Solana Beach School District
County and District Code: 37-68387

Five-Year Comprehensive Technology Plan

July 1, 2012 – June 30, 2017

309 North Rios Ave.
Solana Beach, CA 92075
(858) 794-7100
www.sbsd.k12.ca.us

Solana Beach School District Technology Plan

July 1, 2012 – June 30, 2017

Board of Education

Jeff Busby - President

Richard H. Leib, Esq. - Vice President

Debra Schade, Ph.D – Clerk

Vicky King, Esq. - Trustee

Arthur M. Palkowitz, Esq. – Trustee

Leadership Team

Nancy Lynch, Ed.D. – Superintendent

Catherine McNamara, Ed.D. – Assistant Superintendent Instructional Services

William Banning – Assistant Superintendent Administrative Services

Carlos Estrella – Chief Financial Officer

Caroline Brown – Director, Technology and New Facilities

Mary Ellen Nest – Director, Pupil Services

Jerry Jones – Principal, Solana Highlands

Teresa Davis – Principal, Carmel Creek

Brian McBride – Principal, Solana Pacific

Lisa Denham – Principal, Skyline

Julie Norby – Principal, Solana Santa Fe

Lisa Platt – Principal, Solana Vista

Education Technology Plan Review Systems (ETPRS) - Contact Information

Caroline J. Brown
Director Technology and New Facilities
309 North Rios Ave., Solana Beach, CA 92075
(858) 794-7140 • FAX (858) 794-7149
Backup Contact Information
1st Backup Name: John Leland, 1st Backup Email: jleland@sbsd.k12.ca.us
2nd Backup Name: Catherine McNamara, 2nd Backup Email: cmcnamara@sbsd.k12.ca.us

Appendix I: Technology Plan Contact Information (Required)

Education Technology Plan Review System (ETPRS)
Contact Information

County & District Code: ***37 - 68387***

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

LEA Name: ***Solana Beach School District***

*Salutation: ***Ms.***

*First Name: ***Caroline***

*Last Name: ***Brown***

*Job Title: ***Director Technology and New Facilities***

*Address: ***309 North Rios Ave., CA***

*City: ***Solana Beach, CA***

*Zip Code: ***92075***

*Telephone: ***858-794-7140;*** Ext: N/A

Fax: ***(858) 794-7149***

*E-mail: ***cbrown@sbsd.k12.ca.us***

Please provide backup contact information.

1st Backup Name: ***John Leland***

E-mail: ***jleland@sbsd.k12.ca.us***

2nd Backup Name: ***Catherine McNamara***

E-mail: ***cmcnamara@sbsd.k12.ca.us***

*Required information in the ETPRS

Table of Contents

Technology Plan

Profile

Solana Beach School District, located in north coastal San Diego County, serves approximately 2,900 students. Instruction is rich, varied and innovative. Our goals include providing students with a strong foundation in basic skills along with varied opportunities for advanced critical thinking. High test scores provide evidence that students' needs are being met. District schools consistently rank at or near the top in the county on the California Standards Tests. All of our eligible schools are California Distinguished Schools and two are National Blue Ribbon recipients. Many of our schools have received numerous awards and have been recognized at the state and national level for a variety of accomplishments.

Currently, the District has six elementary schools: Solana Vista (grades K-3), Skyline (grades 4-6 and the K-6 Global Education Program), Solana Santa Fe (grades K-6), Solana Highlands (grades K-4), Carmel Creek (grades K-4), and Solana Pacific (5-6). A seventh school is in the planning stages. Schools in Solana Beach School District house 400-600 students each. Class size reduction (20:1 student to teacher ratio) is implemented in grades K-3. The district has 480 staff members, where approximately 180 hold certificated positions. Each school is staffed with one principal, a school secretary and a part-time clerk.

The District believes that education is a cooperative effort of family, school, and community, and that all children deserve the opportunity for success in school. The District consistently seeks community input and support to create an open environment, which encourages excellence and achievement. Students participate in active, hands-on learning activities and are challenged to use higher order thinking skills. Starting in kindergarten, the development level and learning style of each child is assessed. Teachers tailor instructional activities to capitalize on children's strengths and to remediate their weaknesses. Care is taken to design curriculum that meets individual needs as well as apply California Academic Standards.

Solana Beach School District's student population is diverse and comprised of children from the following ethnicities: White/Non-Hispanic (70%), Asian (20%), Hispanic (7)%, and other (3%). The District socio-economic levels range from low-income to upper-middle income homes. Approximately eight percent of the District students are enrolled in Free and Reduced Meal Program. More than forty languages other than English are represented in the District's enrollment. Six of the most significant first languages other than English (73%) include the following: Chinese (5.2%), Indian (.8%), Korean (3.7%), Russian (1.1%) Spanish (8.5%) and Farsi (1.3%).

Solana Beach School District has demonstrated a record of steady academic improvement as evidenced in the 2010 Academic Performance Index (API) Growth Report. All six of the District's six schools have exceeded school-wide API growth targets since 2003. All District schools exceed the state API achievement target of 800.

District Mission

The District Mission is to provide a child-centered education of the highest quality, using the unique vision and resources of home, school, and community to ensure a stable and vibrant learning environment rigorous in academic standards, rich in diversity, sensitive to individual needs, and committed to developing compassionate children who are confident, competent, and creative learners.

Values Statements: The District Believes…

- in public education.
- everyone can learn and achieve.

- each individual has intrinsic worth.
- respect, honesty, self-discipline, and a sense of fair play are essential to the development of personal integrity.
- in personal responsibility and accountability.
- in striving to do one's best.
- in the value of a supportive, nurturing family.
- in the power of positive thinking.
- in valuing and utilizing diversity, we can achieve common goals.
- effective communication is essential.
- a sense of humor contributes to a healthy, balanced way of life.
- it is the responsibility of every individual to contribute to the betterment of a global society.
- in the benefit of individual pursuits and the value of collaborative contributions.
- successful change requires vision, personal action and a willingness to take risks.
- no failure is fatal…no success is final.
- learning is an essential life-long process.

Technology Plan Purpose and Vision

The California Department of Education required that all districts have a current 3-5 year Board approved Technology Plan. An approved Technology Plan allows for districts to qualify for E-RATE, EETT and other grant funding. With the development of a Five Year Technology Plan, the District commits itself to careful planning, use of relevant research, support, and allocation of resources that are needed to implement technology education successfully. Annually, the Strategic Planning Committee, through the input of the District Technology Committee reviews the goals and objectives for technology. During the school year, the District Technology Committee monitors and evaluates the Action Steps for the five sections of the Technology Plan.

The Plan provides the students and staff of the District an opportunity to obtain educational experiences that will prepare them to move forward with confidence into the future. (Note: References are made throughout the plan indicating "students" and "staff." The Task Force uses the word students to refer to all students (kindergarten through sixth grade including students receiving special services within or outside the regular classroom, etc.) Staff refers to all staff (administrative, classified and certificated). The Task Force recognizes that students and staff use technology and it is our vision to prepare them for a changing future through the expanding development of basic and advanced skills, understanding, and use of technology, which will serve as a catalyst to facilitate learning and enhance effectiveness. To this end, staff and students will utilize technology as a natural part of learning, administering, teaching and assessment.

Technology Planning Process

The Planning Task Force is a broad-based committee of stakeholders, composed of school board members, teachers, administrators (district and site levels), classified staff members and parents and community members. The committee reviewed past accomplishments, relevant research and looked to the educational future of our students. All school sites have Technology Committees that interface with School Site Councils and other site committees. Site committees are represented on the District Technology Committee.

This document contains the history of the school district, the student demographics, an explanation of current technology implementations, educational goals and purposes for technology integration in K-6 standards-based curriculum. As part of the long-range plan for technology, the district will create a hardware acquisition, renewal and infrastructure plan that supports district instructional objectives and growth in student achievement and staff acquisition of technology skills needed to infuse

technology into the curriculum. Technology devices play a significant role in the lives of our students and the education community must stay abreast of the development of these emerging technologies and the impact technology has on our young learners.

Technology Plan Components

The plan for technology includes the following components: Plan Duration, Stakeholders, Curriculum and Instruction; Professional Development; Infrastructure, Hardware and Technical Support; Funding and Budget; and Monitoring and Evaluation; Adult Literacy and Effective Research-based Methods, Strategies and Criteria. The hardware component of the plan will focus on functionality, rather than on specific devices or attributes, which will quickly become obsolete. To facilitate the selection of equipment and materials, the District Technology Committee will meet annually to review markets, changes, and make recommendations for the on-going acquisition of technology equipment. These recommendations will serve as a guide for the District and the school sites, as they make decisions regarding future purchases. Successful implementation of technology will require on-going technical support. This support will include network services, hardware, software and planned obsolescence of equipment. Based upon a physical inventory conducted at the school sites and the district office each summer, the District Technology Plan provides goals and objectives, as well as strategies for monitoring and evaluating the infrastructure, hardware, and technical support needs of the District.

Information, as the natural currency of education, must have adequate pathways over which to travel if benefits are to be maximized. As technology continues to help reshape and improve the use of information in fulfilling the District's mission, care must be taken to ensure that these pathways are adequately maintained and developed as needed. In order to accommodate the changing information needs of students and staff, the District has adopted a Local Area Network – Wide Area Network (LAN-WAN) topology for its intra-site and inter-site data connectivity architecture. This model provides flexibility of design for varied site environments, scalability and manageability to accommodate moves, additions and changes.

SECTION 1 – PLAN DURATION

Plan Duration

The Technology Plan for the Solana Beach School District covers a five-year period from July 1, 2012 through June 30, 2017. This five-year plan addresses district challenges and priorities and builds on the District's past successful educational technology activities.

SECTION 2 – STAKEHOLDERS

Stakeholders

The district created a planning group to direct the vision and gather input from all schools. This group reviewed the 2007-2012 Technology Plan, scanned the data collected to determine the successes over the past five years and determined goals for the next five years. Input was gathered from the District administration, certificated and classified representatives, and parents and students via district surveys, the Speak Up! as well as the State EDTECHPROFILE survey results over the past four years.

A District Technology Committee was organized to review and revise the Technology Plan that will expire on June 30, 2012. The role of the Committee was to address components in the Technology Plan that needed revision to set goals that align with current best practices. Each year, the District Technology Plan is directly incorporated in the District Strategic Plan. The district involves students in an informal way during the year to determine their goals and, as a result, students were not involved at the committee level.

Members of the District Technology Committee 2011-2012

Committee Leaders:

Director Tech/New Facilities: Caroline Brown

Assistant Supt, Instructional Services: Catherine McNamara

Representatives:

Leslie Fausset – Superintendent
Catherine McNamara – Assistant Superintendent Instructional Services
William Banning – Assistant Superintendent Administrative Services
Carlos Estrella – Chief Financial Officer
Caroline Brown – Director, Technology and New Facilities
Mary Ellen Nest – Director, Pupil Services
Jerry Jones – Principal, Solana Highlands
Teresa Davis – Principal, Carmel Creek
Brian McBride – Principal, Solana Pacific
Lisa Denham – Principal, Skyline
Julie Norby – Principal, Solana Santa Fe
Lisa Platt – Principal, Solana Vista
Parent Representative – Kelsey Holahan
Teacher (K-6/Special Education) – Elizabeth Kannenberg
Patti Malmuth – Community, Executive Director Solana Beach Foundation
Lori Wolf – Lab Technician
John Leland – Systems Analyst

The development of the plan included goals, objectives and activities determined by the District Technology Committee that have been shared with the principal, teachers, administrative and classified staff and community partners. Opportunities have been provided to give feedback and ideas through the Parent-Teacher Association/Organization (PTA/PTO), School Site Council (SSC), District Advisory

Forum (DAF) and various surveys. While gathering feedback, small groups had opportunities to discuss the current plan and provide input. The plan was then developed using this input. Once the District Technology Plan has been approved, principals will review the plan with staff and School Site Councils to update the technology section in their school's Comprehensive Single School Plan for Student Achievement.

As a support to the implementation of the plan, selected members of the District Technology Committee will meet a few times annually to oversee the implementation of the District Technology Plan. The committee objectives include:

- Receiving annual reports from departments and school site leaders on progress toward meeting technology goals
- Monitoring implementation and evaluating progress toward meeting annual objectives
- Identifying areas of focus and concerns based on the monitoring report and recommending a plan of action to remedy barriers.
- Continuing communication to stakeholders by providing a formal annual report to the Board of Education. The District Technology Committee will report to staff, School Site Councils, annual site and district Strategic Planning Teams and other parent groups.

Partnerships and Resources

Solana Beach School District is within the San Diego County Office of Education (SDCOE) boundary. The County Office provides a range of technology services to bridge the digital divide and provide quality educational programs and opportunities for staff and students. In an effort to make state-of-the-art technology accessible to all San Diego County schools, the County Office provides learning academies and programs, staff development opportunities, learning resources, and connectivity. The County Office is this district's Internet Service Provider (ISP) as well as provider of administrative systems (Finance and Payroll). The County Office also provides support in human resources and technology planning.

Solana Beach School District actively participates in the activities of the California Technology Assistance Project (CTAP), Educational Technology Support Network (ETSN) and the Classroom of the Future Foundation.

Apple Computer provides the district standard for computer workstations. Solana Beach School District is an Authorized Apple Repair Center. Apple is a valued partner who continues to assist the district with planning, deployment, maintenance and replacement of computer workstations.

AT&T provides the district with planning for and the implementation of the wide area network. Working with AT&T and the San Diego County Office of Education (SDCOE), the district has been able to build a state-of-the-art network at an affordable price. AT&T continues to be a valuable resource in helping to achieve maximum discounts on ERATE, DAS, BEAR and CalNet.

Time Warner and Cox Communications provide the district and school sites with a free cable service. These service providers also assist the district in the planning process of acquiring appropriate programming to the classrooms.

SECTION 3 – CURRICULUM AND INSTRUCTION

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

Currently, Solana Beach School District students including General Education, Special Education, Gifted and Talented (GATE), English Learners (EL) and Low Socio-economic (SES) have equitable access to technology in classrooms, media centers and/or computers labs. The District is expanding access by making the use of technology an integral part of instruction and continuing to encourage sites to purchase and upgrade technology annually. More information regarding technology used by students is available upon request.

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

Hardware and Software

The district has standardized on hardware and software that allows for ease of installation and support. The district staff is working to provide common standards-based instructional software that allows for student learning, professional development, consistent implementation, and ease of use. As more curriculum-based software is available on the Internet, the district will move toward purchasing access licenses instead of physical software.

The Solana Beach School District utilizes hardware and software to support teaching and learning in the following ways:

Technology in Curriculum

The District gives high priority to learning activities that challenge higher-order thinking skills and engage students in hands-on activities using carefully selected software programs. To this end, the District has adopted the National Educations Technology Standards (NETS) for students, teachers and administrators that integrate technology into grade-level standards. All students are also provided instruction in safe and ethical use of computers (see District Document 1: Acceptable Use Agreement and District Document 3: Technology Skills Scope and Sequence).

Technology instruction is embedded in the curriculum and occurs throughout the school day. Technology is used by students in the computer labs, mini labs, classrooms and media centers. Students have weekly scheduled time in the labs and media centers. Classroom teachers also provide daily technology access time in the classrooms.

In the primary grades (K-3), students are introduced to basic computer skills including all essential parts of the computer and keyboard. Students are taught how to log on, navigate, save and launch applications. Primary students also learn the basics of an operating system, document folder, saving, and printing. Many use KidPix software to graphically present academic content and publish along with a slide show. By using word processing software, students will gain basic technology skills (e.g. use of a mouse, keyboard, printer). One of the most important aspects of integrating technology for primary students is their engagement in writing, revising, and reading/presenting their own content. The use of presentation software adds verbal communication into the writing process.

In the intermediate grades (4-6), students are provided more in depth experiences in word

processing, keyboarding, presentations and Internet research. Student presentations in word processing or presentation applications contain text, video clips and images that have been properly cited with their source. Internet research skills are taught with an emphasis on filtering through the data to decipher what is accurate and appropriate. Students learn to use researched materials to write reports. The intermediate students learn the concept of a network and accessibility throughout the school as well as ethics training on Internet searches. Intermediate students also learn to use video cameras to create and present multimedia productions. Students can save their work on various mediums and create digital portfolios. Students use instructional software including database and spreadsheet applications where students collect data, enter data and create charts and graphs to analyze data.

Many students (both Primary and Intermediate) are using software to practice academic content skills. Content-based instructional software provides a digital tutorial that helps students to master skills at their own pace in reading, writing, and math. In order to use the software, students need to be able to use a mouse, keyboard, number pad, and microphone.

Computer Assisted Learning

Curriculum-based software is a strong instructional support for the district core curriculum. Programs such as Compass Learning, Accelerated Reader, Inspiration, Earobics, Mavis Beacon Teaches Typing, and KidPix enhance instruction and allow teachers to differentiate the curriculum to meet individual student needs.

Technology is utilized in intervention programs throughout the district. In the primary grades, the focus is on improving reading and math skills, to ensure that all students are at grade level. In the upper grades, the focus is on enhancing the curriculum with technology and preparing students for middle school. Technology supports writing across the curriculum, creating polished presentations, and data organization.

Software Tools that Assist Students in the Learning Process

Students use a variety of instructional software when learning the content standards. Word processing and organizational software tools include the use of dictionary and thesaurus online. Presentation software includes the use of the Office and iLife Suites (iPhoto and iMovie) to create publishable formats, iTunes to import music and GarageBand to produce music and podcasts. When conducting research students access Grolier and other online resources.

Measures of Academic Progress (MAP)

The Northwest Evaluation Association's (NWEA) Measures of Academic Progress (MAP) are computerized adaptive, nationally normed, tests tailored to a student's achievement level. MAP is fully implemented district wide for Reading and Mathematics assessments in grades K-6. Students take the tests three times each year in the areas of Reading and Mathematics. The MAP assessment is aligned to California curriculum standards and the results are in the form of a RIT scale that shows academic growth each trimester. In addition to detailed district-level reports, teachers receive detailed reports for their classes, and information on each student that informs instruction.

Data Director

DataDirector™ is an online data and assessment management system that allows users to compare multiple sets of data so that they may identify needed interventions, devise enhanced curriculums, and drive the academic achievement of all. All district assessment data is in the system including California Standards Test (CST) data, District writing data, Measures of Academic Progress

(MAP) data. In 2011, the district began implementing three benchmark assessments in every school and that data is being input into Data Director as well.

Video Streaming

The San Diego Office of Education (SDCOE) Digital Content Portal provides all classrooms with access to California Streaming, a video service provider that allows teacher and student access to over 4,000 videos and 40,000 video clips. The video segments are aligned to the California standards and organized by standard for ease of use. Teachers project the videos via LCD projectors in every classroom.

