By June 2015, 90% of teachers will be provided with training on creating information literacy curriculum which includes copyright laws, fair use and cyber ethics.
- Year 3: By June 2016, 100% of teachers will be provided with training on creating information literacy curriculum which includes copyright laws, fair use and cyber ethics.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Provide Technology training to teachers on information literacy and copyright laws, fair use and cyber ethics	July 2013 through June 2016	Technology Services technology trainers	Analysis of training feedback forms and surveys	Training feedback forms and surveys

**Goal 4b.5: Teachers will have the knowledge and skills needed to teach students about cyber-bullying including but not limited to recognizing its different forms and how to respond, report and prevent it as outlined in section 3g.**

Objective 4b.5.1: By June 2016, 100% of teachers will be provided with training on how to teach students about cyber-bullying including but not limited to recognizing its different forms and how to respond, report and prevent it.

Benchmarks:

- Year 1: By June 2014, 80% of teachers will be provided with training on how to teach students about cyber-bullying including but not limited to recognizing its different forms and how to respond, report and prevent it.
- Year 2: By June 2015, 90% of teachers will be provided with training on how to teach students about cyber-bullying including but not limited to recognizing its different forms and how to respond, report and prevent it.
- Year 3: By June 2016, 100% of teachers will be provided with training on how to teach students about cyber-bullying including but not limited to recognizing its different forms and how to respond, report and prevent it.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Training sessions on creating and incorporating curriculum that teaches students about cyber-bullying	July 2013 through June 2016	Trainers in Integrated Support Services and the Bullying Prevention Specialist	Analysis of sign-in sheets and evaluation forms	Sign-in sheets and evaluation forms

**Goal 4b.6: SCUSD staff will use the student information and data management systems properly for accessing and maintaining student record keeping and for informing student and program academic needs as outlined in Goal 3i.1.**

Objective 4b.6.1: By June 2016, 100% of teachers will be provided with training to ensure all SCUSD staff will use the District's SIS and data management system to provide access and obtain student and group data to inform decision making with regard to student and program academic needs.

Benchmarks:

- Year 1: By June 2014, 80% of teachers will be provided with training to ensure all SCUSD staff will use the District's SIS and data management system to provide access and obtain student and group data to inform decision making with regard to student and program academic needs.
- Year 2: By June 2015, 90% of teachers will be provided with training to ensure all SCUSD staff will use the District's SIS and data management system to provide access and obtain student and group data to inform decision making with regard to student and program academic needs.
- Year 3: By June 2016, 100% of teachers will be provided with training to ensure all SCUSD staff will use the District's SIS and data management system to provide access

and obtain student and group data to inform decision making with regard to student and program academic needs.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Provide technology training to teachers on how to effectively use the District's SIS and data management system	July 2013 through June 2016	Technology Services technology trainers	Analysis of technology training feedback forms and surveys	Technology training feedback forms and surveys

**Goal 4b.7: SCUSD staff will acquire the technology skills and information literacy skills required of students in alignment with Common Core State Standards (CCSS) and SBAC assessments implementation as outlined in section 3i.2.**

Objective 4b.7.1: By June 2016, SCUSD will provide training to 75% of its schools to assist them in integrating technology tools, skills, and strategies for CCSS and SBAC assessments implementation.

Benchmarks:

- Year 1: By 2014, 10% of SCUSD teachers will integrate technology tools, skills, and strategies for CCSS and SBAC assessments implementation, based on SCUSD's monitoring and evaluation plan.
- Year 2: By 2015, 50% of SCUSD teachers will integrate technology tools, skills, and strategies for CCSS and SBAC assessments implementation, based on SCUSD's monitoring and evaluation plan.
- Year 3: By 2016, 75% of SCUSD teachers will integrate technology tools, skills, and strategies for CCSS and SBAC assessments implementation, based on SCUSD's monitoring and evaluation plan.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Create, administer and evaluate Technology Needs Survey for Administrators and Teachers	September through November 2013	Academic Office, Assistant Superintendent of Curriculum and Instruction	Analyze and evaluate surveys	District Administrator and Teacher surveys
Create a plan of action for Professional Development	November 2013	Academic Office, Assistant Superintendent of Curriculum and Instruction	Analysis of Technology Needs Surveys	Technology Needs Survey

Align Teacher Technology needs and Digital Media Content Creation Expectations with District-wide Professional Development activities	December 2013 through June 2016	Academic Office, Assistant Superintendent of Curriculum and Instruction	Analysis of meeting agendas and documents from Professional Development	Meeting agendas and Professional Development documents and feedback forms.
Align District-wide Leadership Development Activities with Digital Media Leadership Expectations and Technology Administrators' Needs Survey Results	December 2013 through June 2016	Academic Office, Assistant Superintendent of Curriculum and Instruction	Analysis of meeting agendas and documents and Professional Development Integration Plans	Meeting agendas, meeting documents, Professional Development Integration Plans
Conduct Professional Development for Leadership, and Teacher Capacity building	January 2014 through June 2016	Academic Office, Assistant Superintendent of Curriculum and Instruction	Evaluation of sign-in sheets, agendas and documents from Professional Development	Sign-in sheets, agendas and documents from Professional Development

- 4c. Describe the process that will be used to monitor the Professional Development (Section 4b) goals, objectives, benchmarks, and planned activities including roles and responsibilities.

The implementation of this professional development plan will be overseen by the Chief Academic Officer to ensure that teachers are empowered to adjust their teaching practices in alignment with Common Core, section 3 and section 4 of this plan. As a common practice, the Academic Office retains records of all professional development sessions that it sponsors. Those records include: session agendas, sign-in and sign-out sheets, records of hours of professional development acquired per teacher, as well as a standard evaluation by each participant to measure of the efficacy of each professional development session. The Academic Office is the keeper of these records and they are evaluated annually to inform the following year of professional development offerings. In addition, SCUSD understands the need for basic technical training of teachers so they can impart those skills to their students. The Assistant Superintendent of Information Education Technology and Technology Services, through ongoing basic technical training for teachers, will ensure that teachers acquire more technology skills in order to transfer those skills to their students. The ongoing technical training for teachers will be monitored for effectiveness through feedback from teachers. Technology Services will also keep records of all teachers who participate in the technology trainings.

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

- 5a. 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 of the plan.

**Existing Hardware:** SCUSD has approximately 15,000 desktop and laptop computers and mobile devices, and the overall student-to-computer ratio for student-accessible computers connected to our network and included in our district technology device inventories is 4:1. However, the current student-to-device ratio that meets the Smarter Balanced Assessment Consortium Standards (SBAC) as part of the Common Core Online Assessments is 11:1. The district supports several platforms of devices, both Windows and Apple. Windows-based PCs are the district standard for the administrative use of the Escape finance software system as well as Zangle, the current student information system. The district's server infrastructure is housed on virtual servers, providing a robust, fault-tolerant environment for data and data access.

School sites have multiple printers, digital cameras, video cameras, projectors, mobile Computer/Television displays and other digital devices. Equipment is typically available on an as-needed basis to each classroom. Most district schools utilize either a fixed, "traditional" computer lab, and/or have mobile labs/carts of laptops or mobile devices that can be brought into classrooms.

The district currently does not have an inventory system in place to track the type and age of hardware. However, a one-time, district-wide hardware inventory analysis was conducted in 2013 to assess the type and age of the hardware currently in place.