School Broadcasts

Daily broadcasts are made from school broadcast studios at three of the six school sites. Media teachers and technology instructors collaborate to plan and present standards based activities that are educational and create learning opportunities when watched by the student body. Broadcasts include school news, upcoming events, name that animal, weather, school lunch offerings as well as highlight student achievements and birthdays.

Internet and E-mail Filtering

Internet and e-mail traffic is monitored and filtered through an Internet appliance. In addition, parents, students and staff are required to sign an Acceptable Use Agreement form prior to being permitted to access the Internet. Administrative regulations are in place for disciplinary purposes if the need arises. (Internet Acceptable Use Agreement, District Documents 1 and 2)

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

Strategic Planning

The Solana Beach School District annually revisits the District Strategic Plan by conducting an "Annual Update" for the District and for each of the schools. The process began for the District in 1993, and as a result, each school site developed school specific plans that are aligned to the District plan but also unique to their school needs.

The foundation of the District's Strategic Plan is built on the collaboratively developed beliefs and characterized by our Mission Statement. The District Strategic Planning team consisting of parents, staff, and community members developed the mission statement and strategies. The team meets annually to review progress towards strategic goals, revise focus areas, or create new areas for future action. Paralleling the district model, each school site meets annually to update, celebrate, and refocus school and district goals for the future. The District's focus areas are called Strategies. Strategies are actions that touch and facilitate changes district wide.

In the process of Strategic Planning, the District Board of Education has identified that the growth of each student will be substantial and measurable in an effort to narrow the achievement gap. To this end: (1) student learning is supported by consistent integrated enriched curriculum; (2) student learning is supported by best practices and teaching methods; and (3) student learning occurs in well equipped and resource rich facilities. The District Board of Education is committed to providing resources for technology to be used in the curriculum, in professional development activities and that staff and students have access to hardware and software.

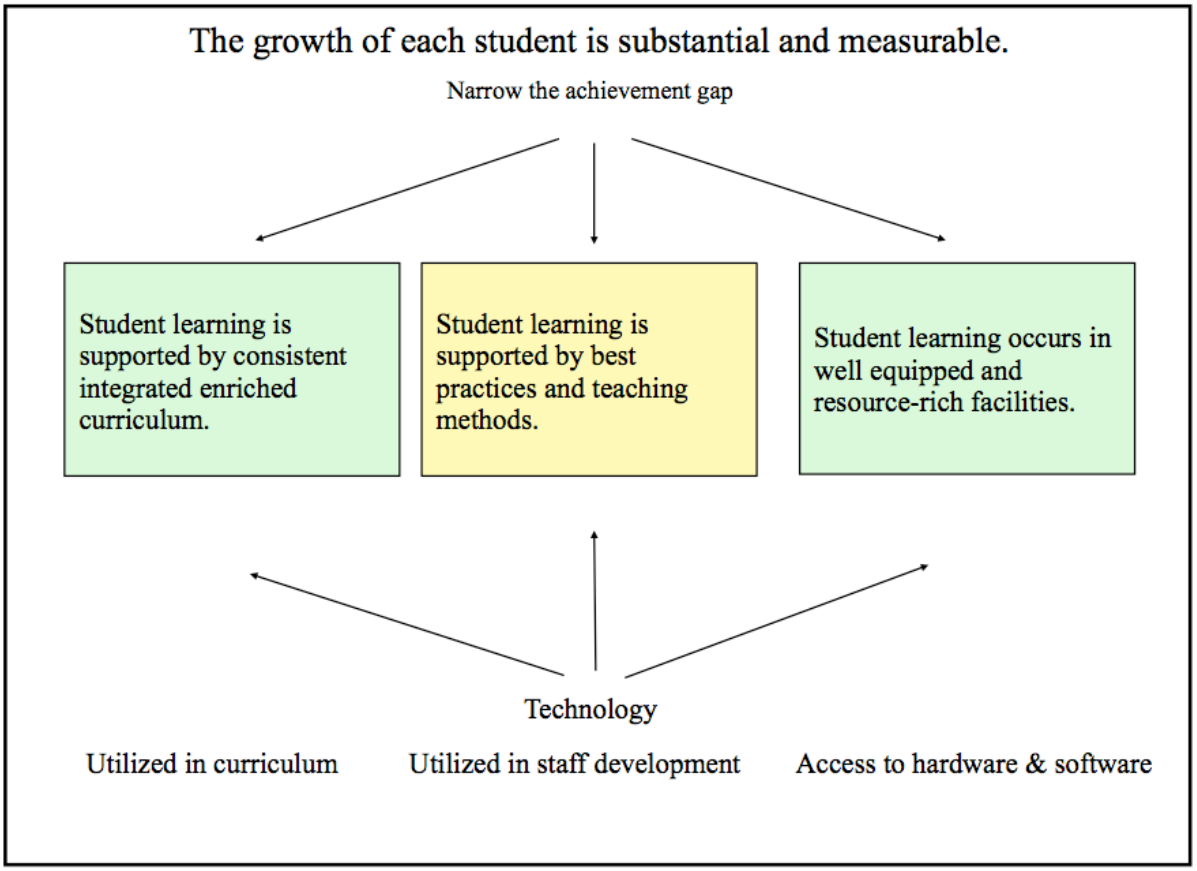
While strategies and focus areas evolve and change to meet the growing needs of the students, parents, teachers and community members, the school board sets direction. Strategic Goals of 2011-2012 include:

Strategic Goal 1: Student learning occurs in well equipped, resource rich facilities that will be constructed and maintained to accommodate the evolving student population and instructional programs.

Strategic Goal 2: Students' unique learning needs and academic achievement levels will be met through differentiated instruction with best practices and teaching methods.

Strategic Goal 3: Develop, expand and/or maintain robust, fee-based Child Development Center preschool, school-age, and enrichment programs that preserve fiscal responsibility and provide appropriate inclusion of children with special needs within the framework of the District Strategic Planning process.

The following chart graphically illustrates the School Board's direction created in October 2006. This has guided the planning across the district.



Standards-Based Curriculum

To ensure that every student has academic success, criterion-referenced state and district assessment are used to monitor progress. The California Standards Test (CST) in English/language arts reveals that eighty-eight percent of students are proficient or advanced. Eighty-eight percent of the district's students are proficient or advanced in mathematics.

The District's programs are designed to provide all students with a high-quality standards-based curriculum. The Board of Education requires that the growth of each student's academic achievement be substantial and measurable. This is not a task of narrowing the achievement gap, but a charge to show that students of all levels are showing growth.

Academic and delivery strategies including the use of instructional technology support the need for all students to meet or exceed proficiency standards as assessed by CST. The District's goal is that through the use of best practices and the incorporation of challenging curriculum that includes information resources and technology, the percentage of students scoring proficient and advanced will be increased annually.

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.

This plan will focus on the effective use of technology and opportunities to identify best practices that extend the classroom, enhance instruction, engage students, and support targeted

instruction, remediation, and differentiation so every student can learn. The District has already made significant progress with the implementation of instructional technologies in numerous areas. The challenge for most teachers is navigating through the overwhelming abundance of products to find what is effective for their individual or objectives, teaching style, and what truly enables the opportunity to reach their students in ways the traditional classroom cannot.

<table>
<tr><td colspan="3">Goal 3d.1 of 2: Student achievement in grades 2-6 will increase with the use of technology to improve teaching and learning.</td></tr>
<tr><td colspan="3">Objective 3d.1 of 1: By 2017, all students in grades 2-6 will use technology to improve in their acquisition of the CA Content Standards in English/language arts and mathematics by increasing the percentage of students scoring proficient or advanced on the California Standards Test (CST) by 1% each year.</td></tr>
<tr><td colspan="3">Benchmarks</td></tr>
<tr><td>Year</td><td>ELA (% Prof/Adv)</td><td>Math (% Prof/Adv)</td></tr>
<tr><td>2012-2013</td><td>89%</td><td>89%</td></tr>
<tr><td>2013-2014</td><td>90%</td><td>90%</td></tr>
<tr><td>2014-2015</td><td>91%</td><td>91%</td></tr>
<tr><td>2015-2016</td><td>92%</td><td>92%</td></tr>
<tr><td>2016-2017</td><td>93%</td><td>93%</td></tr>
<tr><td>Evaluation instrument(s)
Data collected
Position(s) responsible</td><td>Evaluation Schedule</td><td>Program Analysis Modification Process</td></tr>
<tr><td>California STAR assessment system: California Standards Test (CST)

Director, Instructional Services</td><td>Annual administration in May with review of the data in August</td><td>In August (each year) the Leadership Team analyzes school and district data to determine strengths, areas of focus, and longitudinal trends. Action plans are built and action steps are written into Site and District Strategic Planning documents.

Currently the STAR assessment system is scheduled for replacement in 2014-2015 with the Common Core State Standards Assessment.</td></tr>
<tr><td>Measures of Academic Progress (MAP)

Director, Instructional Services</td><td>At least three times during each school year</td><td>Each trimester the MAP is administered to all students. The Leadership Team analyzes school and district data to determine strengths, areas of focus,</td></tr>
</table>

		and longitudinal trends. Action plans are built and action steps are modified in Site and District Strategic Planning documents.

Goal 3d.2 of 2: Teachers will use technology daily in the classroom (as defined by the student annual Speak Up Survey) to help students meet state standards in the content areas.		
Objective 3d2.1 of 3: By 2017, 75% of K-2nd grade classroom teachers will include technology activities for students to enhance instruction and support learning *every day*.		
Benchmarks		
Year	Benchmarks: Percentage of classroom teachers	
2012-2013	50%	
2013-2014	60%	
2014-2015	65%	
2015-2016	70%	
2016-2017	75%	
Evaluation instrument(s) Data collected Position(s) responsible	**Evaluation Schedule**	**Program Analysis Modification Process**
National Speak Up Survey Data collected for students, parents, and administrators. Director of Instructional Services	*Speak Up Survey administered annually. Data for students, parents and administrators disaggregated at three times during the year.*	*Each time data is reviewed action plans will be generated from the conclusions and incorporated into the Strategic Plans.*
Site principals will conduct walkthroughs to observe technology integration.	*At least three times during each school year.*	*Principals to report findings to Leadership Team*
Completion of lessons or units that support technology integration – monitored by the District Technology Committee	*Technology Committee will meet at least three times annually*	*The Technology Committee will build a structure for task completion with timelines and follow it.*
Objective 3d2. 2 of 3: By 2017, 85% of 3rd – 5th grade classroom teachers will include technology activities for students to enhance instruction and support learning every day.		
Year	Benchmarks: Percentage of classroom teachers	
2012-2013	60%	
2013-2014	70%	
2014-2015	75%	
2015-2016	80%	
2016-2017	85%	

Evaluation instrument(s) Data collected Position(s) responsible	**Evaluation Schedule**	**Program Analysis Modification Process**
National Speak Up Survey Data collected for students, parents, and administrators. Director of Instructional Services	Speak Up Survey administered annually. Data for students, parents and administrators disaggregated at three times during the year.	Each time data is reviewed, action plans will be generated from the conclusions and incorporated into the Strategic Plans
Site principals will conduct walkthroughs to observe technology integration.	At least three times during each school year.	Principals to report findings to Leadership Team
Completion of lessons or units that support technology integration – monitored by the District Technology Committee	Technology Committee will meet at least three times annually	The Technology Committee will build a structure for task completion with timelines and follow it.
Objective 3d2.3 of 3: By 2017, 95% of 6th grade classroom teachers will include technology activities for students to enhance instruction and support learning *every day*.		
Year	Benchmarks: Percentage of classroom teachers	
2012-2013	70%	
2013-2014	80%	
2014-2015	85%	
2015-2016	90%	
2016-2017	95%	
Evaluation instrument(s) Data collected Position(s) responsible	**Evaluation Schedule**	**Program Analysis Modification Process**
National Speak Up Survey Data collected for students, parents, and administrators. Director of Instructional Services	Speak Up Survey administered annually. Data for students, parents and administrators disaggregated at three times during the year.	Each time data is reviewed, action plans will be generated from the conclusions and incorporated into the Strategic Plans
Site principals will conduct walkthroughs to observe technology integration.	At least three times during each school year.	Principals to report findings to Leadership Team
Completion of lessons or units that support technology integration – monitored by the District Technology Committee	Technology Committee will meet at least three times annually	The Technology Committee will build a structure for task completion with timelines and follow it.

Implementation plan: Person(s) responsible for monitoring benchmarks and implementation are listed in the implementation plan below.

Goals 1 and 2 (including all objectives for 3d1 and 3d2):			
Activities	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**
Administer the annual *Speak Up* survey for the first time. Use baseline data to establish benchmarks in top three priority areas. Establish goals for each of five future years.	October, 2012 March, 2012	Director, Instructional Services	National *Speak Up* Survey
Create standards aligned lessons/units that support technology integration. Develop two units per grade level.	Create two new units per grade level each year from 2012 - 2107.	Director, Instructional Services Technology lab teachers	Creation of two units per grade level every year for five years.
Site principals will conduct walkthroughs to observe frequency of technology integration.	Three times each school year according to the walkthrough schedule from 2012 - 2017.	Assistant Superintendent, Instructional Services	Principals to report finding to Leadership Team. Focus on areas for growth and establish trimester goals.
Establish standards for iPad/iPod apps that will be loaded onto each device as they are purchased.	Annually in 2012-2013 and 2013-2014	Assistant Superintendent and Director, Instructional Services	Communicated list of standard apps that are loaded when new devices are purchased.
Create an evaluation tool to evaluate the effective use of mobile technology.	2012-2013	Assistant Superintendent, Instructional Services	Student focus groups and survey administered.
Administer mobile technology survey annually	2012-2017	Director, Instructional Services	Survey instrument. Evaluate results of survey and set goals annually for following year.

Use online software provided in the purchase of instructional materials and to supplement the instructional program. • Dreambox Implementation in K/1 Implementation in 2/3 Implementation in 4/5 • Fasttmath • English in a Flash • Vantage My Access	2012-2017 2012-2013 2013-2014 2014-2015 2012-2013 2012-2013 2015-2017	Director, Instructional Services	Annual evaluation of standard/strand achievement. Determine standards needing greater support and identify software to support those areas. Establish goals for 2015-2017.
Evaluation Instrument(s) – Data To Be Collected: National *Speak Up* Survey Walkthrough observation data California Standards Test Measures of Academic Progress (correlated to the California Standards Test) CELDT Mobile technology survey and focus group data			

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.

Preparing our students for the technologically advanced world they will face upon graduation is of critical importance in our high performing district. Both technology and information literacy skills will be essential for future success. Information literacy skills include: accessing information efficiently and effectively, evaluating information critically and competently and using information accurately and creatively from the Internet. Upper grade students must be able to cite Internet information correctly. Students must learn to ask thought-provoking questions, engage in strategic reading, use technology resources where appropriate, interpret and evaluate information, solve problems, and develop new insights.

Goal 3e.1: Students will meet or exceed grade level technology and information literacy proficiencies (e.g. District grade level technology and information literacy proficiency standards for students).		
Objective 3e.1: By 2017, 90% of students grade 2 and grade 5 will meet or exceed the respective NETS Benchmark Assessment.		
Year	Benchmarks/Average Percent Correct	
	2nd Grade	5th Grade
2012-2013	82%	86%
2013-2014	84%	87%
2014-2015	86%	88%
2015-2016	88%	89%
2016-2017	90%	90%
Evaluation instrument(s) **Data collected** **Position(s) responsible**	**Evaluation Schedule**	**Program Analysis Modification Process**
Assessment at grades 2 and 5: Collect student results Director of Instructional Services and Director of Technology Instructional Technology Lab Instructors	Three times/year.	Determine if Assessment is demonstrating student proficiencies and modify as needed.

Implementation Plan

Students will learn technology skills contained in the NETS document (District Document 4) and, when accomplishing projects, students will learn technology skills in the order listed in the Scope and Sequence (District Document 3). Technology skills and information literacy will not be taught in isolation. These skills are taught in conjunction with curriculum goals.

Activities	**Timeline**	**Person(s) Responsible**
During the first year of the plan, the District Technology Committee will determine the benchmark assessment for 2nd and 5th grade students using the National Educational Technology Standards (NETS) sample.	2012	Assistant Superintendent, Instructional Services District Technology Committee
Beginning in 2012 and in each ensuing year, teaching staff will integrate information literacy into all subjects	2012 - 2017.	Director, Instructional Services Teachers Technology lab teachers
Students will be taught grade level technology and information literacy proficiencies based on National Educational Technology Standards (NETS) for Students (K-2, 3-5, 6).	2012-2017	Teaching staff
Technology specific skills, including information literacy, will be taught by teachers in the media center, computer lab and classrooms.	2012-2017	Site administrators, Teaching staff
The ISTE project benchmark assessments will be used to assess student progress	2012-2017	Director, Instructional Services Teaching staff
Students in 2nd and 5th grade will demonstrate knowledge in the six Technology Proficiency areas as outlined in NETS.	2014-2017	Director, Instructional Services Teaching staff
Drawing from NETS, the district will create a culminating assessment to ensure the students moving to the middle school have met the proficiency standards that measure technology skills and information literacy.	2017	Director, Instructional Services

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; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; and avoiding plagiarism. (AB 307)

Policies and Regulations

The District Board of Education supports the technology program across the school district. To this end, the Board has adopted a Use of Technology in Instruction Board Policy with Administrative Regulations in regards to Copyright, Internet/Information Systems Use and Web Page Publications. Students attending Solana Beach schools along with their parents/guardians are required annually to sign an Acceptable Use of Internet and Information Systems Policy as well as an Image Release Agreement.

All staff receive professional development on the importance of understanding Fair Use, respecting intellectual property rights, and obeying Copyright Law. Through real-world use of multimedia in lessons and projects, students are also taught about the importance of intellectual property rights. The District uses online resources to teach staff and students about copyright issues. Education on Copyright and Fair Use is ongoing and supported throughout each school year. The resources are revised to reflect current copyright issues and emerging technologies. Technology Lab instructors include the scope and sequence for this content in their yearlong instructional plans. The Director Technology has had extensive training in copyright and have also done presentations to management and teacher groups.

In order to teach our students about ethical technology standards, information regarding appropriate use of technology in the areas of copyright, fair use, plagiarism and ethical and unlawful/lawful downloading, information is disseminated to the students by the teacher and the school library clerk in September of each new school year. One reference that will be used as a guide is available at the following site: http://www.netsmartz.org.

The district will use the current Acceptable Use Policy and modify the student handbooks to reflect policies regarding fair and ethical use, copyright information, file downloads and peer to peer networks. The teachers and the library staff will attend professional development classes to be prepared to implement the following goals:

LIST OF GOALS

- Students, teachers and administrators will learn and follow U.S. copyright laws and will distinguish lawful from unlawful uses of copyrighted works.
- Each year of the program, all students will receive age-appropriate information and resources on lawful and unlawful uses of copyrighted works, Fair Use Guidelines and respecting intellectual property.
- Students, teachers and administrators will be able to distinguish lawful from unlawful downloading and peer-to-peer file sharing.
- Students and teachers understand plagiarism, Fair Use, and the need for respecting intellectual property.
- Students will be expected to utilize copyright-friendly media in their projects and cite sources when it's age-appropriate (4^{th}-6^{th} Grade).

Goal 3f.1: Students, teachers and administrators know and follow U.S. copyright laws and can distinguish lawful from unlawful uses of copyrighted works. Students, teachers and administrators can distinguish lawful from unlawful downloading and peer-to-peer file sharing. Students and teachers understand plagiarism, Fair Use, and the need for respecting intellectual property.		
Objective 3f.1of 2: By June 30, 2017, all staff will be trained and all students in grades K-6 will be taught the ethical and uses of technology at the appropriate grade level. Students grade 2-6 will take a district designed grade-level evaluation instrument on the ethical and legal uses of technology to measure progress.		
Year	Benchmarks	
1- 5	Each year of the plan, staff will be trained and students in grades K-6 will be taught age-appropriate ethical uses of technology. A district designed grade-level evaluation instrument on the ethical and legal uses of technology will be implemented.	
2	100% staff will be trained and students in grades 5-6 will take a district designed grade-level evaluation instrument on the ethical and legal uses of technology.	
3	100% staff will be trained and students in grades 3-4 will take a district designed grade-level evaluation instrument on the ethical and legal uses of technology.	
4	100% staff will be trained and 90% of all students in grades 1-2 will take a district designed grade-level evaluation instrument on the ethical and legal uses of technology.	
5	All staff will be trained and all students in grades K-6 will be taught the ethical and uses of technology at the appropriate grade level. Students grade 1-6 will take a district designed grade-level evaluation instrument on the ethical and legal uses of technology to measure progress.	
Evaluation instrument(s) **Data collected** **Position(s) responsible***	**Evaluation Schedule**	**Program Analysis** **Modification Process**
An evaluation instrument will be created in 2012 for two identified grade levels for benchmarking results. Director of Instructional Services. Media Center Teachers.	Two grade levels will be assessed mid-year and at year-end to determine if students have obtained mastery of the content. Media Center teachers will meet four times/year. They will review progress.	Walkthrough observations Lesson plans Based on the results of the assessments the curriculum will be modified.

Implementation Plan			
Activities	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**
Content of lessons on U.S. copyright laws, peer-to-peer file sharing, plagiarism, Fair Use, and intellectual property will be shared by Lab Technology Instructors with classroom teachers	2012	Director of Instructional Services Summer Task force Team	Summer task force team. Modifications to the lab curriculum will be made for classrooms.
Activities	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**
Students will be taught age/grade level appropriate lessons in U.S. copyright laws, peer-to-peer file sharing, plagiarism, Fair Use, and intellectual property instruction on a regular basis.	Each year from 2012 - 2017	Classroom teachers Director, Instructional Services	Teacher lesson plans Student and teachers observation (implementation of ethical use lessons for students).
Student work will demonstrate their understanding of ethical use of technology.	Each year from 2012 - 2017	Classroom teachers Director, Instructional Services	Student and teachers observation (implementation of ethical use lessons and student work).
Classroom teachers, trained in 2012, will lead professional development for classroom teachers in the content (above).	2012	Director of Instructional Services Summer task force team Classroom teachers Principals	Summer task force team. Classroom curriculum from 2012 will be modified as needed. Principal walkthroughs will focus on implementation of this objective during Trimester 2, 2013-2014
Classroom teachers, trained in 2013, will lead professional development for	2013 Trimester 2, 2013-2014	Director of Instructional Services Summer task force team Classroom teachers Principals	Summer task force team. Classroom curriculum from 2013 will be modified as needed.

classroom teachers in the content (above).			Principal walkthroughs will focus on implementation of this objective during Trimester 2, 2014-2015
Classroom teachers, trained in 2014, will lead professional development for classroom teachers in the content (above).	2014 Trimester 2, 2014-2015	Director of Instructional Services Summer task force team Classroom teachers Principals	Summer task force team. Classroom curriculum from 2014 will be modified as needed. Principal walkthroughs will focus on implementation of this objective during Trimester 2, 2015-2016
Classroom teachers, trained in 2015, will lead professional development for classroom teachers in the content (above).	2015 Trimester 2, 2015-2016	Director of Instructional Services Summer task force team Classroom teachers Principals	Summer task force team. Classroom curriculum from 2015 will be modified as needed. Principal walkthroughs will focus on implementation of this objective during Trimester 2, 2016-2017
Classroom teachers, trained in 2016, will lead professional development for classroom teachers in the content (above).	2016 Trimester 2, 2016-2017	Director of Instructional Services Summer task force team Classroom teachers Principals	Summer task force team. Classroom curriculum from 2016 will be modified as needed. Principal walkthroughs will focus on implementation of this objective during 2017-2018

Objective 3f.2of 2: By June, 2017, 90% of students will be expected to utilize copyright-friendly media in their projects and cite sources when it's age-appropriate (4^{th}-6^{th} Grade).

Year	Benchmarks
1	50% of students will be expected to utilize copyright-friendly media in their projects and cite their sources when it's age-appropriate (4^{th} grade and higher).
2	60% of students will be expected to utilize copyright-friendly media in their projects and cite their sources when it's age-appropriate (4^{th} grade and higher).
3	70% of students will be expected to utilize copyright-friendly media in their projects and cite their sources when it's age-appropriate (4^{th} grade and higher).
4	80% of students will be expected to utilize copyright-friendly media in their projects and cite their sources when it's age-appropriate (4^{th} grade and higher).
5	90% of students will be expected to utilize copyright-friendly media in their projects and cite their sources when it's age-appropriate (4^{th} grade and higher).

Evaluation instrument(s)	**Evaluation Schedule**	**Program Analysis**

Data collected **Position(s) responsible**		**Modification Process**
An evaluation instrument will be created in 2012 for two identified grade levels for benchmarking results. Director of Instructional Services. Media Center Teachers.	Two grade levels will be assessed mid-year and at year-end to determine if students have obtained mastery of the content. Media Center teachers will meet four times/year. They will review progress.	Walkthrough observations Lesson plans Based on the results of the assessments the curriculum will be modified.

Implementation Plan

Activities	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**
Students will be expected to utilize copyright-friendly media in their projects and cite their sources when it's age-appropriate (4th grade and higher).	Each year from 2012 - 2017	Classroom teachers Director, Instructional Services	Teacher lesson plans Student and teachers observation (implementation of ethical use lessons for students).
Student work will demonstrate their understanding of ethical use of technology.	Each year from 2012 - 2017	Classroom teachers Director, Instructional Services	Student and teachers observation (implementation of ethical use lessons and student work).
Classroom teachers, trained will lead professional development for classroom teachers in the content (above).	2012	Director of Instructional Services Summer task force team Classroom teachers Principals	Classroom curriculum from 2012 will be modified as needed. Principal walkthroughs will focus on implementation of this objective during Trimester 2, 2013-2014
Content of lessons on the utilization of copyright-friendly media in projects and citation of sources will be shared by Lab Technology Instructors with classroom teachers	2012	Director of Instructional Services Summer task force team	Modifications to the lab curriculum will be made for classrooms.
Classroom teachers,	2013	Director of	Classroom curriculum

trained in 2012, will lead professional development for classroom teachers in the content (above).	Trimester 2, 2013-2014	Instructional Services Summer task force team Classroom teachers Principals	from 2012 will be modified as needed. Principal walkthroughs will focus on implementation of this objective during Trimester 2, 2013-2014
Classroom teachers, trained in 2013, will lead professional development for classroom teachers in the content (above).	2014 Trimester 2, 2014-2015	Director of Instructional Services Summer task force team Classroom teachers Principals	Classroom curriculum from 2013 will be modified as needed. Principal walkthroughs will focus on implementation of this objective during Trimester 2, 2014-2015
Classroom teachers, trained in 2014, will lead professional development for classroom teachers in the content (above).	2015 Trimester 2, 2015-2016	Director of Instructional Services Summer task force team Classroom teachers Principals	Classroom curriculum from 2014 will be modified as needed. Principal walkthroughs will focus on implementation of this objective during Trimester 2, 2015-2016
Classroom teachers, trained in 2015, will lead professional development for classroom teachers in the content (above).	2016 Trimester 2, 2016-2017	Director of Instructional Services Summer task force team Classroom teachers Principals	Classroom curriculum from 2015 will be modified as needed. Principal walkthroughs will focus on implementation of this objective during Trimester 2, 2016-2017
Classroom teachers, trained in 2016, will lead professional development for classroom teachers in the content (above).	2017 Trimester 2, 2017-2018?	Director of Instructional Services Summer task force team Classroom teachers Principals	Classroom curriculum from 2016 will be modified as needed. Principal walkthroughs will focus on implementation of this objective during the 2017-2018 school year

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)

The District Instructional Services Department and Technology Department will continue to raise awareness about Internet safety, online privacy, and online predators. Students will receive instruction on Internet safety along with skills to be a critical consumer of information. These skills must be taught directly in the context of meaningful instruction during computer lab, media center and classroom instructional time. Technology Lab instructors will continue to teach a module for every student (K-6) on Internet Safety using the adopted online resources (currently Netsmartz.org). Each Lab instructor will identify the scope and sequence for the content in their yearlong instructional plans. All staff will annually review the content and frequency of distribution of Cyber Safety literature. Cyber Safety literature will be provided to teachers and parents and will be posted on the District website.

Goals:

- All teachers will be trained in grade level appropriate skills related to Internet safety, specifically how to protect online privacy and avoid online predators.
- All classroom or Technology Lab instructors will integrate Internet safety instruction into their curriculum.
- Technology Lab instructors will continue to teach a module for every student (K-6) on Internet Safety using the adopted online resources
- All students will learn and utilize skills related to Internet safety, specifically how to protect online privacy and avoid online predators.
- Information, resources, and lessons will be presented to parents, teachers, and students.

Implementation Plan			
Activities	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**
Content of lessons on Internet safety will be shared by Lab Technology Instructors with classroom teachers	2012	Director of Instructional Services Summer task force team.	Modifications to the lab curriculum will be made for classrooms.
Classroom teachers, trained in years 2012 -2017, will lead professional development for classroom teachers in the content (above).	2013-2017	Director of Instructional Services Summer task force team Classroom teachers Principals	Classroom curriculum will be adjusted as needed each year of the plan. Principal walkthroughs will focus on implementation of this objective during Trimester 2, 2013-2017
Classroom or lab technology teachers will integrate	2012-2017	Principals Teachers	Classroom curriculum will be modified as needed. Principal walkthroughs will

Internet safety instruction into their curriculum.			focus on implementation of this objective during Trimester 2, 2012-2017
Lab instructors will identify the scope and sequence for the content in their yearlong instructional plans.	2012-2017	Lab Instructors Site administrators	
Information, resources, and lessons will be presented to parents, teachers, and students.	2012-2017	Director of Instructional Services Summer task force team Classroom teachers Principals	Records of presentations to parents, teachers and students will be monitored each semester 2012-2017
All staff will annually review the content and frequency of distribution of Cyber Safety literature.	2012-2017	Director of Instructional Services Summer task force team Classroom teachers Principals	Annual staff reviews will be the basis for identifying any needed modifications
Cyber Safety literature will be provided to teachers and parents and will be posted on the District website.	2012-2017	Director of Instructional Services Principals	Selected staff will check website for provision of needed materials.

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

Equitable access to technology is important to the Solana Beach School District. Throughout the year, the Instructional Services and Technology Departments will assess the opportunity for all students to have access to technology regardless of achievement level, language ability, or special needs. The District provides fair and appropriate access to technology-based resources for all students and staff members throughout the day. All student populations will be served (including English Learners, GATE and students with disabilities). The District will continue to ensure that every instructional area has a minimum of three Internet-connected multimedia computers with appropriate instructional software to support curricular goals and to address the needs of all students, including advanced, low-achieving, and special-needs students. As new classrooms and other instructional areas are added to our campus, the District will equip each of them with multimedia computers with Internet access. Rotational use of computer labs and Media Center facilities provide extended opportunities for targeted intervention and enhanced teaching and learning.

The District gives high priority to learning activities that challenge higher-order thinking skills and engage students in hands-on activities using carefully selected software. All computers installed in the school district have standard software applications (e.g. Microsoft Office, Safari, Firefox, KidPix,

Easy Grade Pro, Report Card Maker, etc). Technology resources coupled with instruction in technology skills and information literacy provide all students with a variety of ways build knowledge and communicate understanding. All staff members have email accounts and can access email either on or off campus. Workgroup Manager is the district's adopted desktop security software and allows all clients to access their personal documents from any computer on the LAN.

Equitable access is guaranteed to students with physical disabilities at all times through the use of appropriate software, furniture, and peripherals. The district currently provides specialized equipment for students with physical disabilities, as determined by their existing Individualized Education Plans (IEPs).

Assistive devices provided to students based on IEP modifications include alternative keyboards, alternative mouse/pointer devices, switch boxes, portable word processors and laptop computers. Assistive software applications provided to students based on IEP modifications include auditory feedback, speech recognition, large print, screen readers, and onscreen keyboards. The need for additional equipment and/or software will be reviewed with Special Education case managers as students are enrolled.

Goal 3h.1: All learners will have access to technology resources that will accelerate their learning of English/language arts, mathematics, social studies and science.	
Objective 3h.1of 1: By June 30, 2017, all teaching staff will integrate technology into their curriculum to support individual needs of students.	
Year	**Benchmarks**
1	60% of all teaching staff will integrate technology into their curriculum to support individual needs of students.
2	70% of all teaching staff will integrate technology into their curriculum to support individual needs of students.
3	80% of all teaching staff will integrate technology into their curriculum to support individual needs of students.
4	90% of all teaching staff will integrate technology into their curriculum to support individual needs of students.
5	100% of all teaching staff will integrate technology into their curriculum to support individual needs of students.
Implementation Steps	
Year 1	Continue access for all students of technology rich websites and programs that will help focus learning in particular areas of the curriculum. Start implementation of more "on-line" resources and programs for students for anytime learning and study. Move towards all students having the ability to access software, data and resources from anywhere.
Year 2	Implement additional resources and programs for student appropriate grade level access from school and home. Investigate and implement different access abilities of teachers and staff to be able to access data and information anywhere and at anytime.
Year 3	Implement additional resources and programs for student appropriate grade level access from school and home. Investigate and implement different access abilities of teachers and staff to be able to access data and information anywhere and at anytime.

Year 4	Implement additional resources and programs for student appropriate grade level access from school and home. Investigate and implement different access abilities of teachers and staff to be able to access data and information anywhere and at anytime.	
Year 5	Implement additional resources and programs for student appropriate grade level access from school and home. Investigate and implement different access abilities of teachers and staff to be able to access data and information anywhere and at anytime.	
Evaluation instrument(s) **Data collected** **Position(s) responsible***	**Evaluation Schedule**	**Program Analysis Modification Process**
Speak Up Survey of parents, administrators, teachers, and students Director of Instructional Services Director Technology Leadership Team	Annually, February results analysis	Determine district equity and make recommendations for future use of funds; determine equity for students at home and make recommendations for community outreach
District inventory of hardware District inventory of software Annual replacement plan schedule Director of Technology	Annual inventory, annual replacement plan schedule (purchasing done in July)	Determine equity and add/move equipment as needed

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.

In addition to the steps listed in the table for 3i below, the district has collected multiple assessment data items on each student since 1998 in an effort to better understand and measure the impact of instructional programs on student learning and achievement. In 2010, the district moved all student information into *Aeries* and assessment data is now housed in *Data Director*. Most teachers use *Easy Grade Pro* as their grading program and *Report Card Maker* for report cards. The use of technology has helped site and district administrators, teachers, and other district personnel easily access and obtain data to track student achievement and growth. Training is still necessary for classified and certificated staff to use both of these systems. In 2011, the District implemented the collection of the data for trimester English/language benchmarks. Teachers continue to need training to input and retrieve student, class and grade-level data.

Goal 3i.1: Use technology to make record keeping, assessment, and access to student information more efficient and supportive of efforts to meet students' academic needs	
Objective 3i1 of 2: By June 30, 2012, and each ensuing year, 100% of teachers and administrators will be analyzing and using assessment data to guide curricular decision-making. Data will be used to inform the completion of report cards for parents.	
Year	**Benchmarks**
1	50% of teachers and administrators will be trained each year in data analysis and use of the specific record keeping and assessment data tools outlined in the Implementation steps below.
2	60% of teachers and administrators will be trained each year in data analysis and use of the specific record keeping and assessment data tools outlined in the Implementation steps below.
3	75% of teachers and administrators will be trained each year in data analysis and use of the specific record keeping and assessment data tools outlined in the Implementation steps below.
4	85% of teachers and administrators will be trained each year in data analysis and use of the specific record keeping and assessment data tools outlined in the Implementation steps below.
5	100% of teachers and administrators will be trained each year in data analysis and use of the specific record keeping and assessment data tools outlined in the Implementation steps below.

Evaluation instrument(s) Data collected Position(s) responsible	**Evaluation Schedule**	**Program Analysis Modification Process**
Data Director reports: district and school level assessment reports Director of Instructional Services	Three times/year at the conclusion of Themes 1, 3, and 5.	At the conclusion of data analysis recommendations will be made to include next steps for training in the use of the data collection tool and next steps to strengthen instruction.
School report card documents will be created in new system. Director of Technology	At the completion of each task (most likely three times/year).	The Instructional Services Cabinet will work with pilot teachers to evaluate the ease of use in creating the report card to determine. Recommendations and modifications will be made as appropriate.

The District puts an emphasis on the use of data-driven decision-making. Principals and teachers will continue to spend time analyzing results of benchmarks and statewide testing to ensure that students are exhibiting growth, and instruction is focused on what students need to increase achievement. In grade-level team meetings, teachers will be able to analyze test results and determine specific students who may need modification, re-teaching, and reinforcement. Additionally, teachers will be given time to determine if there are any specific areas to re-teach the entire class. The use of *Data Director* helps facilitate the easy analysis of trends in student achievement, benchmarks, and state testing.

Year	**Implementation Steps/Activities**
2012	In the year of our initial use of the *Data Director* tool, training will be provided by the district for each grade-level team to analyze Theme 1 and 2 data. Principals will provide training in small teams in that analysis of data for Themes 3 and 5.
2012	Every student report card will be created in a system that can be consistently supported and meets the needs of teachers. Pilot teachers will use the report card in Aeries along with the Aeries grade book. Recommendations will be made for 2013.
2013	In this second year of use of *Data Director*, training will be provided by the district for every grade-level team in the advanced use of the system.
2013	Principals will use *Data Director* with every grade-level team to analyze 2012-2013 Theme 1, 3, and 5 data.
2013	Report card pilot team recommendations will be implemented.
2014	Principals will use *Data Director* with every grade-level team to analyze 2013-2014 Theme 1, 3, and 5 data.
2014	Report card pilot team recommendations will be implemented.