Our goal is to develop an ongoing inventory system using the inventorying module as part of the District's existing work-order system, TrackIT!, which performs an automatic inventory of all SCUSD computers, detects hardware specifications and exports the data for analysis in spreadsheet form.

**Existing Internet Access:** In recent years, the Sacramento City Unified School District (SCUSD) has invested resources into implementing a well designed, state-of-the-art district data center that supports the district's vision of the 21st century classroom. This vision includes the delivery of data, voice, video, and wireless services to support the curriculum and professional development components of the district. Current conditions of the site network infrastructure at all SCUSD schools contain critical deficiencies that limit the delivery of 21st century education to the classroom.

SCUSD supports 85 schools and associated administrative offices. The district's wide area network (WAN) currently utilizes AT&T Opt-E-MAN and Comcast BestNet technology as well as inter-site fiber connectivity to provide high-speed access to all schools and administrative facilities. Internet connection is made through the Sacramento County Office of Education via a 10 Gigabyte connection. This access is filtered for content, viruses and SPAM to adhere to the CIPA requirements so that staff and students can depend on a safer and more productive

environment. Routers connect each AT&T Opt-E-MAN or Comcast BestNet circuit to the site local area network (LAN).

SCUSD is a 90% E-Rate eligible school for Internet and telecommunications services and many schools are also eligible for E-Rate Priority 2 network funding.

District elementary schools connect to the Internet at 100mbps. Middle schools and high schools connect to the Internet at 1 Gigabit. Currently, these connection speeds are meeting the needs of the district. A high-speed 1000 mbps Ethernet switch is installed between the data center and the school sites. This network is evaluated annually and upgraded as needed to address user needs.

All workstation network paths are currently deficient and inconsistent in relationship to the desired minimum of 100-megabits per second, with backbone paths running at a speed of 1000 megabits per second. Data and phone lines at all school sites are inconsistent with standard data cabling such as Cat 6 or other high bandwidth media.

Each SCUSD classroom is limited to one or two network drops, which do not meet the demands of the 21st century classroom. Each SCUSD computer lab is limited to 6 to 12 network drops, which do not meet the demands of a modern lab environment, requiring additional consumer grade switches for connectivity.

SCUSD has implemented a model of district-wide enterprise wireless access, using Cisco controllers and wireless access points at 4 sites, which includes the District Office. We plan to deliver this wireless model to all district facilities that undergo pending network upgrades.

The District has also implemented server virtualization in an effort to better utilize server hardware and minimize infrastructure costs, using VMware running on Cisco server hardware. We employ Windows servers for various applications including, Microsoft Exchange, DNS/WINS, file/print services, SQL servers, Proxy, Firewall, Internet/Intranet, Anti-Virus and Internet Content Filtering. Windows Active Directory provides log-on services.

All staff members have email accounts through Microsoft Exchange Email System, while students currently do not have email accounts.

SCUSD's Student Information System (Zangle) is unsupported by the original manufacturer and lacks needed updates and modifications, thereby not meeting the needs of the district and its stakeholders. The District utilizes Escape Online Finance/HR/Payroll Systems in support of the Finance and Human Resources Departments. Currently Escape is meeting the needs of the district.

A Cisco Voice-over-IP telephone system is used at four sites, including the District Office. This system, implemented in 2012, provides state-of-the-art voice-mail, auto-attendant, call accounting, custom dial plans, and web-based management. It uses the existing computer network backbone to transport voice calls internally and route across the district WAN to access regular telephone circuits. The district continues to upgrade the current software version to provide additional features and plans to deliver this telecommunications model to all facilities that undergo pending network upgrades. The primary life-safety objective is to provide direct dial tone to the classroom so that outbound calls and emergency calls can be placed without attendant intervention.

Facilities that have not received network upgrades currently utilize PBX phone systems. These PBX phone systems will be phased-out with the pending implementation of Cisco Voice-over-IP telephone systems. Administrators and technical/support staff use cell phones to provide



consistent communication while away from their respective sites, including both voice-only phones and phones with data access capability to provide connectivity to the district's email services. Our ultimate goal is to provide for safety and enhanced communications between administrators, staff, teachers, parents, students and the community.

To improve communication and provide access to staff, students, parents and the community, SCUSD has implemented Cisco Telepresence video systems that allow live streaming across the Internet as regularly scheduled Board meetings are in session. A link is provided on the District's Board of Education web page that provides access to the live streaming via the Internet, for mobile devices as well as traditional computers, to those who cannot attend the meetings. In addition, the video is archived the following day and available to the general public to view at their convenience, on the district Cisco Show and Share Video Library.

Our new District website uses the Digital Deployment Content Management System (CMS) and all school sites are currently in the process of converting to this CMS model.

### **Existing Electronic Learning Resources:**

All software purchases must meet a minimum set of standards consistent with the California Learning Resource Network (CLRN), as well as the needs and standards of the district. All district computers are imaged with Microsoft Office prior to site deployment, as well as iLife and iWork available for Mac OS X computers.

SCUSD utilizes all district licensed and free software to implement the goals and benchmarks in sections 3d through 3j.

The district coordinates purchasing of site and district licenses to obtain the best values. Sites also select additional software to meet the needs of their student populations. Over the past few years, more sites are tapping into free software downloads and open source Web 2.0 software for blogs, podcasts, and wikis. District software licenses include:

- Microsoft Office
- Follett – library and textbook circulation
- Zangle
- Escape Online
- Digital Deployment (Website Content Management System)
- Orchard, Kidspiration, Inspiration, STAR and Accelerated Reader
- Computer Aided Drafting/Design (CADD)
- Adobe Creative Suite
- AutoCad, Pro Engineer and Solidworks
- iLife and iWork
- DataDirector
- All required server licensing

Most of our elementary school sites have a computer lab or cart with mobile devices with 20-35 workstations available for student use. There are, however, four elementary schools in SCUSD that have no computer lab at all. This will change with the implementation of the Common Core requirement to test all students through the use of computers.

Our middle school classroom configurations vary with the instructional use of computers or mobile devices. All of our middle school sites have at least 1 computer lab while many of the computer labs contain mobile computers or devices allowing for use and sharing across the campus. Furthermore, several sites contain mobile carts, also allowing for use in different campus locations. In addition to district licensed software, many middle school computer labs and classrooms are also taking advantage of free software downloads and Web 2.0 tools.

Of our multiple grade or K-8 schools, there are a wide variety of electronic learning resources used. Some sites have designated computer labs while others have mobile computer/device carts in addition to fixed computer labs. However, the district's Waldorf-Inspired Methods school (Alice Birney) has no computers designated for student use. With the adoption of the Common Core Curriculum and subsequent computer mediated assessments, all schools will have access to computers for learning and assessments.

Like SCUSD's middle and multiple grade schools, our high school classroom configurations vary with the instructional use, number and accessibility of electronic learning resources. Our comprehensive high schools have multiple computer labs at each site while our alternative high schools have at least 1 computer lab at each site. The computer/mobile device labs at our high schools contain a minimum of 25 devices. In addition to using grade book software, our secondary sites teach a variety of course- specific software programs, such as *Dreamweaver*, *Photoshop*, *Adobe Creative Suite*, *CADD* and *AutoCAD* – and are also exploring free Web 2.0 programs.

### **Existing Technical Support:**

The district Technology Services Department provides a phone and email based *Help Desk* for users to submit requests for technical assistance. The District's existing work-order system, TrackIT!, inputs all work-orders in an electronic database, which allows technicians to manage work requests and communicate to users when issues are resolved. TrackIT! allows for the export of work-order data for analysis in spreadsheet form and graphic form.

District support staff will, whenever possible, prioritize support of classroom instruction ahead of other support duties to insure that instruction is the primary focus of technology support in the district. The average response time depends on factors, internal and external, project load and time of year. However, the technology team has a target goal of repair of between two and five days, excluding exceptional circumstances outside the team's control.

As the network expands into more areas to integrate technology and instruction, more servers are needed, more workstations deployed, and more software installed for all devices. As students, teachers and administrators increase their use of technology, additional support will be needed.

Technical Support for the Sacramento City Unified School District is provided by Technology Services. The department has 22 staff members in various technical positions. Because of budget cuts, approximately 9 positions have been cut over the last several years.

Three dedicated general *Help Desk* Technicians answer phones and process email and technology support requests, which are managed in the District's work order system. Work

orders are then assigned to the appropriate support group and technician(s). The *Help Desk* is available 7 a.m. – 5 p.m., Monday through Friday.

Eight Support Technicians provide technical support for the district's school sites and the district's office. Eight mobile support Technicians travel to school sites and provide technical support. These Support Technicians provide the support for computers, printers, IP phones (at upgraded sites) and software demands at all district locations. The mobile support team prioritizes calls and handles them as appropriate on a daily basis with their primarily assigned sites.

The operations unit is a staff of eight that includes: two Network Specialists, one Database Administrator and five Application Specialists. This unit is responsible for the support and maintenance of the data network, Voice-over IP telephone systems, general technical infrastructure, network security, Student Information and Financial Information Systems, data systems, server based applications, Active Directory network accounts and day-to-day administration and maintenance of all district servers. Production printing services are also provided for items such as Accounts Payable, Payroll, and Tax Forms.

- 5b. Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed by the district's teachers, students, and administrators to support the activities in the Curriculum and Professional Development Components of the plan.

**Hardware Needed:** In order to stay current with upcoming implementation of Common Core State Standards, online SBAC Testing and Assessments and to provide the best learning and work environment to students, staff and administrators, SCUSD needs to continue to update and replace aging equipment. Based on data collected from a one-time computer/device inventory, the following data reflects the results of the recent inventory of computers in SCUSD:

SCUSD Computer Data	
Total # of Computers for Instructional Use	9,487
Total # of Internet Connected Computers in Classrooms	9,487
Total # of Computers for Instructional Use 1-3 years old	4,576
Total # of Computers for Instructional Use 4-6 years old	2,358
Total # of Computers for Instructional Use 7-10+ years old	2,553
Total # of SBAC Compliant Devices	4,123

Student to Computer Ratio of SBAC Compliant Devices	11:1
Internet Access Connection Speed (DSL, T-1, >T-1)	Minimum 1000

SCUSD is preparing to create a District-centralized computer purchasing model beginning in 2013-14. The model will be inline with technology and curriculum goals supported by this technology plan. This will ensure that technology equipment remains current and sustainable, is within Common Core technical standards and is accessible to all SCUSD students equitably. This model, creating a sustainable and current standard, will lower the Total Cost of Ownership (TCO) for the District to support seamless technology integration in the classroom.

Over the course of four years, SCUSD will work to create a technology environment, where student to technology device accessibility is at a 1:1 ratio, ensuring that the district delivers technology tools to support student achievement goals as stipulated in section 3 of this Technology Plan. A 1:1 technology accessibility model will be reached, District-wide, by school year 2017-18, ensuring that all students and teachers will have access to the instructional tools that support a media rich, digital content integration environment.

During the 2013-14, SCUSD will deploy appropriate quantities of District standard laptop carts to all district schools, with the objective of meeting the SBAC online testing requirements for spring of 2014-15 and expand the Proof of Concept model deployed at California and Rosa Parks Middle School from a 4:1 to a 1:1 ratio of student to technology devices.

With the objective of reaching a 1:1 ratio of student to technology device (laptops and tablets) model by school year 2017-18, the District will move toward implementing this model to all schools as they undergo District network upgrades. Under the guidance of the Academic Office, a Technology Professional Development Specialist will deliver professional development to all District teachers as school sites implement this program.

The district will deliver a Virtualized Desktop Infrastructure (VDI) as part of the existing District Data Center to provide services for users requiring the use of the Windows/PC platform. VDI is a desktop-centric service that hosts users desktop environments on remote servers, accessed by cost effective “thin clients” on the users end. For the District, this means a more centralized, efficient and cost effective client environment that is easier to maintain and able to respond more quickly to the changing needs of the user and operations. VDI implementations can replace aging Windows desktops as well as existing computer labs.

Going forward, all campuses and facilities will replace LCD projectors (where applicable) with high definition video displays, Cisco video recording and conferencing equipment. This will allow users to display digital content as well as record instruction, trainings, meetings, etc., that can be stored and accessed on the District’s private video library, Cisco Show and Share.

With the convergence of voice, alarms, clocks and other services onto the network, our goal is to provide a robust architecture that supports current and emerging communications standards.

**Electronic Learning Resources Needed:** All future software purchases will continue to meet a minimum set of standards consistent with the California Learning Resource Network (CLRN), as well as the needs and standards of the district. SCUSD will continue to use all district licensed and free software to implement the goals and benchmarks in sections 3d through 3j. Google Apps for Education will be implemented for all students, which will provide online collaboration tools and student email accounts.

The District is in the process of selecting a new student information system (SIS). The new SIS will meet all requirements stipulated in the District approved Request for Proposal (RFP), including, but limited to, system capacity for data analysis, management, student record keeping and home-school communication. Any new District SIS will meet all requirements for state CALPADS reporting.

A Learning Management System (LMS) will be implemented, providing students, teachers and parents with a centralized and Internet accessible system for administration, documentation, tracking, reporting, home-school communication and the delivery of education courses or training programs.

SCUSD will also implement Atomic Learning, an online and on-demand technology training and support system. This allows for flexible learning opportunities for district students and staff to receive professional technology development in the form of videos that can be accessed at the users convenience. This opportunity with Atomic Learning also allows for parents and community members to access these training videos for free as part of the paid license agreement for the District.

**Networking and Telecommunications Infrastructure Needed:** The Sacramento City Unified School District will continue implementing the vision of a well-designed infrastructure that delivers state-of-the-art support to the 21st century classroom. This vision includes the delivery of data, voice, video, and wireless services to support the curriculum and professional development components of the Academic Office.

Network upgrades already performed at four existing schools will be implemented at all school site facilities by the school year 2017-18. Network upgrades include the appropriate number of Ethernet drops in classrooms and labs, installation of new switches; District-wide enterprise wireless access, video capabilities and IP phone services.

With the proliferation of mobile devices (smart phones, tablets, etc.) at SCUSD, the District will implement a Mobile Device Management System (MDMS). A MDMS secures, monitors, manages, inventories and supports mobile devices deployed across an organization. Technology Services will continue to evaluate current storage environment for District users and supplement storage capacity as needed.