	A report card task force will assess the use of the tool being used for the report card and determine action steps.
2015	Principals will use *Data Director* with every grade-level team to analyze 2014-2015 Theme 1, 3, and 5 data.
2015	2014 report card team recommendations will be implemented. The report card task force will assess the use of the tool being used for the report card and determine action steps.
2016	Principals will use *Data Director* with every grade-level team to analyze 2015-2016 Theme 1, 3, and 5 data.
2016	2015 report card team recommendations will be implemented. The report card task force will assess the use of the tool being used for the report card and determine action steps.
2017	Principals will use *Data Director* with every grade-level team to analyze 2016-2017 Theme 1, 3, and 5 data.
Objective 3i 2 of 2: By June 2013, and each ensuing year, new intervention software will be evaluated to determine the value for identified under-performing students.	
Year	**Benchmarks**
2012-2013	Evaluate the effectiveness of newly introduced software programs for intervention students: Dreambox for K/1, FasttMath, English in a Flash
2012-2013	Evaluate the use of software tools for intervention students and determine a). if there is a need to add additional software and b). if there is capacity to support the addition of new software.
2013-2014	Evaluate the effectiveness of newly introduced software programs for intervention students: Dreambox for 2/3, Vantage My Access for 5/6
2013-2014	Evaluate the use of software tools for intervention students and determine a). if there is a need to add additional software and b). if there is capacity to support the addition of new software.
2014-2015	Evaluate the effectiveness of newly introduced software programs for intervention students: Dreambox for 4/5, Vantage My Access for 3/4
2015-2016	Evaluate the use of software tools for intervention students and determine a). if there is a need to add additional software and b). if there is capacity to support the addition of new software.
2015-2016	Evaluate the effectiveness of newly introduced software programs for intervention students.
2016-2017	Evaluate the use of software tools for intervention students and determine a). if there is a need to add additional software and b). if there is capacity to support the addition of new software.
2016-2017	Evaluate the effectiveness of newly introduced software programs for intervention students.

Evaluation instrument(s) Data collected Position(s) responsible	**Evaluation Schedule**	**Program Analysis Modification Process**
Usage data for software e.g., Dreambox, FasttMath, My Access, etc. M.A.P. scores to monitor progress in achievement. Director of Instructional Services Director Technology Leadership Team	Monthly status reports at Leadership Team Annual teacher survey Annual review of Compass Learning use	Assess growth in student achievement for students participating in intervention. Identify methods to modify use of technology, software, and instructional strategies as a result of data analysis.

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

The Solana Beach School District has a vision to develop new ways and refine traditional methods of improving the communications between home and school. It is through timely and relevant communication that the home-school connection is strengthened.
The District strives to provide communication to parents in a variety of ways to give families personal choice in how they receive important and essential information. The District will explore alternative methods of communication and add, as appropriate, throughout the duration of the Technology Use Plan. A large volume of information is distributed to parents electronically. At this time it is becoming increasingly important to monitor the volume because parents may be getting too much instead of too little.

Goal 3j.1 of 1 Ensure that District electronic communication is of the highest quality and demonstrates the kind of innovative district we are and want to be.	
Objective 3j1 of 1: By June, 2014 select a content management web hosting service and convert district, school, and teacher websites to the new system and provide training for staff and parents on use of the system.	
Year	Benchmarks/implementation
2012	Select a vendor for web hosting following ERATE vendor selection guidelines
2012	Convert content from the old website to the new website
2012	Explore alternative learning management systems to support online professional development modules for parents
2012	As training is conducted for parents in the district, add online modules to the website when possible.
2012-2013	Conduct professional development for administrators and support staff for web site conversion and ongoing maintenance
2013	Conduct professional development for teachers so they can convert their current web sites and perform ongoing maintenance
2013	Create a minimum of one online module for parents
2014	Create and implement quality control mechanisms to ensure that district, school, and teacher websites represent the districts priorities and are kept up-to-date and accurate.
2014	Create a minimum of two online modules for parents
2014-2017	Assess the traffic and impact of the online modules for parents and modify as needed

Evaluation instrument(s) Data collected Position(s)* responsible	Evaluation Schedule	Program Analysis Modification Process
Review of websites Parent survey Completed online modules Director Instructional Services Director Technology Leadership Team Certificated staff, parents	Annual review of district and school websites.	Review of websites at regular intervals during the year by administration, support staff, teachers, and families. Survey families to determine if communication is effective and timely.

Implementation Plan

Technology currently plays a vital role in providing home-to-school communication. In addition to the benchmarks above, home school communication practices will continue to build on the following established procedures:

- District and site administrators update web pages regularly making a wide range of information available to parents.
- All teachers have websites in which classroom information is posted. The information posted includes important dates, contact information, school calendars, curriculum standards, School Site Council (SSC), and Parent/Teacher Association (PTA) information.
- The majority of teachers use a wiki that requires parents and students to use a password so they can view current class photographs, student work, and dynamic classroom information.
- Certificated staff members have his/her own District email account and email addresses are listed on the District's web page.
- Certificated and administrative staff members have his/her own District voicemail accounts at their sites accessible from their classroom, office and/or home.
- Solana Beach School District owns and effectively (and frequently) uses School Messenger (an automated dialing software program), Web Pages and List Services.

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.

In addition to specific evaluation measures described in 3 d through 3j, the process used to monitor the curricular component is as follows:

The Assistant Superintendent and Director of Instructional Services, Director of Technology and New Facilities, and site principals will be involved in the monitoring of the district's curricular goals that will be supported by this technology plan. They will be involved in monitoring technology integration into the teaching process by the teacher observation process and formal monitoring will occur during scheduled team walkthroughs. The team will review student achievement data a minimum of three times each year. Data from the annual *Speak Up Survey* will also be reviewed and an action plan will developed. The *Speak Up Survey* will be used to gauge the interest in innovative technology tools by students and teachers. These surveys will assist in assessing the frequency and types of technology

used in instruction. The Leadership Team will collaborate during meetings to review data on progress toward educational technology curriculum goals. In these meetings, they will assess what further professional development may be required across the District.

The Media Center Teachers will meet a minimum of four times each year. The Media Center Teachers will be responsible for the analysis of the implementation of appropriate and ethical use of technology. They will also be responsible for the analysis of the district's accomplishment in creating equity of access for all students and student groups and for assessing the quality of our programs to teach information literacy. Lastly, this team will be responsible for measuring the objectives for improving student record keeping, assessment data collection, and data-driven decision-making.

The Technology Lab Instructors will meet a minimum of five times each year. They will be responsible for the analysis of the district 2nd grade and 5th grade benchmark assessments using the National Educational Technology Standards (NETS). They will also be responsible for the assessment of the teaching of Internet Safety and they will make recommendations to improve the curriculum as needed. Requests for professional development will be made to the Director of Instructional Services and Educational Technology to provide training and support.

Communication of analysis of qualitative and quantitative data and recommendations may be included, as appropriate, in District and Site Strategic Planning Meetings, Board Meetings and, if applicable, through other identified district curriculum meetings/task force groups.

SECTION 4 – PROFESSIONAL DEVELOPMENT

It is essential that the vision, plan and implementation process for technology be communicated to all stakeholders in the District. Good communication will foster active participation that will support successful use of technology. After providing for the assessment of teachers' and administrators' current technology skills and needs for professional development, the plan will provide for on-going professional development opportunities necessary to implement the curriculum component of our plan. In order to facilitate technology integration into the curriculum with innovative instructional practices, teachers need high quality professional staff development.

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

Solana Beach School District administered a twenty-four question survey created by *EdTechProfile (ETP)* to certificated and classified employees. The *EdTechProfile* is used by district staff to tailor professional development opportunities that best serve staff needs. This is a survey where staff members are asked to rank their own proficiency in technology and, for employees who work directly with students, usage of technology in the classroom. The findings include Commission on Teacher Credentialing, CTC Standard 9 and Standard 16 proficiencies.

Upper Grade Teacher Results:

Areas of Proficiency	Beginning	Beg/Intermediate	Intermediate	Adv/Intermediate	Advanced
Internet Skills	0%	0%	9%	31%	59%
General Computer Knowledge	0%	0%	23%	27%	50%
Information Literary	0%	5%	5%	72%	18%
Internet Safety	0%	0%	23%	50%	27%
Email Functions	0%	0%	27%	27%	46%
Word Processing	0%	0%	5%	36%	59%
Presentation Software	0%	17%	14%	14%	55%
Spreadsheet Software	13%	41%	18%	23%	5%
Database Software	18%	46%	14%	14%	9%
Ethical Use of Technology	0%	9%	31%	27%	32%
Integration of technology when teaching	0%	14%	27%	23%	36%
Use of multimedia resources	0%	23%	18%	27%	32%
Use of technology tools to encourage student collaboration and peer evaluation	14%	23%	23%	27%	14%
Use of classroom webpage	5%	14%	9%	23%	50%
Use of technology to improve two-way communication between home and school	0%	0%	27%	27%	45%
Use of technology tools for student record-keeping	5%	9%	9%	27%	50%

Frequency	Infrequently (once or twice a quarter)	From time to time (a few times a quarter)	Frequently (at least every other week)	Regularly (at least once a week)	Daily
Technology tools are integrated into student learning	5%	9%	5%	14%	68%
Technology tools are used to achieve instructional goals	5%	9%	5%	55%	27%
Students use technology resources to collaborate and/or give each other feedback	31%	32%	18%	14%	5%

Rating	Poor	Below Average	Average	Above Average	Excellent
Students' information literacy skills	0%	0%	60%	41%	0%
Students' access to computer-based and online technology	0%	0%	27%	50%	23%

Upper grade teachers report that they are advanced in most areas related to their use of technology. The areas that are not advanced include: use of spreadsheet and database software, use of technology tools to encourage student collaboration and peer evaluation, integration of technology when teaching, Internet safety, and information literacy. Upper grade teachers report that they using technology tools integrated in student learning daily frequently and they could develop their use of technology resources for student collaboration and feedback. They report that student information literacy is average and access is above average.

Primary Grade Teacher Results:

Areas of Proficiency	Beginning	Beg/Intermediate	Intermediate	Adv/Intermediate	Advanced
Internet Skills	0%	5%	33%	33%	30%
General Computer Knowledge	0%	6%	36%	34%	23%
Information Literary	5%	16%	38%	33%	9%
Internet Safety	2%	8%	38%	39%	14%
Email Functions	0%	5%	33%	47%	16%
Word Processing	2%	2%	23%	48%	25%
Presentation Software	8%	23%	33%	22%	14%
Spreadsheet Software	24%	34%	30%	8%	5%
Database Software	30%	28%	39%	3%	0%
Ethical Use of Technology	3%	13%	36%	33%	16%
Integration of technology when teaching	0%	16%	39%	27%	19%
Use of multimedia resources	11%	20%	33%	19%	17%
Use of technology tools to encourage student collaboration and peer evaluation	41%	31%	20%	3%	5%

Use of classroom webpage	22%	31%	14%	14%	19%
Use of technology to improve two-way communication between home and school	2%	6%	34%	34%	23%
Use of technology tools for student record-keeping	14%	22%	33%	17%	14%

Frequency	Infrequently (once or twice a quarter)	From time to time (a few times a quarter)	Frequently (at least every other week)	Regularly (at least once a week)	Daily
Technology tools are integrated into student learning	2%	14%	9%	17%	58%
Technology tools are used to achieve instructional goals	5%	8%	11%	31%	45%
Students use technology resources to collaborate and/or give each other feedback	59%	19%	11%	8%	3%

Rating	Poor	Below Average	Average	Above Average	Excellent
Students' information literacy skills	11%	6%	56%	25%	2%
Students' access to computer-based and online technology	8%	2%	34%	41%	16%

Primary grade teachers report that they are intermediate in most areas related to their use of technology. The areas that are mostly ranked below intermediate include: use of spreadsheet software, use of technology tools to encourage student collaboration and peer evaluation, and use of the classroom webpage. Primary grade teachers report that they are using technology tools integrated in student learning daily and to achieve instructional goals, however, they are infrequently using technology resources for student collaboration and feedback. They report that student information literacy is average and access is above average just as the upper grade teachers did.

Technology professional development should be an important priority for the district as students have above average access to technology at home and teachers are using technology frequently in classrooms. All teachers would benefit from professional development in: spreadsheet and database software, use of technology tools to encourage student collaboration and peer evaluation, Internet safety, and information literacy.

Administrator Results:

Areas of Proficiency	Beginning	Beg/Intermediate	Intermediate	Adv/Intermediate	Advanced
Internet Skills	0%	0%	43%	43%	14%
General Computer Knowledge	0%	0%	43%	43%	14%
Information Literary	0%	0%	86%	0%	14%
Internet Safety	0%	14%	29%	43%	14%
Email Functions	0%	0%	43%	29%	29%
Word Processing	0%	0%	14%	86%	0%
Presentation Software	0%	0%	43%	57%	0%
Spreadsheet Software	29%	43%	14%	14%	0%
Database Software	14%	43%	29%	0%	14%
Ethical Use of Technology	14%	0%	29%	29%	29%
Integration of technology when teaching	0%	43%	43%	0%	14%
Use of multimedia resources	0%	29%	43%	14%	14%
Use of technology tools to encourage student collaboration and peer evaluation	43%	29%	29%	0%	0%
Use of classroom webpage	43%	0%	57%	0%	0%
Use of technology to improve two-way communication between home and school	0%	0%	72%	14%	14%
Use of technology tools for student record-keeping	14%	14%	43%	14%	14%

Frequency	Infrequently (once or twice a quarter)	From time to time (a few times a quarter)	Frequently (at least every other week)	Regularly (at least once a week)	Daily
Technology tools are integrated into student learning	29%	29%	0%	0%	43%
Technology tools are used to achieve instructional goals	14%	14%	14%	29%	29%
Students use technology resources to collaborate and/or give each other feedback	14%	57%	29%	0%	0%

Rating	Poor	Below Average	Average	Above Average	Excellent
Students' information literacy skills	0%	0%	0%	100%	0%
Students' access to computer-based and online technology	0%	0%	0%	80%	20%

Administrators report that they are intermediate in most areas related to their use of technology. The areas that are ranked below intermediate include: use of spreadsheet and database software and use of technology tools to encourage student collaboration and peer evaluation. Administrators report that they are observing technology tools integrated in student learning daily and frequently to achieve instructional goals, however, students use technology resources to collaborate and/or give each other feedback from time to time (a few times/quarter). They report that student information literacy and access is above average.

4b. List of clear goals, measureable 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.

Learning to use technology to strongly support instructional goals requires that teachers have opportunities to participate in ongoing learning opportunities. Teachers typically spend their day in classrooms with students and have few opportunities to interact with other teachers, to develop skills, and expand their knowledge base. Teachers and administrators need time for collaboration, reflection, observation, mentoring, research, study groups, acquisition of new skills, and continued learning.

Goal 4b: To provide ongoing professional development necessary to reach the curriculum component objectives.		
Objective 4b.1: By June 30, 2017, 100% of classroom teachers will learn techniques to increase the integration of technology into the core curriculum, as measured by training evaluations and lesson plans.		
Year 1 Benchmark: 60% of classroom teachers will learn techniques to increase the integration of technology into the core curriculum		
Year 2 Benchmark: 75% of classroom teachers will learn techniques to increase the integration of technology into the core curriculum.		
Year 3 Benchmark: 85% of classroom teachers will learn techniques to increase the integration of technology into the core curriculum.		
Year 4 Benchmark: 95% of classroom teachers will learn techniques to increase the integration of technology into the core curriculum.		
Year 5 Benchmark: 100% of classroom teachers will learn techniques to increase the integration of technology into the core curriculum.		
Evaluation instrument(s) **Data collected** **Person(s) responsible**	**Evaluation Schedule**	**Program Analysis** **Modification Process**
Professional development evaluation survey. Director of Instructional Services	After every training session, a minimum of three times/year.	The Instructional Services team will analyze the evaluations and make modifications after each training session.

Objective 4b.2: By June 30, 2012 and each ensuing year, professional development opportunities will be provided for teachers and administrators in: spreadsheets and database software, use of technology tools to encourage student collaboration and peer evaluation, student information literacy, and Internet safety. Using the District EdTechProfile teachers will report that they are advanced in most areas related to their use of technology.		
Year 1 Benchmark: 90% of classroom teachers and administrators will be trained in the use of literacy and internet safety to integrate into lessons for students.		
Year 2 Benchmark: 90% of classroom teachers and administrators will be trained in the use of student collaboration and peer evaluation to integrate into lessons.		
Year 3 Benchmark: 90% of classroom teachers and administrators will be trained in the use of spreadsheet and database software to integrate into lessons for students.		
Years 4 and 5 Benchmarks: to accommodate for staff turnover and maintain the 90% benchmark, professional development opportunities will continue to be provided for classroom teachers and administrators in the use of spreadsheet and database software to integrate into lessons for students. Using the District EdTechProfile teachers will report that they are advanced in most areas related to their use of technology.		
Evaluation instrument(s) **Data collected** **Person(s) responsible**	**Evaluation Schedule**	**Program Analysis** **Modification Process**
Analysis of professional development content. Schedule of training dates. Professional development evaluation survey. Director of Instructional Services	After every training session, a minimum of three times/year.	The Instructional Services team will analyze the evaluations and make modifications after each training session.

Objective 4b.3: by June 30, 2017 Teachers will demonstrate routine use/refinement of five grade level units which incorporate and assess information, media, and technology skills.
Year 1 Benchmark: 90% of classroom teachers will demonstrate routine use/refinement of one grade level or department unit which incorporates and assesses information, media, and technology skills.
Year 2 Benchmark: 90% of classroom teachers will demonstrate preparation/mechanical use of a second grade level unit which incorporates and assesses information, media, and technology skills.
Year 3 Benchmark: 90% of classroom teachers will demonstrate preparation/mechanical use of a third grade level unit which incorporates and assesses information, media, and technology skills.
Year 4 Benchmark: 90% of classroom teachers will demonstrate preparation/mechanical use of a fourth grade level unit which incorporates and assesses information, media, and technology skills.
Year 5 Benchmark: 90% of classroom teachers will demonstrate preparation/mechanical use of a fifth grade level unit which incorporates and assesses information, media, and technology skills.