The District will implement a bandwidth management and network traffic analysis tool, such as Cisco's Iron Port. This will help us understand current traffic patterns and offer alternatives to our current Internet content filtering. The data will also help determine equipment replacement and circuit updates in future years. We will measure network application performance, categorize

and manage Web traffic based on its content, guarantee quality-of-service for preferred applications and content, and contain the impact of undesirable traffic.

SCUSD remains committed to building, expanding and maintaining a scalable data infrastructure, as demands on technology, data storage, security, and network performance increase over time.

**Physical Plant Modifications Needed:** As the District prepares to deliver leading-edge technology in the vision of the 21st Century Classroom, we must also provide the proper environment for this technology. With more technology devices being deployed at school sites (i.e., equipment used to support SBAC and Common Core State Standards), the increased processing power of the data center, heat load and power consumption become significant factors in the design of the physical plant.

The district must accommodate upcoming electrical demands of an increased technology device and computer infrastructure by:

- Installing the appropriate quantity of electrical outlets in classrooms and testing facilities;
- Installing the appropriate quantity of electrical outlets to support the expanded data network infrastructure; and
- Installing adequate backup power supplies at school sites and the District's Data Center

**Technical Support Needed:** As the schools bring in more technology and rely on it with increased frequency for instruction, more technical support will be needed to meet the demands of faster response time and the sheer volume of equipment growth.

We anticipate needing to add new technical support positions over the course of the next three years to meet the goals and support needs of the district. Based on the professional development goals and requests for technology training for classified and certificated productivity software use, instructional technology support positions will be needed within the Technology Services Department.

- 5c. 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.

Year 1 Benchmark:		
Recommended Actions/Activities	Timeline	Person(s) Responsible
Expand the Proof of Concept model at 2 SCUSD schools by providing the appropriate number of technology devices (laptops and tablets) to move the 2 schools from a 4:1 to a 1:1 student to device ratio.	2013-2014	Technology Services

Using Year 16 E-Rate funding, 11 E-Rate eligible school facilities will undergo network upgrades.	2013-2014	Director of Technology Services & Operations Team
Deploy appropriate quantities of district standard laptop carts at all SCUSD schools for SBAC online testing.	2013-2014	Technology Services & Assessment, Research and Evaluation Services
Begin the replacement of LCD projectors (where applicable) with high definition video displays, Cisco video recording and conferencing equipment.	2013-2014	Technology Services
Purchase and parallel the use of a new Student Information System (SIS) with the existing SIS (Zangle).	2013-2014	Technology Services, Operations Team & Data Team
Pilot the deployment and use of a Virtualized Desktop Infrastructure (VDI) to provide services for users requiring the use of the Windows/PC platform.	2013-2014	Technology Services & Operations Team
Research and choose a Learning Management System (LMS).	2013-2014	Technology Services & Academic Department
Research and choose a Mobile Device Management System (MDMS).	2013-2014	Technology Services & Operations Team
Review and amend SCUSD policies and agreements to prepare for student use of Google Apps for Education. Engage departments in the district to begin implementation of Google Apps for Education.	2013-2014	Technology Services & Academic Department
SCUSD will implement the use of Atomic Learning for online and on-demand technology training and support.	2013-2014	Technology Services
Implement a bandwidth management and network traffic analysis tool.	2013-2014	Operations Team
Pending available funding, SCUSD will add new Technical Support positions.	2013-2014	Assistant Superintendent, Information Education Technology
Pending available funding, SCUSD will add new Instructional Technology Support positions.	2013-2014	Assistant Superintendent, Information Education Technology

Year 2 Benchmark:		
Recommended Actions/Activities	Timeline	Person(s) Responsible
Create a 1:1 student to technology device ratio at 25% of SCUSD schools by providing the appropriate number of technology devices (laptops and tablets).	2014-2015	Technology Services
Using Year 17 E-Rate funding, 24 E-Rate eligible school facilities will undergo network upgrades.	2014-2015	Director of Technology Services & Operations Team
Begin the implementation of a Virtualized Desktop Infrastructure (VDI) to provide services for users requiring the use of the Windows/PC platform.	2014-2015	Technology Services & Operations Team
Continue to replace LCD projectors (where applicable) with high definition video displays, Cisco video recording and conferencing equipment.	2014-2015	Technology Services

Complete implementation and use of the new Student Information System (SIS) and eliminate the use of the old SIS (Zangle).	2014-2015	Technology Services, Operations Team & Data Team
Implement the use of Google Apps for Education throughout SCUSD.	2014-2015	Technology Services & Academic Department
Engage appropriate departments in SCUSD in the use of the Learning Management System (LMS).	2014-2015	Technology Services & Academic Department
Implement the use of the Mobile Device Management System (MDMS)	2014-2015	Operations Team
Pending available funding, SCUSD will add new Technical Support positions.	2014-2015	Assistant Superintendent, Information Education Technology
Pending available funding, SCUSD will add new Instructional Technology Support positions.	2014-2015	Assistant Superintendent, Information Education Technology

<b>Year 3 Benchmark:</b>		
<b>Recommended Actions/Activities</b>	<b>Timeline</b>	<b>Person(s) Responsible</b>
Expand the student to technology device ratio of 1:1 to include 60% of SCUSD schools by providing the appropriate number of technology devices (laptops and tablets).	2015-2016	Technology Services
Continue the implementation of a Virtualized Desktop Infrastructure (VDI) to provide services for users requiring the use of the Windows/PC platform.	2015-2016	Technology Services & Operations Team
Continue to replace LCD projectors (where applicable) with high definition video displays, Cisco video recording and conferencing equipment.	2015-2016	Technology Services
Continue the use of Google Apps for Education throughout SCUSD.	2015-2016	Technology Services & Academic Department
District use of Learning Management System (LMS).	2015-2016	Technology Services & Academic Department
All remaining school facilities will undergo network upgrades using District Bond funds.	2015-2016	Director of Technology Services & Operations Team
Pending available funding, SCUSD will add new Technical Support positions.	2015-2016	Assistant Superintendent, Information Education Technology
Pending available funding, SCUSD will add new Instructional Technology Support positions.	2015-2016	Assistant Superintendent, Information Education Technology

5d. Describe the process that will be used to monitor Section 5b and the annual benchmarks and timeline of activities including roles and responsibilities.

The SCUSD's Assistant Superintendent of Information Education Technology, the Director of Technology Services and the Operations Team will oversee the implementation of SCUSD's goals for Infrastructure, Hardware, Technical Support and Software within this plan. Collecting and assessing relevant data regarding the scope, stability and results of the above goals will be conducted semi-annually by all units of the Technology Services department and other



departments as necessary. In addition, Technology Services will annually monitor and assess this plan's progress with the Technology Advisory Committee. Technology funds, Bond Funds and E-rate discounts will be utilized, when and where available, to update and replace aging equipment, provide network upgrades at school sites, provide new technologies to our District's schools as necessary and provide training to District employees as needed. It is the Technology Services Department's goal to provide the students, staff and administrators in the District with a robust and technologically-rich learning environment. Technology Services will ensure success through continued evaluations of annual costs and effectiveness of its responsibilities, and make modifications as necessary.

Activity and Dates	Person(s) Responsible
July 2013 through June 2016 SCUSD will replace aging computers and devices	Technology Services, Academic Office and Budget Services
July 2013 through June 2016 all schools will undergo network upgrades	Technology Services
July 2013 through June 2016 SCUSD will provide schools with new tools and technologies to provide the students, staff and administrators in the District with a robust and technology-rich learning environment	Technology Services and Academic Office
July 2013 through June 2016 SCUSD will provide technology training to teachers and staff as needed	Technology Services

## 6. Funding and Budget

### 6a. List of established and potential funding sources.

#### **Established Funding Sources:**

- Title I: Disadvantaged Students
- Title II: Teacher Quality
- Vocational Programs
- Economic Impact Aid
- School Improvement
- Grants
- ERate
- Microsoft K12 Voucher Funds
- General Funds
- Bond Measure

The District will also explore the potential for allocating additional general budget funds toward technology use. Setting long-term priorities and providing ongoing funding to continue to replace obsolete equipment is a goal of the leadership team of SCUSD.

The district is committed to a long-term financial plan that provides students and teachers with suitable technology to support learning, and at the same time, protects the community's investment. Responding to the financial realities presented by the need to make technology available to students is a significant challenge. Providing and maintaining technology resources not only includes the initial purchase price of the equipment but must also include the infrastructure to maintain and support equipment as well as to connect each school to the district and every student and staff member to the internet. Professional learning is essential, both in the use of equipment and software, as well as in instructional strategies for the integration of this technology into the curriculum.

#### **Potential Funding Sources:**

- Private Donations
- Parent Teacher Association
- Corporate sponsorships
- After School Programs
- Regional Occupational Programs

The District will seek grant funding and also explore the potential for allocating additional general budget funds toward technology use.

### 6b. Estimate annual implementation costs for the term of the plan.

Item Description	Year 1	Year 2	Year 3	Funding Source Including E-Rate
<b>1000-1999 Certificated Salaries</b>				
Substitutes and Stipends for Staff Development	\$45,000	\$46,000	\$47,000	General Fund
<b>2000-2999 Classified Salaries</b>				
Tech Support Salaries	\$1,532,000	\$1,532,000	\$1,532,000	General Fund
<b>3000-3999 Employee Benefits</b>				
Benefits for Certificated and Classified related to Ed Tech Plan	\$679,000	\$679,000	\$679,000	General Fund
<b>4000-4999 Materials and Supplies</b>				
Computers	\$1,650,000	\$1,950,000	\$2,050,000	General Fund / E-Rate / Vouchers
Printers	\$25,000	\$30,000	\$32,000	General Fund
LCD Projectors	\$300,000	\$310,000	\$310,000	General Fund
Misc - Other Peripherals	\$400,000	\$425,000	\$450,000	General Fund
ELR's - (Electronic Learning Resources) Info Trake Online	\$150,000	\$175,000	\$195,000	General Fund
ELAR's - (Electronic Learning Assessment Resources)	\$60,000	\$60,000	\$60,000	General Fund
<b>5000-5999 Other Services and Operating Expenses</b>				
Staff Development Prof. Dev.	\$75,000	\$75,000	\$75,000	General Fund
Productivity Software	\$600,000	\$600,000	\$600,000	General Fund
Internet Access - OPT-E-MAN	\$620,000	\$620,000	\$620,000	General Fund / E-Rate
Web Site Publishing and Hosting	\$25,000	\$25,000	\$25,000	General Fund / E-Rate
<b>6000-6999 Equipment</b>				
Capital Outlay	\$200,000	\$200,000	\$200,000	
Bond Funding and all E-Rate eligible school facilities to undergo network upgrades.	\$1,800,000	\$0	\$0	E-Rate / Bond Money
Install and Maintain Student Information System	\$1,300,000	\$250,000	\$250,000	Bond Money
Totals:	\$9,461,000	\$6,977,000	\$7,125,000	

6c. Describe the district's replacement policy for obsolete equipment.

Sacramento City Unified School District will plan to replace existing computers on a four-year cycle to ensure that every school has computers that meet our district's goal of providing each student access to current technology. SCUSD is currently negotiating options where older equipment is refreshed annually and Professional Development is included in the refreshment program. Additional computers, whiteboards, audio/video equipment, etc., could be purchased with various site funds and grants in accordance with each site's technology plan and goals. Obsolete computers will be recycled as per recommendation and contracted agreement with our primary supplier.

School sites identify obsolete equipment annually and the District coordinates the removal and disposal of that equipment. Asset tags are kept on equipment of value equal to or greater than \$500 and are maintained in Escape, the district's Finance/HR/Payroll system. Annual audits are conducted and checked at school sites to maintain inventory. Equipment in need of repair is classified as obsolete' if the system is not worth the investment in parts/labor. The Purchasing department manages the surplus of equipment for the district.

6d. Describe the process that will be used to monitor Ed Tech funding, implementation costs and new funding opportunities and to adjust budgets as necessary.

The budget for the Sacramento City Unified School District Technology Plan will be reviewed annually by the Superintendent, Fiscal Services, and Technology Services. Upon review, funding for professional learning and technology needs will be assessed and revised according to funding availability.

## 7. Monitoring and Evaluation

- 7a. Describe the process for evaluating the plan's overall progress and impact on teaching and learning.

Technology's impact on student learning and attainment of the District's curricular goals are monitored by the District Technology Committee and reported to the Superintendent and Board of Education annually. Technology Committee meetings will be conducted regularly to share data related to progress toward goals, and to collect, review and disseminate annual findings as noted in the implementation plans which follow each objective in the curriculum and professional development sections of this plan.

A district survey and evaluation will be conducted each year and reported to the committee for review. Benchmarks and progress of implementation will be monitored by the District Technology Committee. Student achievement is evaluated using multiple measures, including standardized test scores. The District Technology Plan will be revised each year, along with the Site Technology Use Plans.

Teachers and site administrators will annually complete a district provided survey to help monitor the usage and expansion of instructional technology. Student technology usage will be monitored by feedback from the teachers. Student equity of access to technology will be included. Benchmarks and monitoring will help establish whether progress is being made and what modifications need to be made. Successful implementation of the technology plan will be determined from academic information showing student achievement improvement.

Final evaluation of technology's impact on student learning and attainment of the District's curricular goals will be reported at the end of the technology plan cycle (every 3 years). All objectives and components will be reviewed, evaluated, and revised as needed by the District Technology Committee. The Committee will assist in making recommendations and adjustments to the District and Site Technology Plan.

- 7b. Schedule for evaluating the effect of plan implementation.

The Technology Committee will meet at least quarterly, or as needed, to maintain the plan's momentum based on formative assessment results. Updates will be provided regularly. Meetings will be scheduled and held at times convenient to the majority of participants.