Evaluation instrument(s) Data collected Person(s) responsible	Evaluation Schedule	Program Analysis Modification Process
An evaluation instrument will be created in 2012 for two identified grade levels for benchmarking results. Director of Instructional Services. Media Center Teachers.	Two grade levels will be assessed in January and at year-end to determine if students have obtained mastery of the content. Media Center teachers will meet four times/year. They will review progress.	Walkthrough observations Lesson plans Based on the results of the assessments the curriculum will be modified.
Objective 4b.4: By June 30, 2017, 100% of classroom teachers will use the new website to host their classroom website.		
Year 1 Benchmark: 100% of classroom teachers will be trained to use the new website to host their classroom website.		
Year 2 Benchmark: 40% of classroom teachers will use the advanced features of the new website.		
Year 3 Benchmark: 60% of classroom teachers will use the advanced features of the new website.		
Year 4 Benchmark: 80% of classroom teachers will use the advanced features of the new website.		
Year 5 Benchmark: 100% of classroom teachers will use the advanced features of the new website.		
Evaluation instrument(s) Data collected Person(s) responsible	**Evaluation Schedule**	**Program Analysis Modification Process**
An evaluation rubric will be created in 2012 for the purposes of evaluating the district, school, and classroom websites. Director of Instructional Services. Principals	Three times/year with the Leadership Team.	Websites that are evaluated as "needs improvement" will be modified. Recommendations will be organized into an action steps document with tasks, person responsible, and timelines for implementation.
Objective 4b.5: By June 2017 Classroom and Special Education teachers will be trained in the instructional uses of mobile devices.		
Year 1 Benchmark: 25% of teachers will receive five days of Apple training and use mobile devices with their students.		
Year 2 Benchmark: 50% of teachers will receive five days of Apple training and use mobile devices with the students.		
Year 3 Benchmark: 75% more teachers will receive five days of Apple training and use mobile devices with the students.		
Year 4 Benchmark: 85% more teachers will receive five days of Apple training and use mobile devices with the students.		
Year 5 Benchmark: 95% more teachers will receive five days of Apple training and use mobile devices with the students.		

Evaluation instrument(s) Data collected Person(s) responsible	Evaluation Schedule	Program Analysis Modification Process
Professional development evaluation survey. Director of Instructional Services	After every training session, five times/year.	The Instructional Services team will analyze the evaluations of professional development and will make modifications after each training session. Director of Instructional Services monitors teachers and administrators progress on Technology surveys. Adjustments are made based on survey results.

***Person(s) responsible for monitoring benchmarks and implementation are listed in the implementation plan below.**

Implementation Plan:

Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Continue to offer professional development for teachers related to techniques to integrate technology into the core curriculum.	Summers 2012 2013 2014 2015 2016	Director Instructional Services Principals Teachers	Use professional development feedback forms after every training session. Review feedback forms and make recommendations for improvement of training and implement recommendations during the next training.
Offer professional development opportunities for teachers and administrators in student information literacy, and Internet safety.	2012	Director Instructional Services Principals Teachers	Monitored using professional development feedback forms and staff survey data.
Offer professional development opportunities for teachers and administrators in use of technology tools to encourage student collaboration and peer evaluation.	2013	Director Instructional Services Principals Teachers	Monitored using professional development feedback forms and staff survey data.
Offer professional development opportunities for teachers and administrators in use of spreadsheet and database software.	2014	Director Instructional Services Principals Teachers	Monitored using professional development feedback forms and staff survey data.

Develop five grade level units to be used in the Technology Lab that incorporate and assess information, media, and technology skills.	2012 2013 2014 2015 2016	Director Instructional Services Principals Teachers	Monitored using professional development feedback, staff survey data, and completion of written units.
Train all teachers to use the new website and convert all content from the old to the new website.	2012	Director of Technology Principals Teachers	Content current by June 2013
Train classroom and Special Education teachers in the instructional uses of mobile devices.	2012 2013 2014 2015 2016	Director Instructional Services Principals Teachers	Monitored using professional development feedback forms and staff survey data.
Evaluation Instrument(s) — Data To Be Collected: Data from staff technology surveys Data from professional development evaluations			

The professional development conducted in the last five years has had a significant positive impact and needs to continue. Enabling Solana Beach School District instructional staff to meet the goals in this plan will require professional development to be less general and more specific to the particular needs of individual teachers. The District Leadership Team understands that implementing and managing a successful and engaging technology-integrated, standards-based curriculum will require time, patience, planning, encouragement, leadership, and ongoing monitoring and evaluation. The District is committed to investing the time, resources, training, support and leadership necessary to provide students and staff with a 21st-century learning environment.

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.

In addition to specific evaluation measures described in the goals and objectives in 4c, the process used to monitor the curricular component is as follows:

Professional Development training will be evaluated at the conclusion of each training session. Feedback will be considered and modifications for future training needs and implementation will be a high priority. Technology professional development will be monitored and adjusted depending on the results of these surveys. Evaluations are collected from participants at the end of each training opportunity. These are used to evaluate the success of the trainings and to determine if there is any need for modifications. Every year, all teachers and administrators go online and retake the *EdTechProfile* assessment so that growth in technology proficiency and technology integration can be monitored. The Director of Instructional Services will monitor the overall progress of teachers and administrators via the online *EdTechProfile* assessment tools and information from the National Speak Up Survey. Annually by June 30, the Instructional Services Department will meet with principals to discuss professional development goals and needs for the following year. This will include training opportunities for administrators and for staff at specific school sites. The information collected will include needs for training in Compass Learning, Data Director, and mobile devices. At least once per year, the Instructional Services Department will report on the progress of plan goals to the Cabinet, Leadership Team, and Superintendent. A report will be provided to the Board on the progress with technology integration within the District.

SECTION 5 – INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE

5a. Existing hardware, Internet access, electronic learning resources and technical support already in the district that will be used to suppor the Curriculum and Professional Development Components.

The District hardware and software is configured to meet the staff and student needs and conform to the district technology model. The District is equipped with a wide area network (WAN), which provides continuous access to File Services, Electronic Mail, Financial and Student Information systems as well as the Internet. Each classroom is "wired" for telephone and network communications. In addition, individual sites have purchased other peripheral equipment to augment student learning and the technology program.

Wide Area Network (WAN)

The District WAN uses Metro Ethernet for connectivity between the school sites, the District Office and the County Office of Education. Bandwidth from each school site to the district office is 50 megabit. Bandwidth from the district office to the County Office of Education and to the Internet is 20 megabit. The WAN is secured with a combination of a Firewall, VPN gateway and a content filter. Utilizing a VPN client application, staff can securely access the network and services from home. The WAN connectivity serves to provide instructional support in the following area:

- Email for teachers and staff via an IMAP compatible client (Zimbra, Outlook Express, OS X Mail, Etc.) or through an Internet browser
- Internet access to support curriculum activities/projects
- Administrative access, over a secure VPN connection to the San Diego County Office of Education, to provide access to business applications (e.g. FIS, PAY)
- Backup capabilities for site servers, desktops, and laptops
- Data security on servers and local computers
- File sharing, handing-out and handing-in assignments, report cards, grade books
- Special Education Student Support
- District Web server and Intranet server
- Students and staff are able to save data within user accounts
- Students and staff are able to print to all printers on the WAN
- Secure remote access

Local Area Network (LAN)

All schools and the District Office use CAT5 /CAT6 copper cabling with multiple drops (4-12) per classroom or office. All sites have switched Ethernet connectivity available at 10/100mphs and 10/100/1000mbps for servers. Wireless access is available at each site and multiple access points are employed at 54mbps or 11mbps (802.11b/802.11g). All LAN backbone connections are switched gigabit over fiber and most have redundant links.

WAN/LAN Equipment Standards

The District has standardized on Cisco VOIP, routing and switching equipment. Ethernet connections are a minimum standard 10/100 mbps, all backbone connections are a minimum 10/100/1000mbps. All wireless equipment will support 802.11b and 802.11g standards as well as WEP, LEAP and Radius security systems.

Telecommunications (Voice Systems)

All buildings and classrooms in the school district have telephone services. Currently, Cisco's Voice Over IP (VOIP) technology is used to accommodate approximately 400 telephone hand-sets and 300 voicemail boxes. Four-digit dialing is available between school sites and the district office. Two PRIs (46 dial tones) are installed at the district office to accommodate incoming and outgoing calls for all district locations. The VOIP systems are also connected to the public address systems. Also, in the event that the Internet connection between sites is interrupted, three backup dial tones are in place for outgoing and incoming calls.

Electrical Considerations and Protection

Currently, all district schools have adequate electrical power servicing the facility and adequate electrical outlets in each instructional area. Uninterruptible Power Supplies (UPS) are installed at each server location Main Distribution Frame (MDF) and Intermediate Distribution Frame (IDF) for phones, servers and network equipment. The estimated run time for the Uninterruptible Power Supplies (UPS) is a minimum of 1 hour.

E-Mail Communication

The District currently provides and supports e-mail accounts which can be accessed through a web interface and/or an IMAP compatible client for district employees.

Electronic Calendaring

The District currently provides and supports Zimbra Collaboration Suite, a group email and calendaring program, which can be accessed and shared through an Internet browser for district administrative employees. The District provides administrators with smart phones to access cellular phone technologies that provide mobile access to calendars, email, and text communications.

Servers

Each school is equipped with a file, authentication, and library resource servers. These servers provide file sharing, desktop security, client authentication and management, and a site database of learning resources. Servers house documents and configurations for students, teachers and staff allowing users to access personal profiles from any computer on the site. Additionally, each school has an Energy Management Server (EMS) or EMS hardware device. At the District Office, in addition to file and authentication servers, there are additional servers providing services for the entire district. The services include Email, DNS, DHCP, internet web site, intranet web site, backup, personnel database, IEP database, Compass Learning, Mavis Beacon Teaches Typing, Read Naturally, Student Information System, wikis, Procare, Nutrikids, databases, VOIP and network monitoring.

Server Standards

The district has employed VMWare for servers running Windows or Linux. Some authentication, file and application services are standardized on Apple Mac OS X Servers and will need to be transferred to a new platform during this plan timeline.

Remote Access

The District allows for access to resources from home including file sharing, grade reporting/tracking and web-based email via VPN client.

School/Classroom Standards

The district has established standards for classroom connectivity. Each classroom or instructional area has 4 to 12 network connections - typically clustered in two locations in each room. This classroom infrastructure will provide staff and students with immediate access to classroom technology. Labs have been established at each school site to provide for large group instruction and activities, as well as after school and community based technology activities. Each school supports a library media center to assist in individualized or large group electronic research.

Computer Standards

District standards have been established to provide support in a more efficient and cost effective manner. Information Systems staff establishes and maintains minimum desktop standard configurations. The current minimum procurement standard for the Apple configuration is: iMac Intel Multi-core processor; or better computers with 2-4 GB RAM and 500 GB hard drives, DVD CD-ROM (RW).

Digital California Project

The Digital California Project (DCP) is a multi-million dollar effort funded by the state and is designed to build the necessary network infrastructure needed to prepare California's schools to take advantage of tomorrow's advances in network technology. This high-speed data network is currently being built statewide and soon will be available to the District. DCP will allow for much improved delivery of audio and video over the networks and will lead to improved delivery of many electronic resources including advanced placement courses, advanced on-line collaboration, and video conferencing from educational institutions statewide. The District, with a 20-meg OptEman connection to the San Diego County Office of Education, will be able to connect directly to Internet II (DCP).

Electronic Communications Web Page

The District maintains two web sites, an Internet and an Intranet site. The external web site houses individual school web sites, educationally based information, provides links to departments and district services, and other district information. The Intranet site provides secure access to information on software use, district general policies, employee information (evaluations, directory, leave, etc.).

Technology Support Staff

The District's Technology Department consists of thirteen staff members in the following positions:
Director – 50%
Manager – 100%
Department Secretary – 75%
District Office Admin Technician – 100%
School Site Repair Technician – 2 at 100%
District Webmaster – 75%
Computer Lab Instructors – 6 at 60-75% (under principal supervision)

Technical support is available district wide. Staffing levels in the department have decreased in the last few years and the volume of equipment has increased. End users are experiencing a slight increase in turn-around time on requests and repairs. School Site Repair Technicians and Computer Lab Instructors are assigned to each school site and receive additional support from the technology staff members located at the district office. Computer repairs, software support and help requests are

addressed within 8 and 48 hours. Computers are repaired at the district office by the School Site Repair Technicians who are certified. The Director, Manager and District Office Admin Technician support the District's wide area and local area networks, computer imaging and backup. These positions are located at the district office and service all school sites.

While current staffing levels are maintaining the hardware and software in place across the district, an annual review will be performed to assess the levels of service and indicate if additional staff members are required. As new resources become available to expand the number of computers/mobile devices in each classroom and deliver increased network services, a portion of new funding will be allocated to technical support to ensure that current levels of service are maintained. Priority will be give to the addition of a third School Site Repair Technician when the district opens its seventh elementary school. As technology becomes integral in the classroom, additional instructional staffing needs will be assessed.

The technology department is currently using an online "helpdesk" software application to track and respond to requests for assistance. This application is web based. The plan is to deploy the software application to the Maintenance and Operations department for facilities maintenance requests as well. Reporting within the software will allow staff to ascertain if problems are re-occurring and assist in establishing an equipment replacement methodology.

The district has planned for a reliable infrastructure and appropriate technical support to promote the successful integration of technology-based instruction. The district will support high-speed Internet connectivity, access to resources on multiple network servers, an increased volume of network traffic, and security features such as anti-virus protection and Internet-filtering.

5b 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.

As the implementation and use of technology in the teaching/learning process increases in the next few years, so will the need for maintaining and purchasing the essential components necessary to implement the plan. All components require sufficient funding for successful implementation. The District actively explores best practices to determine and address priority needs that will support the goals of the technology plan. In order for any educational plan to run smoothly, technology tools need to be operational on a daily basis. When a problem occurs, immediate attention is required in order to minimize any loss to students learning. In order to support the goals of this plan, the district has established the following goals:

Goals:

Technology Resources – All students will have equal access to the hardware, software and learning resources necessary to successfully achieve the learning goals. All teachers, administrators and support staff will be provided the technology tools necessary to support the learning environment and access required information.

Connectivity – All district schools will be connected by an infrastructure that supports secure, reliable, and adequate access to the information required by staff, students and parents.

Data Systems – The district will provide access to student, financial, payroll and personnel information, where appropriate, that supports secure, reliable and adequate access.

Technical Support – The district will provide the support necessary to ensure the reliability of the district's information systems. This support will be at the site level as well as the district level, and focus on the instructional and business needs of the district.

Telecommunications – The district will provide a reliable telecommunications network that is adequate to ensure effective communication throughout the district, the community and with parents.

Physical Plant – The district will provide and maintain the facilities necessary to support technology. System support includes: building space, electrical, heating/ventilation/air, low voltage electrical, intercom and building security.

Comprehensive Plan for Infrastructure Upgrades Needed

The district is committed to improving the infrastructure technology to accommodate present and future network needs. The focus in the area of technology infrastructure in the district will be to maintain or exceed a district-wide computer/mobile device to student ratio of 1:3 along with ensuring that every teacher has access to a multi-media computer. (Note: Computers counted in the ratio are less than 4 years old. If the entire installation base is counted, the computer/mobile device to student ratio would be 1:2.3). Additionally, students will access to technology via computer labs, media centers, and up-to-date classroom computers.

The following section, Section 5c, of the Solana Beach School District Technology Plan outlines a list and timeline for acquiring technology resources and providing the infrastructure and support

needed to achieve the goals and objectives outlined in the Curriculum and Professional Development Components.

Present challenges include:

- Training for users and standardized software and hardware platforms
- Equity across school sites
- The need to expand the district Internet and Intranet site, further establishing it as a communications tool for district employees
- The need to expand wireless access across the district to meet the demands of the increasing volume of wireless mobile devices

The District intent is to provide a comprehensive web presence that enables teachers and administrators to provide more accessible and up-to-date information to parents in order to enhance communications between home and school.

Accessibility Needs

Solana Beach School District believes that technology must be readily accessible in a way that meets the needs of all learners. To help achieve this goal, given the budget constraints of a small district, the District Technology Committee has recommended the ongoing purchase of computers for classroom, media centers, offices and lab settings. Access to networked instructional resources and peripheral devices (scanners, printers, digital cameras, video cameras) needs to be made available to all students and teaching staff. District staff will explore the feasibility of providing laptop computers and expanded wireless coverage for students and teachers.

- "To be used effectively, technology must be readily accessible in a way that meets the needs of all learners. This includes both ready access to hardware, software, and connectivity, as well as ready access to content and ideas being expressed" (The Knowledge Loom: The Practices, 2000).

Hardware Replacement Plan Needs

As part of the technology equipment replacement plan (see 6b – budget pages 6000-6999), the following timeline is established for installation of upgraded equipment needed to implement this plan:

Implementation Rotation Year 6 (Summer 2012)
Information provided upon request.

Implementation Rotation Year 7 (Summer 2013)
Information provided upon request.

Implementation Rotation Year 8 (Summer 2014 – Summer 2017)
Reassess the rotation schedule, determine other hardware, server and software needs

Learning Resources Needs

As part of the technology plan (see 6b – budget pages 4000-5999), the following software is needed for teachers and students.

Accelerated Math (SSF)
Accelerated Reader (SSF, SH)
Acrobat Professional
Acrobat Reader
Alexandria / RWS, Alexandria Research Workstation

Boardmaker (Spec Ed)
Compass Learning
DreamBox (Districtwide K-3)
Earobics
Easy Grade Pro
ELA Student Works
ELA Teacher Works
English in a Flash (Districtwide)
Examview
FasttMath (Districtwide)
FileMaker Pro
FireFox
First in Math (SV Only)
GarageBand
GoogleDocs
iChat
iLife
iMovie HD
Inspiration
iPhoto
iTunes
iWeb
iWork (Pages, Keynote, Numbers)
KidKeys
KidPix
Kidspiration
Math Text Online
Mavis Beacon Teaches Typing
MS Office (Excel, PowerPoint, Word)
NWEA/MAP
QuickTime Pro
QuickTime w/ Flip4Mac
Read 180 (SKY)
Read A-Z (SV)
Read Naturally
RealPlayer
Report Card Maker
Safari (Internet Browser)
Safari Device Commander
Safari DMC File Commander
Safari Remote Desktop
Science Text Online
SDCOE Portal
Social Studies Text Online
Timez Attack (SSF Only)
Windows Media Player
WorldBook / Groliers
[Note: Some titles require subscription renewal on a 1-year, 2-year or 5-year basis.]

As part of the technology plan (see 6b – budget pages 4000-5999), the following software is needed at the operating system level to improve technical support and systems management.

Active Directory
ARD/RDC
Backup Applications
Filter
LDAP
Mac OS X, Windows, Linux, iOS
PaperCut

Parallels – virtual machines
Safari (SH and SP)
SNMP Monitoring
Sophos
Timbuktu
WorkGroup Manager
[Note: Some applications require subscription renewal on a 1-year, 2-year or 5-year basis.]

As part of the technology plan (see 6b – budget pages 4000-5999), the following software is needed for management applications.