The following specifies the monitoring and evaluation annual timeline, the person(s) responsible, and the process and frequency of communicating results to tech plan stakeholders:

- **Provide overall Tech Plan management and coordination** - Assistant Superintendent of Technology Services & Technology Committee; Monitoring – July 2013 and monthly thereafter, Evaluation - July 2013 and monthly thereafter
- **Manage, coordinate, implement, monitor, and evaluate curriculum-based technology integration staff development** –Assistant Superintendent of Technology Services, Technology Committee and Assistant Superintendent of Curriculum and Instruction; Monitoring – July 2013 and monthly thereafter, Evaluation - July and annually thereafter
- **Manage, coordinate, implement, monitor, and evaluate staff development focused on teaching students NETS skills** –Assistant Superintendent of Technology Services, Technology Committee and Assistant Superintendent of Curriculum and Instruction; Monitoring – July 2013 and monthly thereafter, Evaluation - July 2013 and annually thereafter
- **Coordinate, manage, and evaluate technology budget, acquisitions, installation, and maintenance** –Assistant Superintendent of Technology Services & Technology Committee; Monitoring – July and monthly thereafter, Evaluation - July and annually thereafter
- **Standardize, develop, manage, monitor, and revise as necessary network, hardware, infrastructure, software, and technical support specifications, policies, and procedures** –Assistant Superintendent of Technology Services, Technology Committee and Assistant Superintendent of Curriculum and Instruction; Monitoring – July 2013 and monthly thereafter, Evaluation - July 2013 and annually thereafter
- **Collect and analyze staff development data on technology proficiencies through the annual completion of the District provided survey** –Assistant Superintendent of Technology Services, Technology Committee and Assistant Superintendent of Curriculum and Instruction; Monitoring – December and annually thereafter, Evaluation - December and annually thereafter
- **Coordinate ongoing tech committee and stakeholder involvement** –Assistant Superintendent of Technology Services, Technology Committee and Assistant Superintendent of Curriculum and Instruction; Monitoring – July 2013 and quarterly thereafter, Evaluation - July 2013 and annually thereafter
- **Collect and analyze data regarding students' technology skills and students' academic achievement** –Assistant Superintendent of Technology Services, Technology Committee and Director of Assessment, Research and Evaluation; Monitoring – October 2013 and quarterly thereafter, Evaluation - October 2013 and quarterly thereafter
- **Communicate tech plan implementation update to stakeholders including the District school board** –Assistant Superintendent of Technology Services & Technology Committee; Monitoring – July 2013 and both annually and whenever circumstances warrant thereafter, Evaluation - July 2013 and annually thereafter
- **Communicate annual Technology Plan evaluation results to stakeholders including the District school board. Parents and the community will receive annual reports via the District web site, newsletters, and press releases** –Assistant Superintendent of Technology Services & Technology Committee; Monitoring – July 2014 and annually thereafter, Evaluation - July 2014 and annually thereafter

7c. Describe the process and frequency of communicating evaluation results to tech plan stakeholders.

The Technology Advisory Committee will communicate progress and recommendations for change to the stakeholders for consideration and feedback via email, postings on the District's website and annual Committee meetings. Opportunities for the stakeholders to give input and voice concerns will be available throughout the duration of this Technology Plan via email, responses to postings on the District's website and feedback from annual Committee meetings. Evaluation will continue throughout the duration of the plan monthly, quarterly and annually. Teachers will be encouraged to collaborate and share successes and/or challenges regarding the use of technology in the classroom with colleagues through email, weekly and/or department meetings and the use of Cisco's "Show and Share" which is a webcasting and video sharing application that allows users to create highly secure videos to share ideas and experiences. In addition, when necessary, mid-course corrections will be made per monitoring and feedback results from all stakeholders. For detailed information on the evaluation strategies of each component, please refer to section 7b of the technology plan.

## 8. Collaborative Strategies with Adult Literacy Providers

The Adult Education Division, an integral component of the Sacramento City Unified School District since 1872, participates in the federal Adult Education and Family Literacy Act, enacted as Title II of the Workforce Investment Act, which provides federal funding for Adult Basic Education (ABE), English as a Second Language (ESL), and General Education Development (GED) programs. The goal of the programs is to enable adults to become more employable, productive, and responsible citizens through literacy. All of our ABE, ESL, and GED classrooms have multiple computers, printers, and are connected to the Internet using the district's network connections. Teachers regularly use smart boards, document cameras, and LED projectors to deliver instruction. All students have access to software and programs that are available at several levels in order to accommodate all student needs.

There are no other literacy programs in the attendance area that deal with literacy at the level that SCUSD's Adult Literacy does. The ESL classes at Sacramento City College prepare students to pass the Test of English Foreign Language (TOEFL) exam indicating that they have the ability to use and understand English at the university level. Our students transition to this program when they have completed the advanced level courses which we offer. The County Office of Education does not have an adult education program, the libraries are just developing a program and we are collaborating with them, and Regional Occupational Program (ROP) services aren't available for adults in our area, just high school students.

Many adults in the District need a variety of services that adult education provides. Specifically, the diverse groups of people who need stronger literacy skills in the District include:

- Recent immigrants who have little education in their native languages;
- Middle-aged and older U.S. born high school graduates who can no longer keep up with the reading, writing, and technology demands of their jobs;
- Adolescents and adults who dropped out of school;
- Adults who had disabilities that were not fully accommodated in school; and
- Highly educated immigrants who are literate in their native language but need to learn to read and write in English.

Being literate demands proficiency with current tools and practices that require reading and writing – including digital and online media used to communicate with others and to gather, evaluate, and synthesize information. It is important, therefore, to offer reading and writing instruction that incorporates the use of both print and digital methods of communication. This type of instruction prepares learners to accomplish important reading and writing tasks that are indispensable in today's world.

In today's world, expectations for literacy include the use of digital and online media to communicate and to produce, find, and evaluate information to meet educational and work demands. Strong reading and writing skills strengthen valued aspects of digital literacy in many key areas of work and daily life, such as:

- Presenting ideas, including organizing a compelling argument, using multiple media, and integrating media with text;
- Using online resources to search for information, evaluate the quality of that information, and organize information from several sources; and
- Using basic office software to generate texts and multimedia documents, including writing documents, taking notes, and preparing displays to support oral presentations.



Researchers are only beginning to identify the literacy skills related to technology use and to study the kinds of instruction that can develop them for learners of all ages. Until more is known about those skills, however, using technologies for literacy study can offer practical benefits to learners who will need to use digital tools in education settings and for their jobs.

**SCUSD understands the importance of collaboration between and across agencies that provide adult literacy programs. While SCUSD has utilized cross-agency collaboration between SCUSD's adult education programs and other adult education programs such as providing students with resource contact information and having an up-to-date knowledge of programs serving adults in the area, there is not a formal collaboration model currently in place. With the implementation of this Technology Plan, SCUSD will begin to develop a formal collaboration model so that our students have full knowledge of and access to the various adult literacy and education programs available to them.**

## 9. Effective, Researched-Based Methods and Strategies

- 9a. Summarize the relevant research and describe how it supports the plan's curricular and professional development goals.

SCUSD's student achievement goals are based on our response to prepare students to meet the knowledge and skills required for the 21st century. Our District has joined the Partnership for 21st Century Skills. Continuing into the 2013-14 school year, information literacy, educational technology, and 21st century skills development are integrated into the District's curricular, instructional, and assessment activities. Students will demonstrate proficiency in using educational technology and information literacy skills to enhance learning, promote critical thinking skills, develop collaborative skills and cultivate creativity.

SCUSD understands the urgency for educators to access data quickly and efficiently in order to use data effectively to inform the implementation of education policies, programs, and practices. Understanding how implementation processes impact student achievement and academic success can allow educators to make adjustments as needed. Having systems in place and professional development on how to use the systems appropriately, educators will have data to inform and promote good decision making processes at all levels.

District staff will develop and participate in professional development activities and attain proficiency in utilizing educational technology to improve student achievement. Students and staff will have access to technology tools and equipment from hardware, software, and others yet to be defined in learning environments conducive for continuous improvement. This includes access to technologies with universal design features or other design modifications that assure access for students with educational disabilities or challenges. Overall, our plan is defined and guided by emerging research that inspires using technology tools to support and enhance teaching and learning.

### **Annotated Bibliography**

Apple Inc. (2010). Challenge Based Learning: A Classroom Guide

- This guide explores Challenge Based Learning as a collaborative learning experience in which teachers and students work together to learn about compelling issues, propose solutions to real problems, and take action. The approach asks students to reflect on their learning and the impact of their actions and publish their solutions to a worldwide audience.
- This guide will be used to inform the content of the professional development provided to teachers regarding the creation of technology rich and relevant curriculum.

Boss, S., & Krauss, J. (2007). Reinventing Project-Based Learning: Your Field Guide to Real-World Projects in the Digital Age. Eugene, ISTE (International Society for Technology in Education)

- Reinventing Project-Based Learning offers educators an accessible guide for maximizing the benefits of project-based learning in today's technology-rich learning environment. This reader-friendly book speaks directly to educators, administrators, and professional development specialists who want to transform learning into a more active, student-driven experience, using technology tools for inquiry, collaboration, and

connection to the world beyond the classroom. Examples from educators in many different countries showcase this new vision of instructional design.

- This book will be a valuable resource to the Academic Office when developing professional development for teachers. It will also be used as a guide/resource for teachers regarding the creation of technology rich and relevant curriculum.

Center for Digital Education. Realizing the Full Potential of Blended Learning. Available: [www.centerdigitaled.com](http://www.centerdigitaled.com)

- This paper explains why educators would want to embrace blended learning. When blended learning approaches and their supporting technologies are implemented well, they foster more interactive, collaborative and engaged student learning.
- This research is informative to both the Academic Office in their creation of professional development for teachers. It's also a valuable source for discussion and collaboration among teachers and site administrators.

Copyright and Fair Use. United States Copyright Office. Available: <http://www.copyright.gov/>

- This site provides information on copyright basics, laws, regulations, fact sheets as well as modules about "Taking the Mystery out of Copyright (for students and teachers)."
- This website will be provided as a source for teachers to look to when incorporating copyright laws into their curriculum. Some teachers may wish to direct their students directly to the website in their lesson planning/curriculum.

Johnson, Laurence F.; Smith, Rachel S.; Smythe, J. Troy; Varon, Rachel K. (2009).

Challenge-Based Learning: An Approach for Our Time. Austin, Texas: The New Media Consortium.

- This paper looks at six case studies implementing challenge-based learning. Students self-reported that they were learning and refining skills that closely matched those identified by the Partnership for 21st Century Skills. By the end of their respective projects 80% of participating students reported that they had made a difference in their schools or communities by addressing their challenge. Challenge-based learning is a fresh approach that calls for a new way of thinking about the role of the teacher, one in which he or she had to be comfortable as the students struggled and wrestled with a meaningful challenge, letting them choose their own path to understanding within a clearly global issue like sustainability, global warming, or war, and ultimately allowing them to come up with both questions and answers as they directed the course of their own learning.
- This is a very informative piece of research that will inform the design of professional development by the Academic Office, but it is also a great source to provide teachers with to spark discussions and collaboration among teachers as well as a inspire teachers to reflect on the content and curriculum they have and currently use in their own classrooms.

Partnership for 21st Century Skills. Available: <http://www.p21.org/>

- Research explains the elements that are the critical systems necessary to ensure student mastery of 21st century skills, with a focus on assessment. 21st century standards, assessments, curriculum, instruction, professional development and learning environments must be aligned to produce a support system that produces 21st century outcomes for today's student.

- This website is critical to the SCUSD as a whole as it points to the importance of collaboration and common goals across disciplines and departments. SCUSD is a large school district and focusing on a robust, collaborative support system for our students is critical. It can be used in every department, by every school site and every teacher as a place to inform our practices as educators serving the needs of our students.

Roschell, J., Pea, R., Hoadley, C., Gordin, D., & Means, B. Changing how and what children learn in school with computer-based technologies. *The Future of Children: Children and Computer Technology* [Online] Available: [www.futureofchildren.org](http://www.futureofchildren.org)

- Research explores the various ways computer technology can be used to improve how and what children learn in the classroom. Several examples of computer-based applications are highlighted to illustrate ways technology can enhance how children learn by supporting four fundamental characteristics of learning: (1) active engagement, (2) participation in groups, (3) frequent interaction and feedback, and (4) connections to real-world contexts.
- This research is valuable to the Academic Office in their design of professional development for teachers as it has clear examples of technology enhancing student learning. It may also be used by teachers to inform and improve their teaching practices beyond the professional development they receive.

Trilling, B. & Fadel, C. (2009). *21st Century Skills: Learning for Life in Our Times*, MA., Jossey-Bass.

- Authors introduce a framework for 21st Century learning that maps out the skills needed to survive and thrive in a complex and connected world. 21st Century content includes the basic core subjects of reading, writing, and arithmetic-but also emphasizes global awareness, financial/economic literacy, and health issues.
- This research is very informative to curriculum development and professional development. It is also relevant to the Districts' goals of preparing students to leave high school with globally relevant skills needed to thrive in the workplace, college, and beyond.

- 9b. 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.

SCUSD is committed to providing students and staff with the latest tools and strategies to ensure their success. Under the guidance of the Sacramento County Office of Education, the California Department of Education and the US Department of Education, we intend to monitor and document how our technology programs are facilitating student learning and achievement, teaching and technology management. SCUSD understands that technology tools and strategies are constantly changing and must be periodically modified and monitored to support the needs of the students and teachers in the District.

The District continues to examine ways to deliver curriculum and professional development, both face-to-face and online, using new, innovative, technology-based tools. The Technology Plan integrates the development of innovative strategies for using technology tools for students, teachers, and administrators. The district will continue to work to explore ways to deliver and integrate technology into our rigorous academic curriculum online for our students. We will explore ways to expand distance-learning opportunities for all students. Equity and access to technology tools to enhance learning are vital to our plan and vision.

The appropriate district and site committees annually review K-12 course offerings and content. Teachers are invited to propose and/or implement new courses utilizing innovative strategies and technologies. Teachers from grades K-12 are taking advantage of our bandwidth to tap into distance-learning opportunities. Technology Services works closely with the Academic and Accountability Offices to incorporate innovative Professional Development opportunities to integrate technology into teaching and learning.

**Appendix C - Criteria for EETT Technology Plans**  
**(Completed Appendix C is REQUIRED in a technology plan)**

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

- For corresponding EETT Requirements, see the EETT Technology Plan Requirements (Appendix D).
- Include this form (Appendix C) with "Page in District Plan" completed at the end of your technology plan.