Badger – Badging machine, camera, etc.
Board Topics
CALPADS
Cisco VPN
Core JT27
County VPN Config
Data Director
Days Worked Matrix
Decision Insite
District Matrix - Student Data, Student demographics
Electronic White Boards
Email / Calendaring
EMS – Energy Management (2)
Facilities Request – Site and District
FileMaker Pro - Various Databases
  Multiple Measures – Student assessment data
  Street List – Attendance boundaries
FIS – Financial, Stores, Purchase Orders, State reporting
IEP / NCCSE
Inventory – Fixed assets
MadMimi
Network / Phone Number Listings – DID, circuits, PRI, Wireless
NutriKids - Food Service, Prorated fee schedules
PAY – Payroll
Private Advantage – CDC Billing
SACS
School Messenger – Auto dialer
SIS - Student System (Aeries.Net, Client and ABI)
Site Maps – School Site maps
Summer School Databases - Enrichment, Academy
Video Broadcast / Podcast
Virtual Machines - Admin and Spec Ed
VOIP – Phones, Voicemail, E911, InformaCast
WD4D – Personnel, Budget, Leave, Policies, Salary
Web Sites – Maintenance and design
WIKI
[Note: Some applications require subscription renewal on a 1-year, 2-year or 5-year basis.]

The table below includes a list of technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed to accomplish the goals in the Curriculum and Professional Development components of the Technology plan.

Software needed					
Renew educational and administrative	See list of learning	See list of learning resource software	See list of learning resource software	See list of learning resource	During this five-year plan,

Renew educational and administrative software licenses districtwide	See list of learning resource software above	See list of learning resource software above	See list of learning resource software above	See list of learning resource software above	During this five-year plan, appropriate measures will be taken to implement software needs. Annually the list of software supported will be reviewed for success in the educational environment.
Technical Support needed					
Technical Support	The technology department will require additional funding to provide adequate technology support to the school sites and maintain the infrastructure and equipment necessary to this five-year plan.	The technology department will require additional funding to provide adequate technology support to the school sites and maintain the infrastructure and equipment necessary to this five-year plan.	The technology department will require additional funding to provide adequate technology support to the school sites and maintain the infrastructure and equipment necessary to this five-year plan.	The technology department will require additional funding to provide adequate technology support to the school sites and maintain the infrastructure and equipment necessary to this five-year plan.	During the five-year duration of this plan, the IT department will be sure the equipment is working to accommodate the staff and students needs. The goal is to maximize student learning and teacher time on task.
Professional Development Needed					
Professional Development Technology teacher or outside sources to teach use of new hardware and software	**Adequate** funding is needed to provide professional development that will be offered throughout the school year and in the summer to accommodate the needs and expectations for this plan. The training will include all staff members. Training will be provided by in-house and out-of-house	Adequate funding is needed to provide professional development classes will be offered throughout the school year and in the summer to accommodate the needs and expectations for this plan. The training will include all staff members. Training will be provided by in-house and out-of-house support providers.	Adequate funding is needed to provide professional development classes will be offered throughout the school year and in the summer to accommodate the needs and expectations for this plan. The training will include all staff members. Training will be provided by in-house and out-of-house support providers.	Adequate funding is needed to provide professional development classes will be offered throughout the school year and in the summer to accommodate the needs and expectations for this plan. The training will include all staff members. Training will be provided by in-house and out-of-house support providers.	Training sessions for all staff will be offered to maintain the knowledge of the ever-changing technology. This will include administrators, principals, teachers, clerical staff and the technology department.

5c. List of clear 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.

Comprehensive Plan for Infrastructure and Hardware Upgrades

Through the Year 14 ERATE plan, the District has committed to improving the technology infrastructure in an effort to accommodate present and future network needs. The district currently qualifies for a 42% discount on telecommunication only. For 2012-13, the district has issued an RFP for upgrading MetroWAN. In addition to increasing network bandwidth/infrastructure and connectivity to enhance the teaching and learning environment, district technology staff will initiate the following:

- Year 1 – Explore and provide options for providing each student with the means to access their files and curriculum resources from home
- Year 1 – Expand the district Internet and Intranet content
- Year 2 – Expand the implementation of the student information system that includes grade entry, report cards, alignment of assessment data with curricular standards, class scheduling, health records.
- Year 3 – Explore and provide options for document retention and workflow integration.
- Year 3 – Expand the implementation of the student information system that includes parent access from home.

The Solana Beach School District has designed the technology infrastructure and school facilities to achieve a 3:1 student to up-to-date computer ratio in all classrooms along with ensuring that every teacher has access to a multi-media computer.

Equity of Learning Resources

While many aspects of technology implementation are similar across the district, the planning team determined that there are inequities in classroom hardware availability particularly in the volume of software licensing, number of mobile devices and electronic white boards. The district has purposed to close the hardware technology gap between the schools by exploring the purchase of hardware necessary to support relevant components of the plan.

1) Ensure a minimum student to computer ratio of 3:1 in all grades
2) Ensure all teachers have up-to-date wireless laptops or a designated teacher computer in each classroom
3) Based on the timeline below, the Director of Technology and Manager of Information Systems will work with Administrators to make requests for purchasing and will monitor purchases and installation.

Benchmarks / Action Step	Person Responsible	Annual Dates
Determine the technology hardware, electronic learning resources, networking and telecommunication infrastructure, physical plant modifications, and technical support needed by teachers, students, and administrators to support the activities in the Curriculum and Professional Development components.	Director of Technology, Technology Planning Committee, Superintendent	Twice Annually (Aug and Jan)
Determine the existing hardware, Internet access, electronic learning resources, infrastructure, and technical support already in place in the school district that could be used to support the Curriculum and Professional Development components.	Director of Technology, Technology Planning	Jul/Aug of each program year

	Committee, Superintendent	
Monitor and supervise installation of new infrastructure, hardware and software	Director of Technology	June-Sept
Develop a detailed annual infrastructure, hardware and software plan for upcoming funding and projections. Determine needs for additional technical support.	Director of Technology, Technology Planning Committee, Superintendent	May, June
Conduct quarterly status reviews to identify progress on yearly goals.	Principals, Director of Technology, Teachers	Aug, Nov, Feb, May
Place orders for new infrastructure, hardware and software. Determine staffing levels and conduct interviews for additional technical support as needed.	Director of Technology	May, June

5d. Process to Monitor Benchmarks and Timelines

Project Leadership Structure and Individuals Responsible for Coordinating the Technology Plan

The Technology Plan – Curriculum and Professional Development goals will drive the purchasing decisions of technology related hardware. A collaborative effort of the Leadership Team will ensure the consistency of implementation. The Leadership Team (district office and school site administrators) will oversee the District Technology Plan as well as monitor the Site Technology Plans. The District's Director of Technology Services will support the Leadership Team, Principals and Technology staff members to ensure goals, objectives, timelines, and benchmarks indicated in the plan are met.

The Director of Technology Services will be responsible for initiating an annual review that will monitor the progress of the infrastructure portion of the plan on an ongoing basis. A monitoring checklist will be designed to ensure that the following operational goals are carried out in a timely manner to support the use to technology in the District:

1) Develop and maintain hardware to support the activities of curriculum, operational services and professional development.
2) Ensure that technical support is in place to meet the needs of staff and students. While current staffing levels are maintaining the hardware and software in place across the district, an annual review will be performed to assess the levels of service and indicate if additional staff members are required.
3) Select, maintain and evaluate software to support the activities of curriculum, operational services and professional development.
4) Implement a long-term plan to ensure commitment of funds for state-of-the-art technology.
5) Regularly review and determine the need to improve network services.
6) Provide teachers and administrators access to student data to evaluate and improve achievement.
7) Monitor available funding and processing of purchase orders to acquire the necessary hardware, software and courseware to implement the plan.

SECTION 6 – FUNDING AND BUDGET

6a. Established and Potential Funding Sources

Solana Beach School District is committed to providing funding for technology across the district. The goal is to support the learning environment and maximize student achievement and teacher productivity. Funded by capital facilities, grant and general fund monies, the current infrastructure supports access for students, teachers, and administrators.

The monetary commitment from the district for the implementation of technology hardware and software has increased in the past few years. The Technology Department staffing has decreased in the number of support positions.

Solana Beach School District is a member of the North County Educational Purchasing Consortium, an organization of local school districts who participate in cooperative purchasing agreements resulting in some cost savings.

The district continues to fund technology equipment, infrastructure, software, support, and professional development. The district will seek additional funding as grants become available. The district does not currently qualify for the Microsoft Voucher Program.

The district is an active participant in the ERATE program. The District receives ERATE reimbursements of approximately $65K - 100K annually for telecommunications usage for telephone lines, cell phone and network connectivity for the wide area network. SBSD qualifies at the 42% reimbursement rate on usage charges only. The reimbursement rate is a calculation that is applied to the number of students served by the free and reduced lunch program (AFDC).

Technology services, support, salaries, and benefits are funded with general fund monies; infrastructure upgrades are typically funded from capital funds; and equipment is funded from general fund, foundation funds, PTA/PTO and/or other donations. The Solana Beach Foundation for Learning provides a substantial amount of dollars through family donations and corporate contributions that the schools use to update classroom computers and for pilot implementations of emerging technologies (e.g. mobile technology, iPad, iPod, etc).

The following table lists the established and potential funding sources:

Established Funding Source
General Fund
Title I
Title II
ERATE Reimbursement
EETT
Capital Building Fund
Other Site Funds (eScript, PTA/PTO, etc)

Potential Funding Source
One-time Block Grants
Local Donations; Foundation
Content based funding or donations
Other federal and state funding
City Competitive Mini-Grant Program

6b. Implementation Costs

Information available upon request.

6c. District's Replacement Policy for Obsolete Equipment

It is critical to recognize and communicate the need to keep technology current in order to enable students and staff to have access to necessary applications for success in their endeavors. Network standards need to be established to provide this success and to keep the network running optimally, avoiding degradation to network performance. Obsolete computers play a major role in driving up the Total Cost of Ownership (TOC) in terms of repair expenditures. The burden placed on technicians to keep obsolete equipment intact has resulted in a review and reconfiguration of repair/replacement procedures. The district priority is to have a consistent software installation set limiting the differences in operating systems. With lean centralized staffing, only district owned equipment is placed on the network and installed by district trained technicians or designee. All computers on the network must have proper anti-virus and security software installed. A system to check consistency and security has been established and will be reviewed annually. The District Administration is investigating a centralized approach to creating equity of technology throughout the district by exploring options such as leasing and centralized budgeting. Information Systems staff will work with the Curriculum and Instruction Staff to develop programs that will reward users with technology for attending training classes, designate funding and/or other staff development programs.

6d. Feedback Loop Used to Monitor Progress and Update Funding and Budget Decisions

The Solana Beach School District Board of Education has committed funds for state-of-the-art technology in an effort to provide well-equipped and resource rich facilities. Each year, the Leadership Team, strategic planning groups, and site leadership groups will actively assess the status of the Technology Plan. Administrators will be made aware of each site's technology needs and, as a result, priorities will be established for ongoing technology planning and budgeting.

Benchmark / Action Step	Person Responsible	Annual Completion Date
Identify all costs associated with implementing each component.	Director of Technology	January
Identify established and potential funding sources, present and future.	Superintendent	January
Consider options for reducing costs.	Superintendent/principal Director of Technology	February
Develop and implement annual budgets for the term of the plan.	Superintendent	February
Provide for ongoing technical support.	Director of Technology	February
Plan for the obsolescence of equipment.	Director of Technology	February
Establish a feedback loop to monitor and improve progress.	Director of Technology	September

The Superintendent, with assistance from the Director of Technology and Chief Financial Officer will be responsible for the overall monitoring of the timeline for the Infrastructure, Hardware, Technical Support, and Software component. The Director of Technology will monitor progress on a quarterly basis and forward a report to the Superintendent and the Board of Trustees annually. If parts of the plan are not being implemented according to the timeline, the Superintendent and Chief Financial Officer will take steps to make sure that this is corrected. If goals and objectives need to be modified, the Superintendent will consult stakeholders and Technology Planning Committee members to modify the plan. The Chief Financial Officer will publish an expenditure vs. budget report two times per year.

SECTION 7 – MONITORING AND EVALUATION

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

The Assistant Superintendent of Instructional Services, site administration and lead teachers will meet during the first semester of the implementation of the Technology plan to review the data collected. Additional surveys and questionnaires may need to be developed to obtain all of the information required in order to assess the progress in implementing the activities of the plan.

The District plan for monitoring technology and the impact upon student achievement is varied. Student test scores on the California Standards Test, Measurement of Academic Performance Assessment and California English Language Development Tests are analyzed throughout each year. Results from that analysis is presented to staff, board members and all other stakeholders.

Student use of technology is evaluated at a classroom level. Technology benchmarks are provided to teachers and performance is monitored in each individual classroom. School site principals monitor teacher implementation of benchmarks with students. The 2nd and 5th grade benchmark assessments are administered in the computer lab in May of each year. Results are shared with staff, students and administrators.

Professional development goals are currently monitored and evaluated by the Assistant Superintendent of Instructional Services. A technology needs assessment survey is administered in the spring of each year and that information is used when planning future professional development opportunities.

Infrastructure, hardware and technical support are monitored and evaluated in meetings and discussions that occur between district administration, the network specialists and the Technology Committee. Inventory of all equipment will be in accordance with the technology plan will be conducted by staff in the technology department. Inventory is evaluated on an on-going basis to determine areas of need and to provide funding to address those needs. An obsolescence policy is in place as part of the replacement plan noted above.

The Director of Technology, district administration and the technology committee will work closely with the Chief Financial Officer to ensure funding is utilized most efficiently and additional resources are being pursued.

The Assistant Superintendent of Instructional Services, site administration and lead technology teachers will prepare briefing reports to summarize the information collected. They will meet regularly (twice a year) during each year of the plan to review, discuss, and analyze the progress made as reported in the briefings prepared by staff. The site administration will discuss the findings, identify potential areas for change in program activities and implementation, forward their recommendations to stakeholders and the Board for modifications as needed.

The District Technology Committee will meet at least three times per year to discuss emerging technologies, curriculum implications, and monitor progress on all components of the Technology Plan. An evaluation of the stated benchmarks will be compiled at the end of each year of the plan. School site technology leaders identified by the school principal will monitor site technology activities and report these activities to the District Technology Committee.

All teachers and administrators will complete the *EdTechProfile* and/or *Speak Up Survey* annually (or as needed by local and state requirements). Professional Development opportunities will be offered in the areas indicated to be of priority in the results of the survey. Both teaching staff and administrative staff will participate in the surveying process and training will be provided that directly relates to job functions. The Leadership Team and the District Technology Committee members will

review the results of the profiles to determine if the plan goals are being met and if modifications to the implementation strategy are necessary.

The District will use the data to drive decisions regarding instruction and the use of technology. Annual assessments of student achievement and of student technical skills and information literacy, along with *EdTechProfile* and *Speak Up Survey* results, will determine new priorities for professional development, resource allocation and technical support.

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

The schedule and timelines for evaluating the effectiveness of the Technology Plan implementation are located within the Section 3 Curriculum Goals and Objectives, in Section 4 Professional Development in 5d, Infrastructure, Hardware, Technical Support and Software and in 6d, Funding and Budget. See tables and narratives in sections 3d through k, 4b, 4c and 5d for yearly benchmarks and the evaluation schedule.

A detailed description of how technology will impact student learning and curricular goals is found in Component 3, Curriculum Goals and Objectives and in Component 4, Professional Development. Activities will be monitored annually as follows:

ACTIVITY	TOOLS	METHODS	TIMELINE
Student Computer Knowledge and Skills	• Student grade summaries on technology-based projects • Technology Proficiency Exam Results using the NETS●S Developmental Rubric for Grades 2 and 5 (see Appendix D)	Review of percentage of students meeting expected requirements. If benchmarks not met, adjust plan as needed.	Annually in the spring
Student Academic Achievement	• STAR scores • Grades on student Writing Proficiency paper • Student grade summaries on technology-based projects	Review percentage of students meeting expected requirements. If benchmarks not met, adjust plan to address curriculum areas needing improvement.	Annually in the spring and fall
Staff Personal Proficiency	• *EdTechProfile* or *Speak Up Survey* completed each year • Staff Development Attendance Records • Staff Development Personnel Records • Individual Learning Plans • Summary of Professional Growth hours in Technology	Review percentage of staff meeting expected requirements. If benchmarks not met, modify staff development training and Individual Learning Plans.	Annually in the spring
Staff Assistance to Students	• *EdTechProfile* or *Speak Up Survey* completed each year • Staff Development Attendance Records • Staff Development Personnel Records • Individual Learning Plan • Self-Evaluation Survey	Review percentage of staff meeting expected requirements. If benchmarks not met, modify staff development training and Individual Learning Plans.	Annually in the spring and fall
Staff Technology Integration	• *EdTechProfile* or *Speak Up Survey* completed each year • Staff Development Attendance Records • Informal classroom observation forms • Technology-based lesson plans • Individual Learning Plans • Self-Evaluation Survey	Review lesson plans and attendance records. If benchmarks not met, alter Individual Learning Plans.	Annually in the spring
Partnership Involvement	• Attendance Records • Meeting Minutes • Agendas	Review levels of partnership involvement and adjust plan as needed.	Annually in the spring

In addition to specific goals, objectives, benchmarks, implementation plan and timeline described in sections 3d through 3j, will be monitored as follows:

Component/objective	Tools	Action steps	Timeline
2 STAKEHOLDERS Partnership Involvement	*Agendas *Attendance Records *Meeting Minutes	Review levels of partnership involvement and adjust plan as needed.	Twice Annually
3 CURRICULUM Monitor Student Academic Achievement	*CAT6 Assessment Results *Grades on student Report Cards *MAP Results *Writing Proficiency paper *Student grade summaries on technology-based projects and benchmark assessments	Review % of students meeting objectives. If benchmarks not met, adjust plan to address curriculum areas needing improvement.	Three times annually (at MAP Assessment Intervals – Fall, Winter and Spring)
4. PROFESSIONAL DEVELOPMENT 4A Monitor Staff Personal Proficiency Objectives.	*Agendas *Attendance Records *Staff Development Personnel Records *Individual Learning Plans *Summary of Professional Growth hours in Technology	Review % of staff meeting expected requirements. If benchmarks not met, modify professional development training.	Three times annually (at MAP Assessment Intervals – Fall, Winter and Spring)
STAFF DEVELOPMENT 4B Monitor Staff Technology Integration into the instructional program	*Staff Development *Attendance Records *Informal classroom observation forms *Lesson plans preparation with technology *Self-Evaluation Survey *Alternative evaluations	Review lesson plans and attendance records. If benchmarks not met, alter professional development plans and alternative evaluations, if applicable	Ongoing
5.INFRASTRUCTURE HARDWARE, TECHNICAL SUPPORT AND SOFTWARE	*Staff development for technical staff *Agendas, meeting minutes, help documents *Customer (staff, student and parent) feedback	Review Service Request Orders to determine patterns of requests in order to modify professional development and/or equipment install base	Ongoing
6. FUNDING AND BUDGET	*Budget Development *Planning meetings, agendas and minutes	Assess the age of equipment Determine useful life of equipment within each installation	Twice Annually (Nov and May)
8. COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS	*Agendas *Attendance Records *Meeting Minutes *Online learning software *Help documents	Provide family training opportunities Provide access to technology at home	Ongoing

7c. Process and frequency of communicating evaluation results to Technology Plan stakeholders

The Leadership Team will coordinate the implementation of the Technology Plan and will be responsible for the management of all activities described in the programs for students and staff. The District Technology Committee will assist in project management and plan modifications. Stakeholders will be provided information at meetings or advisories in the same settings as they provided initial input in the plan. Meetings and advisories with stakeholders occur quarterly.