<b>1. PLAN DURATION CRITERION</b>	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
<b>The plan should guide the district's use of education technology for the next three to five years. (For a new plan, can include technology plan development in the first year)</b>	3	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.
<b>2. STAKEHOLDERS CRITERION</b> Corresponding EETT Requirement(s): 7 and 11 (Appendix D).	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
<b>Description of how a variety of stakeholders from within the school district and the community-at-large participated in the planning process.</b>	4	The planning team consisted of representatives who will implement the plan. If a variety of stakeholders did not assist with the development of the plan, a description of why they were not involved is included.	Little evidence is included that shows that the district actively sought participation from a variety of stakeholders.
<b>3. CURRICULUM COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 1, 2, 3, 8, 10, and 12 (Appendix D).	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>

<b>a. Description of teachers' and students' current access to technology tools both during the school day and outside of school hours.</b>	6	The plan describes the technology access available in the classrooms, library/media centers, or labs for all students and teachers.	The plan explains technology access in terms of a student-to-computer ratio, but does not explain where access is available, who has access, and when various students and teachers can use the technology.
<b>b. Description of the district's current use of hardware and software to support teaching and learning.</b>	9	The plan describes the typical frequency and type of use (technology skills/information and literacy integrated into the curriculum).	The plan cites district policy regarding use of technology, but provides no information about its actual use.
<b>c. Summary of the district's curricular goals that are supported by this tech plan.</b>	10	The plan summarizes the district's curricular goals that are supported by the plan and referenced in district document(s).	The plan does not summarize district curricular goals.
<b>d. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to improve teaching and learning by supporting the district curricular goals.</b>	12	The plan delineates clear goals, measurable objectives, annual benchmarks, and a clear implementation plan for using technology to support the district's curriculum goals and academic content standards to improve learning.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
<b>e. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire the technology skills and information literacy skills needed to succeed in the classroom and the workplace.</b>	15	The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire technology skills and information literacy skills.	The plan suggests how students will acquire technology skills, but is not specific enough to determine what action needs to be taken to accomplish the goals.

<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 and teachers can distinguish lawful from unlawful uses of copyrighted works, including the following topics: the concept and purpose of both copyright and fair use; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; and avoiding plagiarism</b>	16	The plan describes or delineates clear goals outlining how students and teachers 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.	The plan suggests that students and teachers 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.
<b>g. List of goals and an implementation plan that describe how the district will address Internet safety, including how students and teachers will be trained to protect online privacy and avoid online predators.</b>	18	The plan describes or delineates clear goals outlining how students and teachers will be educated about Internet safety.	The plan suggests Internet safety education but is not specific enough to determine what actions will be taken to accomplish the goals of educating students and teachers about internet safety.
<b>h. Description of or goals about the district policy or practices that ensure equitable technology access for all students.</b>	20	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.	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.



<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>	20	The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to support the district's student record-keeping and assessment efforts.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
<b>j. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to improve two-way communication between home and school.</b>	22	The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to improve two-way communication between home and school.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
<b>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>	23	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding procedures, roles, and responsibilities.
<b>4. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 5 and 12 (Appendix D).	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>

<b>a. Summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development.</b>	24	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 Commission on Teacher Credentialing (CTC) Standard 9 and 16 proficiencies.	Description of current level of staff expertise is too general or relates only to a limited segment of the district's teachers and administrators in the focus areas or does not relate to the focus areas, i.e., only the fourth grade teachers when grades four to eight are the focus grade levels.
<b>b. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing professional development opportunities based on your district needs assessment data (4a) and the Curriculum Component objectives (Sections 3d - 3j) of the plan.</b>	25	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 - 3j) of the plan.	The plan speaks only generally of professional development and is not specific enough to ensure that teachers and administrators will have the necessary training to implement the Curriculum Component.
<b>c. Describe the process that will be used to monitor the Professional Development (Section 4b) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.</b>	30	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).	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>

<b>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 &amp; 4) of the plan.</b>	31	The plan clearly summarizes the existing technology hardware, electronic learning resources, networking and telecommunication infrastructure, and technical support to support the implementation of the Curriculum and Professional Development Components.	The inventory of equipment is so general that it is difficult to determine what must be acquired to implement the Curriculum and Professional Development Components. The summary of current technical support is missing or lacks sufficient detail.
<b>b. Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed by the district's teachers, students, and administrators to support the activities in the Curriculum and Professional Development components of the plan.</b>	35	The plan provides a clear summary and list of the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support the district will need to support the implementation of the district's Curriculum and Professional Development components.	The plan includes a description or list of hardware, infrastructure, and other technology necessary to implement the plan, but there doesn't seem to be any real relationship between the activities in the Curriculum and Professional Development Components and the listed equipment. Future technical support needs have not been addressed or do not relate to the needs of the Curriculum and Professional Development Components.
<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 identified in Section 5b.</b>	39	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>	41	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>	42	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>	43	Cost estimates are reasonable and address the total cost of ownership, including the costs to implement the curricular, professional development, infrastructure, hardware, technical support, and electronic learning resource needs identified in the plan.	Cost estimates are unrealistic, lacking, or are not sufficiently detailed to determine if the total cost of ownership is addressed.
<b>c. Describe the district's replacement policy for obsolete equipment.</b>	44	Plan recognizes that equipment will need to be replaced and outlines a realistic replacement plan that will support the Curriculum and Professional Development Components.	Replacement policy is either missing or vague. It is not clear that the replacement policy could be implemented.
<b>d. Describe the process that will be used to monitor Ed Tech funding, implementation costs and new funding opportunities and to adjust budgets as necessary.</b>	44	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>	45	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>	45	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>	47	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 CRITERION</b> Corresponding EETT Requirement(s): 11 (Appendix D).	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
<b>If the district has identified adult literacy providers, describe how the program will be developed in collaboration with them. (If no adult literacy providers are indicated, describe the process used to identify adult literacy providers or potential future outreach efforts.)</b>	48	The plan explains how the program will be developed in collaboration with adult literacy providers. Planning included or will include consideration of collaborative strategies and other funding resources to maximize the use of technology. If no adult literacy providers are indicated, the plan describes the process used to identify adult literacy providers or potential future outreach efforts.	There is no evidence that the plan has been, or will be developed in collaboration with adult literacy service providers, to maximize the use of technology.

<b>9. EFFECTIVE, RESEARCHED-BASED METHODS, STRATEGIES, AND CRITERIA</b> Corresponding EETT Requirement(s): 4 and 9 (Appendix D).	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
<b>a. Summarize the relevant research and describe how it supports the plan's curricular and professional development goals.</b>	50	The plan describes the relevant research behind the plan's design for strategies and/or methods selected.	The description of the research behind the plan's design for strategies and/or methods selected is unclear or missing.
<b>b. Describe the district's plans to use technology to extend or supplement the district's curriculum with rigorous academic courses and curricula, including distance-learning technologies.</b>	52	The plan describes the process the district will use to extend or supplement the district's curriculum with rigorous academic courses and curricula, including distance-learning opportunities (particularly in areas that would not otherwise have access to such courses or curricula due to geographical distances or insufficient resources).	There is no plan to use technology to extend or supplement the district's curriculum offerings.

**Appendix J - Technology Plan Contact Information  
(Required)**

Education Technology Plan Review System (ETPRS)  
Contact Information

County & District Code: 34 - 67439

School Code (Direct-funded charters only): \_\_\_\_\_

LEA Name: Sacramento City Unified

\*Salutation: Mr.

\*First Name: Terry

\*Last Name: Kritsepis

\*Job Title: Assistant Superintendent, Information Education Te

\*Address: 5735 47th Ave.

\*City: Sacramento

\*Zip Code: 95824-4528

\*Telephone: 916-643-7409

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\*E-mail: Terry-kritsepis@scusd.edu

Please provide backup contact information.

1st Backup Name: Jeremy Predko

E-mail: Jeremy-predko@scusd.edu

2nd Backup Name: Mao Vang

E-mail: Mao-vang@scusd.edu

\* Required information in the ETPRS