Parents will be informed of the evaluation findings through presentations made at the District Advisory Forum held three times per year and is lead by the Superintendent. Evaluation data will be provided to the school site leadership teams during a meeting at least annually to assist the site advisory committees in making recommendations for program modifications for the coming year(s). Formal reports will be made to the school board at least annually, and twice a year to teaching staff during staff meetings and the Professional Development Days held in the fall.

SECTION 8 – EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS TO MAXIMIZE THE USE OF TECHNOLOGY

Family Learning

The District's Technology Plan was developed with the idea that K-6 resources are used in extended programs that include child care programs, preschool and parent involvement. Various local organizations offer extended programs for families. A partial list or programs are offered in the community are:

San Dieguito Union High School District Adult School – outside district
Mano a Mano Foundation – outside district
Case de Amistad – outside district
Solana Beach County Library: Friends of the Library – outside district
Solana Beach School District Education Coalition – outside district, hosted in district
Read San Diego: Partner with St. Peter's Episcopal Church – outside district
St. Leo's Tutoring – outside district
Solana Beach County Library: Learn 888-466-0668 – outside district
Other agencies such as local colleges, universities and community centers.

Increasing parental access to technological opportunities is continually explored by staff members of Solana Beach School District. Discussions are held at the District Advisory Committee meetings and Advisory meetings with parent representative participating in the discussion. In addition, the district and site team investigates opportunities for collaboration. Adult literacy developed through students and parents using technology collaboratively is a major component in the parent trainings. Family Learning Nights in English and Spanish are conducted throughout the school year in coordination with Title I, English Learners Advisory, Migrant Education and other school programs. These family workshops will include relevant activities which will enhance a comfortable learning environment. The Family Learning Nights provide students and their families opportunities to write and publish, practice language and math skills as well as use technology. Through these educational activities, parents and students will enhance literacy knowledge as well as demonstrate technology skills. Family Learning Nights extend the use of District technology beyond the school day and help to provide parents improved skills for supporting the achievement of their children.

SECTION 9 – EFFECTIVE RESEARCH-BASED METHODS, STRATEGIES AND CRITERA

9a. Summary of the relevant research and description of how it supports the plan's curricular and professional development goals.

Proven Methods for Student Learning and Teaching

The Solana Beach School District Technology Plan is based on effective, research-based strategies for improving student learning and enhancing classroom instructional practices.

Computer-Assisted Instruction

Students use instructional software extensively. Software is evaluated and recommended by Solana Beach School District teachers and administrators prior to purchase. A variety of educational programs is available, including drill-and-practice software for reviewing and strengthening mathematics concepts, interactive programs to reinforce science and social studies instruction, simulation software to supplement science concepts, and language arts software for building grammar and vocabulary skills (especially for English Language Learners). Future instructional software purchases will: 1) expand the variety of educational programs available, 2) focus on programs that provide individualized instruction for special needs and English Learner students, and 3) include applications that help improve student communication skills (reading and writing), such as graphic organizer software, web editing software, and video editing software.

- While the body of research on the effectiveness of computer-assisted instruction has shown mixed results, two recent studies showed that students using computer-assisted instruction, including the use of integrated learning systems, drill-and-practice software, and computer tutorials, showed "impressive gains" in student academic achievement (Sivin-Kachala & Bialo, 2000; Kulik, 1994).

- 21st–century information and communication tools as well as more traditional computer-assisted instructional applications can positively influence student learning processes and outcomes (Cradler, McNabb, Freeman & Burchett, 2002).

Computers as Tools for Problem-Solving, Conceptual Development, and Critical Thinking

As noted in the Solana Beach School District Technology Plan, computers will be used as tools to promote higher-order thinking skills among students. Students will engage in individual and group projects that incorporate technological tools to encourage collaborative, inquiry-based learning, as well as creative expression. Projects will incorporate the exploration of Internet resources (such as online databases, simulations, and informational web sites) to conduct research, the use of technology-based communications (word-processing), and the use of desktop publishing and presentation software (including scanned images, video, animation, and audio). The goal is to integrate technology in order to effectively engage students in activities that promote critical thinking, analyzing, making inferences, and problem-solving.

- Integration of technology into instruction is most effective "when students and teachers take advantage of its sophistication and versatility to support higher-order thinking and conceptualization" (Ringstaff and Kelley, 2002). "Best practices in this category come from organized classroom projects in which student teams are presented with a real-life problem or

issue to address. Such projects are often cross-curricular, combining skills from the core subjects of mathematics, language arts (writing), science, and social studies, as well as the arts. These projects typically incorporate technology tools such as Internet resources, spreadsheets (including charts and graphs), presentation software (such as PowerPoint), scanners, digital cameras, and video editing system." (Ringstaff and Kelley, 2002).

- Participation in such projects has been demonstrated to improve problem solving and communication skills. "Students using sophisticated technologies as everyday learning tools show marked growth in essential workplace skills. Moreover, such gains do not come at the expense of basic skills." (Penuel, Golan, Means & Korbak, 2000) "Research reviews also show increased student motivation, engagement, and self-esteem as well as improved school attendance and fewer dropouts" (Coley, 1997).

- Technology has been positively linked to increasing student motivation, learner engagement, communication and collaboration, and problem-solving skills. (Sandholtz et al, 1997; Kelley &Ringstaff , 2002.)

Proven Methods for Technology Management

Accessibility

Solana Beach School District believes that technology must be readily accessible in a way that meets the needs of all learners. To help achieve this goal, given the budget constraints of a small district, the District Technology Committee has recommended the ongoing purchase of computers for classroom, media centers and lab settings. Access to networked instructional resources and peripheral devices (scanners, printers, digital cameras, video cameras) will be made available to all students and teaching staff. District staff will explore the feasibility of providing laptop computers and expanded wireless coverage for students and teachers.

- "To be used effectively, technology must be readily accessible in a way that meets the needs of all learners. This includes both ready access to hardware, software, and connectivity, as well as ready access to content and ideas being expressed." (The Knowledge Loom: The Practices, 2000).

- Levin and Arafeh suggest while virtually every school in the United States has access to the Internet, computers usually are not a central part of the learning experience (Levin & Arafeh, 2002). As described in this component under "Teacher Training is Essential," the US Dept of Education attributes the disconnect between accessibility and implementation of technology in the classroom to a teachers lack of training in ways to enhance the learning experience with computers. (U.S. Department of Education, 2004).

Administrative Leadership is Key

The Technology Committee will strive to provide the vision, leadership and support necessary to build a school culture where technology is seamlessly integrated as an effective tool for teaching and learning at all grade levels.

- "Our experiences in working with (school) sites confirm what the research literature says, that leadership is the single most important factor affecting the successful integration of technology. This is true at the state level and at the school level. For example, the state with the most

successful technology programs are those that have had visionary governors, legislators, and staff who are committed to the use of technology as a tool for teaching and learning. Similarly, the schools who have made the most progress are those with energetic and committed leaders.
- It is especially important for principals to have a vision of what is possible through the use of technology, and to be able to work with others to achieve the vision.
- Effective principals lead by example, have a clear idea about how technology can support best practices in instruction and assessment, use technology fluently, and participate actively in professional development opportunities.
-Supportive principals highlight the efforts of teachers who attempt to use technology to improve teaching and learning.
-Effective principals facilitate shared input and decision-making by showing interest and trust in the decisions of school technology committees." (SEIR*TEC, 2002)

- The National Education Technology Plan (2004) concluded that while there is no disagreement over the need for American students to have the knowledge and skills to compete in an increasingly technology-driven world economy, the educational community is far behind both the business community and tech-savvy students in the use of technology. This "digital disconnect" is a major cause of frustration among today's students, leading to the risk that public schools that do not adapt to their students' technology needs will become increasingly irrelevant.

Time, Encouragement and Leadership

The Technology Committee understands that implementing and managing a successful and engaging technology-integrated, standards-based curriculum will require time, patience, planning, encouragement, leadership, and ongoing monitoring and evaluation. The district is committed to investing the time, resources, training, support and leadership necessary to provide students and staff with a 21st-century learning environment.

- "Truly integrating technology into teaching and learning is a slow, time-consuming process that requires substantial levels of support and encouragement for educators. The Apple Classroom of Tomorrow studies (Dwyer et. al, 1991) of what happens in technology-rich environments have shown that teachers go through predictable stages in their use of technology, and that this process takes from three to five years. We have also started to notice that there seems to be a correlation between the amount and level of technical assistance we provide and movement along the continuum of technology integration; i.e., the schools that receive the most attention are making the most progress" (SEIR*TEC, 2002).

- The U.S. Department of Education concludes that, "Technology ignites opportunities for learning, engages today's students as active learners and participants in decision-making on their own educational futures and prepares our nation for the demands of a global society in the 21st-century" (U.S. Department of Education, 2004)

Teacher Training is Essential

An overall goal of the Solana Beach School District Technology Plan is for the teaching staff to take an active role in the process of integrating technology into the curriculum, in order to provide compelling ways for all students to meet State Academic Standards. In order for technology to be effectively integrated into the classroom, teachers need to feel confident in using the software, Internet resources, and equipment with students. Teachers need to be able to envision effective methods for incorporating technology to engage students in meaningful learning. Developing these skills will require

well-designed, ongoing professional development and support, as well as time for planning and collaboration with colleagues.

- "Virtually every major study of successful technology use finds that teacher professional development is key" (Office of Technology Assessment, 1995).
- "Teachers trained in how to use technology use it more often and in ways that result in student gains. Conversely, a lack of training is a significant barrier to success" (Mann & Shafer, 1997).
- Teachers "not only need familiarity with equipment, but – more important – they need to see and practice the most productive ways of using (technology) to support learning. They need time to explore, reflect, collaborate with peers, and engage in hands-on learning" (Sandholtz, Ringstaff & Dwyer, 1997).
- Teachers need training, assistance and support in making the transition from traditional methods of teaching (lecture, recitation, seat work) to technology-based instruction (supporting student collaboration, inquiry, problem solving, and interactive learning (Ringstaff & Kelley, 2002).
- Teachers engaged in collaborative planning and sharing of instructional strategies more effectively use technology in the classroom (Becker & Riel, 2002). When teachers receive a project-based approach to staff development, they in turn apply project-based teaching principles to their own teaching (Cradler & Cradler, 2002).
- Although virtually every school in the United States has access to the Internet, computers usually are not a central part of the learning experience (Levin & Arafeh, 2002). The 2004 National Education Technology Plan concluded that the problem does not result from lack of funds, but results more from a lack of adequate training and lack of understanding of how computers can be used to enrich the leaning experience (U.S. Department of Education, 2004).

References

Anonymous. "Factors that Affect the Effective Use of Technology for Teaching and Learning," SouthEast and Islands Regional Technology in Education Consortium -SEIR*TEC (2002) www.seirtec.org/publications/lessondoc.html

Becker, H.J. & Riel, M.M "Teacher professional engagement and constructive-compatible computer usage," *Teaching, Learning and Computing Report No. 7* (2002) www.Crito.uci.edu

Coley, Richard, "Technology's Impact," Online Electronic School (September 1997). www.electronic-school.com/0997f3.html

Coley, Richard, "Technology's Impact," Online Electronic School (September 1997). www.electronic-school.com/0997f3.html "Good Models of Teaching with Technology: Accessibility," The Knowledge Loom: The Practices (2000). www.knowledgeloom.org/gmott/index.jsp

Cradler, J., McNabb, M., Freeman, M. & Burchett, R. (2002). *How Does Technology Influence Student Learning?* Learning and Leading with Technology.

Dwyer et.al "The Apple Classroom of Tomorrow Studies" 1991

Honey, Margaret, Katherine McMillan Culp & Robert Spielvogel, "Critical Issue: Using Technology to Improve Student Achievement," North Central Regional Educational Laboratory (1999) www.ncrel.org/sdrs/areas/issues/methods/technlgy/te800.htm

Honey, Margaret, Katherine McMillan Culp & Robert Spielvogel, "Critical Issue: Using Technology to Improve Student Achievement," North Central Regional Educational Laboratory (1999) www.ncrel.org/sdrs/areas/issues/methods/technlgy/te800.htm

Investment: A Review of Findings from Research", (San Francisco, CA: WestEd, 2002).

Kelley, L. & Ringstaff, C. (2002). *The Learning Return on our Educational Technology Investment: A Review of Findings From Research.* San Francisco: WestEd.

http://WestEd.org/online_pubs/learning_return
Kulik, James "Meta-analytic Studies of Findings on Computerized Instruction", in Technology Assessment in Education and Training, ed. Eva Baker & Harold O'Neil (Hillsdale, NJ: Lawrence Eribaum Associates, 1994).
Levin, D. & Arafeh, S. (2002). *The Digital Disconnect: The Widening Gap Between Internet-Savvy Students and their Schools*. Washington, DC: The Pew Internet & American Life project.
Mann, Dale & Edward Shafer, "Technology and Achievement," The American School Board Journal (July 1997). www.asbj.com/achievement/ci/ci10.html
National Center for Education Statistics (NCES), (2002). *Technology in Schools: Suggestions, Tools, and Guidelines for Assessing Technology in Elementary and Secondary Education.* U.S. Department of education, office of Educational research and Improvement (NCES 2003).
Office of Technology Assessment, Teachers and Technology: Making the Connection (Washington, DC: U.S. Government Printing Office, 1995).
Office of Technology Assessment, Teachers and Technology: Making the Connection (Washington, DC: U.S. Government Printing Office, 1995).
Penuel, Bill Shari Golan, Barbara Means, & Christine Korbak, Silicon Valley Challenge 2000: Year 4 Report (Menlo Park, CA: SRI International, 2000).
Ringstaff, Kathy & Loretta Kelley, "The Learning Return on our Educational Technology Investment: A Review of Findings from Research", (San Francisco, CA: WestEd, 2002).
Sandholtz, Judith, Cathy Ringstaff & David Dwyer, Teaching with Technology: Creating Student-Centered Classrooms (New York: Teachers College Press, 1997).
Sandholtz, Judith, Kathy Ringstaff & David Dwyer, Teaching with Technology: Creating Student-Centered Classrooms (New York: Teachers College Press, 1997).
SEIR*TEC "Factors that Affect the Effective Use of Technology for Teaching and Learning," SouthEast and Islands Regional Technology in Education Consortium - SEIR*TEC (2002) www.seirtec.org/publications/lessondoc.html
Sivin-Kachala, Jay & Ellen Bialo, 2000 Research Report on the Effectiveness of Technology in Schools, 7th ed. (Washington, DC: Software and Information Industry association, 2000).
Sivin-Kachala, Jay & Ellen Bialo, 2000 Research Report on the Effectiveness of Technology in Schools, 7th ed. (Washington, DC: Software and Information Industry association, 2000).
The Knowledge Loom "Good Models of Teaching with Technology: Accessibility," The Knowledge Loom: The Practices (2000). www.knowledgeloom.org/gmott/index.jsp
U.S. Department of Education (2004). *National Education Technology Plan.* www.NationalEdTechPlan.org

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.

Online Courses for Students:

Solana Beach School District continues to identify online resources for its kindergarten through sixth grade students. Improved District and classroom web pages will be used to provide students and their parents with resources to support the instructional program. To supplement the district's curriculum with rigorous academic courses supporting the California Content Standards, students will be provided with opportunities to access appropriate grade level content on the Internet.

Online Courses for Educators

Solana Beach School District encourages its teachers to be lifelong learners. Currently and in the future, Solana Beach educators will utilize distance learning both internally within the classrooms and externally from remote locations.

Online courses will provide teachers and administrators with an alternative method for earning college credits, taking courses for professional growth, or simply pursuing an educational interest.

Providers of online courses for educators may include, but are not limited to, the following:

- Palomar College
- San Diego State University
- Cal State San Marcos
- Mira Costa College

Elementary school teachers and administrators are also encouraged to take advantage of online courses for professional growth.

DISTRICT DOCUMENTS

District Document 1	Acceptable Use Agreement – Student
District Document 2	Acceptable Use Agreement – Staff
District Document 3	K-6 Technology Skills Scope and Sequence
District Document 4	NETS●S Developmental Rubric for Grades 2 and 5
District Document 5	NETs Standards for Teachers
District Document 6	Professional Development: General Computer Knowledge and Skills

APPENDICES

Appendix I:	Technology Plan Contact Information (Page 3 above)
Appendix H:	Goals and Benchmarks Evaluation Form (Page 104)
Appendix C:	Criteria for EETT Technology Plans (Page 106)

District Document 1: Acceptable Use Agreement – Student

Solana Beach School District
Student Acceptable Use Policy Terms and Conditions

The Solana Beach School District is pleased to offer students and staff of the District access to the District computer network for Internet, streamed video and other educational resources. **District staff access online resources to enhance instruction and provide additional learning opportunities for students.** This access is limited and is subject to District policies, rules, regulations, and restrictions, as they may be amended from time to time. This use is also subject to all applicable laws. Students will be granted access when written consent of the student's parent or guardian is received.

Access to these resources through the District is a privilege, not a right. Notwithstanding any provision in this policy, the District may revoke access at any time by giving written notice to the parent or guardian.

When using the District's computers and network, the student's behavior can affect the other students as well as the employees of the District and the public. A student's activities while using the network must be in support of education and research, and consistent with the educational objectives and the rules and regulations of the District. In addition, a student accessing the Internet and other information resources using District equipment and facilities is responsible for all activities taking place as a result of the student's access. Access is permitted with the permission of and the general supervision of an employee of the District. IMPROPER USE OF THE NETWORK, FACILITY AND EQUIPMENT WILL RESULT IN THE CANCELLATION OF THE STUDENT'S ACCESS PRIVILEGES AND REVOCATION OF PERMISSION TO USE THE NETWORK, AS WELL AS DISCIPLINARY ACTION BY SCHOOL OFFICIALS.

Improper use is defined in District rules and regulations, which may be amended periodically. By way of example and illustration only, the following is a list of some of the uses that are unacceptable:

- using impolite, abusive, offensive, or otherwise objectionable language in either public or private messages;
- using the Internet or other resources for sending or retrieving confidential, illegal, obscene, or other material unrelated to the educational objective for which access is granted;
- placing, on the Internet or other information system, material which is confidential, illegal, obscene, or unrelated to the educational objective for which access is granted;
- sending, receiving, copying, or changing copyrighted materials without first obtaining all required permission;
- knowingly or negligently allowing any other person to obtain the student's password;
- using another person's password;
- allowing your account/password to be used by another person;
- using the network for financial gain, commercial activity, political activity, or for any illegal activity;
- damaging, destroying, removing, copying, or abusing any District equipment, including but not limited to computers, printers, and software.

Retain Top Portion for Your Information.

~ ~

Return Bottom Portion to Your Child's School

Student's Agreement

The Governing Board of Solana Beach School District recognizes the educational value of using Internet and other online resources for communication and information access and encourages the use of such sources to enhance student learning. My teacher, principal, and the leaders of my school district believe that the Internet and other electronic technology can help me learn. They also realize that it is a privilege for students to use computers and other technology that belongs to the school district. To keep this privilege, all students that use school technology have to agree to use it responsibly. As one of the students who use school technology, I understand the school district's rules about using technology and I agree to follow them. I know that if I don't follow the rules, the school district officials will have the right to take my privileges away and give me other appropriate consequences.

Student's Name (please print) *Student's Signature* *Date* *Teacher's Name*

Parent/Guardian's Agreement

As a parent or guardian of this user, I have read the District's rules and regulations for use of Solana Beach School District's Internet and electronic information services. I understand that these services are designed for educational purposes and Solana Beach School District has taken available precautions to eliminate inappropriate materials and I will not hold them responsible for materials acquired by my student with these services. I also agree to report any misuse of electronic information services to the school administrator.

Signature of Parent or Guardian *Date*

District Document 2: Acceptable Use Agreement – Staff

Solana Beach School District
Staff Acceptable Use Policy Terms and Conditions

The Solana Beach School District is pleased to offer access to the District computer network for electronic mail, file services, the Internet, streamed video and other educational resources. To gain access, all staff and students must agree to all the terms of responsibility required for access by reading and signing the district acceptable use policy. This access is limited and is subject to District policies, rules, regulations, and restrictions, as they may be adopted and amended from time to time. This use is also subject to all applicable laws. Access to these resources through the District is a privilege, not a right. Notwithstanding any provision in this policy, the District may revoke access at any time by giving written notice. District Officials may override or replace pass codes and monitor, access, copy, or remove any information placed into each computer.

When using the District's computer network, an individual's behavior can affect the employees, as well as the students, of the District and the public. Activities while using the network must be in support of education and research, and consistent with the educational objectives and the rules and regulations of the District. In addition, an individual accessing the Internet and other online resources using District network equipment and facilities is responsible for all online activities which take place as a result of the access. There is no right to privacy in the use of the District's computer resources or user accounts and the District reserves the right to monitor and access information on the system and in user accounts for the purpose of determining whether a violation of Board Policy 4040 or the District's Acceptable Use Policy has occurred.

IMPROPER USE OF THE NETWORK WILL RESULT IN THE CANCELLATION OF THE ACCESS PRIVILEGES AND REVOCATION OF PERMISSION TO USE THE NETWORK, AS WELL AS DISCIPLINARY ACTION BY SCHOOL/DISTRICT OFFICIALS. Improper use is defined in District rules and regulations, which may be amended periodically. By way of example and illustration only, the following is a list of some of the uses that are unacceptable:

* violating the conditions of the Education Code dealing with student's rights to privacy;
* using impolite, abusive, offensive, or otherwise objectionable language in either public or private messages;
* using the Internet or other resources for sending or retrieving confidential, illegal, obscene, or other material unrelated to the educational objective for which access is granted;
* placing material on the Internet or other information systems which is confidential, illegal, obscene, or unrelated to the educational objective for which access is granted (e.g. chain letters, jokes, etc.);
* sending, receiving, copying, or changing copyrighted materials without first obtaining all required permission;
* installing software that is not licensed appropriately or that may interfere with computer operations;
* reporting (forwarding) personal communication without the author's prior consent;
* knowingly or negligently allowing any other person to obtain a password;
* using another person's password
* allowing your account/password to be used by another person;
* using the network for financial gain, commercial activity, political activity, or for any illegal activity;
* damaging, destroying, removing, copying, or abusing any District equipment;
* using the Internet or other District equipment for personal use during working hours.

Retain top portion for your records.

- -

Return bottom portion to your site office.

I have read the Solana Beach School District Acceptable Use Policy Terms and Conditions of Internet Use and I agree to follow the rules. I understand that if I violate the rules, I may face disciplinary action. I understand that I am responsible for students under my supervision and will report any observation of misuse by students or staff members. I will protect my password to ensure system security. The District and its representatives will not be held responsible for loss of data from the computer system, breaches of security, service interruption, nor for the accuracy or inaccuracy of information received or disseminated through its computer system.

The Solana Beach School District's computer network offers access to data bases and computer users throughout the world. The network provides access to electronic mail, libraries, and assortment of software, discussion groups on a wide variety of topics, and information from many sources and institutions. The District employs filtering/blocking technology to ensure that individuals using our system are not exposed to visual depictions of material that is (1) obscene, (2) child pornography, (3) harmful to minors. Since filters/blocking devices may not provide one hundred percent blocking of inappropriate materials, it is the staff member's responsibility to visually monitor use of the Internet It is the staff member's responsibility to report immediately instances in which the staff member has observed or individuals have reported that blocking/filtering has failed and/or to report to the site administrator instances in which inappropriate material has been viewed so that the Superintendent or designee can take the appropriate corrective actions. It is the staff member's responsibility to report immediately any security breach, virus, or illegal use involving a district computer, or receipt of any threatening or unwelcome communication, to the site administrator.

Governing Board Policies (4040, 6162.7, and 6163.4) outline acceptable use, access, and administration of District technology. Your signature below acknowledges receipt of a copy of Policies 4040, 6162.7, and 6163.4 and your agreement to adhere to its provisions.

I hereby release the District, its personnel, and any institutions with which it is affiliated, from any and all claims and damages of any nature arising from my use of, or inability to use, the District system, including, but not limited to claims that may arise from the unauthorized use of the system.

______________________________ ____________________________ __________

Print Name Date School Year

___________________________ ____________________________

Signature Position, Site

District Document 3: K-6 Technology Skills Scope and Sequence

Solana Beach School District
K-6 Technology Scope and Sequence I = Introduce M = Master E = Extend

Note: Technology Skills Scope and Sequence is to be used by instructional staff in the classrooms, media centers and computer labs district-wide. Technology skills are incorporated into curriculum-based projects across content areas, such as, math, science, language arts, art, music and social studies.

Objective	KG	One	Two	Three	Four	Five	Six
BASIC CONCEPTS							
Identify the major parts of a computer, peripheral and mobile devices: CPU/hard drive, keyboard, mouse, monitor, printer, portable media (CD, DVD, key disk, etc.)	I/M	E	E	E	E	E	E
Identify desktop icons (hard drive, disk, file server, trash can, dock).	I/M	E	E	E	E	E	E
Develop technology vocabulary appropriate to grade level.	I/M	I/M	I/M	I/M	I/M	I/M	I/M
Demonstrate the safe handling of portable media.	I/M	E	E	E	E	E	E
Demonstrate the proper use of special keys (return, escape, delete, spacebar, arrows, caps lock, enter, shift, control, alt, and command).	I/M	E	E	E	E	E	E
Demonstrate the direct manipulation of a mobile device using multi-touch features including the following gestures; swipe, tap, pinch, and reverse pinch							
Utilize the mouse to move and point to a designated location; point and click; point and double click; press and drag; and select options from the menu bar.	I/M	E	E	E	E	E	E
Select, open and quit programs.	I/M	E	E	E	E	E	E
Print a document.	I/M	E	E	E	E	E	E
Start, restart, and shut down computers properly, open and close windows, use the scroll bar.		I/M	E	E	E	E	E
Explain what a computer is and its capabilities.		I	M	E	E	E	E
Explain what a mobile device is and its capabilities.		I	M	E	E	E	E
Compare and contrast the capabilities of a computer and a mobile device.			I	I	M	M	E
Move and resize windows.			I/M	E	E	E	E
Apply technologies to strategies for problem solving and critical thinking.				I	M	E	E
Select and use technology appropriate to tasks.				I	M	E	E
Demonstrate understanding of RAM, ROM, HD, File Size and File Type.				I	I	M	E
KEYBOARDING ACCURACY							
Demonstrate proper keyboard positions, ergonomics and posture.	I	I	I	I	I	M	E
Type a minimum of 10 wpm with no errors as demonstrated on a timed typing test.			I/M				
Type a minimum of 15 wpm with no errors as demonstrated on a timed typing test.				M			
Type a minimum of 20 wpm with no errors as demonstrated on a timed typing test.					M		
Type a minimum of 25 wpm with no errors as demonstrated on a timed typing test.						M	
Type a minimum of 30 wpm with no errors as demonstrated on a timed typing test.							M
COMMUNICATIONS							
WORD PROCESSING							
Use a word processing program to:							
Create, name, save, print preview and print documents.		I/M	E	E	E	E	E
Insert and delete text.		I/M	E	E	E	E	E
Modify font, style and size of text.		I/M	E	E	E	E	E
Edit work using a spelling checker; center the title of a document; highlight text to modify and delete; columns; margins.			I/M	E	E	E	E
Save documents in a personal folder on the file server.		I	I/M	E	E	E	E
Cut, copy, and paste text and graphics; edit text using a thesaurus.			I	I/M	E	E	E
Import graphics from a variety of sources (scanned images, digital camera pictures, internet graphics, CD resource discs).			I	I	I/M	E	E
Resize and crop graphics; use tab, margin and alignment settings in text.					I/M	E	E
Create a 1-2 page document using word processing skills, writing process steps, and publishing programs.					I/M	E	E
Cut, copy, and paste text and graphics between two documents.						I/M	E
Create headers and footers.						I/M	E
Use the “save as” feature to create new versions of documents.						I/M	E
DATABASE							
Explain the purposes of a database.				I/M	E	E	E
Define a database as a collection of information with two or more categories.				I/M	E	E	E
Identify the parts of a database.				I/M	E	E	E
Add data to an existing database.				I/M	E	E	E
Participate in database sorting activities.				I/M	E	E	E
Create a database; sort records in a database.						I/M	E

Filter records in a database.						I/M	E
SPREADSHEET							
Identify the parts of a spreadsheet; explain the purposes of a spreadsheet (charting and calculating).				I/M	E	E	E
Create a simple spreadsheet; create a chart (graph) from a spreadsheet.				I/M	E	E	E
Enter a simple formula to calculate information in a spreadsheet.					I/M	E	E
INFORMATION ACQUISITION AND MANIPULATION/MULTIMEDIA							
Use a variety of multimedia programs.	I	I/M	E	E	E	E	E
Participate in the creation of a multimedia class project.	I	I	I/M	E	E	E	E
Create a multimedia presentation with teacher assistance.		I	I/M	E	E	E	E
Create a multimedia presentation.			I/M	E	E	E	E
Operate a digital camera, scanner or other peripheral device.					I/M	E	E
Use portable media and online databases for search and retrieval of information.		I/M	E	E	E	E	E
Determine the usefulness, appropriateness, and reliability of information.					I/M	E	E
Use Boolean logic as appropriate in keyword searching.					I/M	E	E
Use effective strategies to send and retrieve data on a local area and a wide area network.				I	M	E	E
Use electronic encyclopedias, indexes, and catalogs.				I	M	E	E
Describe advantages and disadvantages of various computer processing, storage, retrieval, and transmission techniques.					I/M	E	E
Describe the meaning of the terms copyright and plagiarism.			I	I	I/M	M	M
Use the correct sending, receiving, copying, or changing of copyrighted material with the required permission.		I	I	I	I/M	M	E
CYBER CITIZENSHIP AND ETHICAL USE							
Understand and adhere to the District's Acceptable Use Policy and Procedures.	I	I	M	M	E	E	E
Know when it is appropriate to use technology for entertainment and educational purposes.	I	I	M	M	E	E	E
Respect the work of other students.	I	I	I	M	M	E	E
Understand what constitutes Cyberbullying.			I	I	M	M	E
Understand the importance of account security.			I	I	M	M	E

District Document 4: NETS●S Developmental Rubric for Grades 2 & 5

NETS●S Developmental Rubric for Grades 2 and 5

NETS●S	PROFICIENCY	
	By End of Grade 2	By End of Grade 5
1. BASIC OPERATIONS AND CONCEPTS		
• Students demonstrate a sound understanding of the nature and operation of technology systems.	Students describe how to use basic input devices (e.g., keyboard, mouse/tract pad), output devices (e.g., monitor, printer), and software resources (e.g., portable media, MP3 player, DVD). Students name common technology found in homes (e.g., DVD, tape or digital recorders, CD players, digital still and video cameras, telephones, radios). Students identify functions represented by symbols and icons commonly found in applications (e.g., font name, font size, bold, underline, alignment, color of type). Students know how to use correct sitting, hand, arm, and fingering positions to type complete sentences (including Shift for capital letters, the Space Bar for spacing, and punctuation keys). Students discuss how to properly care for and use portable media (e.g., mini DV tapes, CDs, DVDs, memory cards, USB memory sticks).	Students know how to use basic input and output devices (including adaptive devices as needed); how to access network resources (e.g., printers, file servers); and how to use common peripherals (e.g., scanners, digital probes, digital cameras, LCD projectors). Students recognize, discuss, and visually represent ways technology has changed life and work at school and in the home, community, business, industry, and government during the past three decades. Students identify and know how to use Menu options in applications to develop text, graphics, spreadsheets, and WEB documents; to save, print, format, add multi-media features; to store, access, and manage files; and to use dictionary, thesaurus, and spelling and grammar tools. Students know proper keyboarding positions and technique to touch-type using the correct hands for alphabetic, numeric, and special-purpose keys (e.g., arrows, Escape, Shift, Backspace, Delete, Caps Lock, Control) and how to use these keys and the Edit Menu items to correct errors in a document.
• Students demonstrate a sound understanding of the nature and operation of technology systems.		Students identify characteristics of an operating system, application software, virus-detection software, or spam-defense software and the need to protect the information and functioning of the technology system.
• Students are proficient in the use of technology.	Students recognize functions of basic File Menu commands (e.g., New, Open, Close, Save, Save As, Print) and folders to manage and maintain computer files on a hard drive or other storage medium (e.g., server, CD, DVD). Students recognize accurate terminology to describe hardware, software, multimedia devices, storage media, and	Students identify basic software commands used to manage and maintain computer files on a hard drive, server, CD or DVD; manage and maintain files on a network; and know how to exchange files with other students and the teacher through network file sharing. Students identify the terminology used to describe basic hardware, software,

	peripherals as well as to identify the basic functions of technology resources (hardware and software) commonly used in early elementary classrooms.	and networking functions as well as to discuss the functions, processes, and/or procedures applied in common use of these technology resources.
2. SOCIAL, ETHICAL, AND HUMAN ISSUES		
• Students understand the ethical, cultural, and societal issues related to technology.	Students identify common uses of information and communication technology in the community and in daily life.	Students identify issues related to how information and communication technology supports collaboration, personal productivity, lifelong learning, and assistance for students with disabilities.
• Students practice responsible use of technology systems, information, and software.	Students recognize that copyright affects how one can use technology systems, information, and software resources.	Students discuss basic issues related to the responsible use of technology and information, identify scenarios describing acceptable and unacceptable computer use, and describe personal consequences of inappropriate use.
• Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.	Students describe acceptable and unacceptable computer etiquette and how to work cooperatively with peers, family members, and others when using technology in the classroom or at home.	Students identify software or technology-delivered access valuable to them and describe how it improves their ability to communicate, be productive, or achieve personal goals.
3. TECHNOLOGY PRODUCTIVITY TOOLS		
• Students use technology tools to enhance learning, increase productivity, and promote creativity.	Students know how to use word processors, drawing tools, presentation software, concept-mapping software, graphing software, and other productivity software to illustrate concepts and convey ideas.	Students identify and apply common productivity software features such as menus and toolbars to plan, create, and edit word-processing documents, spreadsheets, and presentations.
• Students use productivity tools to collaborate in constructing technology-enhanced models, preparing publications, and producing other creative works.	Students know how to work together to collect and create pictures, images, and charts for development of word-processed reports and electronic presentations.	Students know procedures for importing and manipulating pictures, images, and charts in word-processing documents, spreadsheets, presentations, and creative works.
4. TECHNOLOGY COMMUNICATION TOOLS		
• Students use telecommunication tools to collaborate, publish, and interact with peers, experts, and other audiences.	Students–with assistance from teacher, parents, or student partners–identify procedures for safely and securely using telecommunication tools (e.g., e-mail, message boards, blogs) to read, send, or post electronic messages for peers, experts, and other audiences.	Students identify telecommunication tools (e.g., e-mail, message boards, blogs) and online resources for collaborative projects with other students inside and outside the classroom who are studying similar curriculum-related content.
• Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.	Students know how to use a variety of developmentally appropriate media (e.g., presentation software; newsletter templates; Web sites as resources for clip art, music and information resources) to communicate ideas relevant to the curriculum to their classmates, families, and others.	Students identify a variety of media and formats to create and edit products (e.g., presentations, newsletters, Web sites, PDF documents) to synthesize and communicate information and ideas from the curriculum to multiple audiences.
5. TECHNOLOGY RESEARCH TOOLS		
• Students use technology to locate, evaluate, and collect information from a variety of sources.	Students–with assistance from teachers, parents, or student partners–identify steps for using technology resources (e.g., CDs, reference or educational software) and Web-based search engines to locate information on assignment topics in the curriculum.	Students describe steps for using common Web search engines and basic search functions of other technology resources to locate information, as well as use guidelines for evaluating information from a variety of sources for its relevance to the curriculum.
5. TECHNOLOGY RESEARCH TOOLS *continued*		
• Students use technology tools to process data and report results.	Students, with assistance from the teacher, know how to use existing common databases (e.g., library catalogs, online archives, electronic	Students describe how to perform basic queries when using library catalogs, online archives, electronic dictionaries, and encyclopedias to process data and

	dictionaries, encyclopedias) to locate, sort, and interpret information on assigned topics in the curriculum.	report results on assigned topics in the curriculum.
• Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.	Students identify technology resources (e.g., concept-mapping software, drawing software) to show steps in a sequence; to demonstrate likenesses and differences; and to recognize, record, and organize information related to assigned curricular topics.	Students identify, record, and organize information on assigned topics in the curriculum by selecting and using appropriate information and communication technology tools and resources (e.g., slideshow, timeline software, database, concept-mapping).
6. TECHNOLOGY PROBLEM-SOLVING AND DECISION-MAKING TOOLS		
• Students use technology resources for solving problems and making informed decisions.	Students know how to select information and communication technology tools and resources that can be used to solve particular problems (e.g., concept-mapping software to generate and organize ideas for a report, illustrate same/different, or illustrate the sequence of a story; drawing program to make a picture; presentation software to communicate and illustrate ideas; graph program to organize and display data; a Web browser and search engine to locate needed information).	Students know how to apply their knowledge of problem-solving tools to select appropriate technology tools and resources to solve a specific problem, make a decision or design a presentation.
• Students employ technology in the development of strategies for solving problems in the real world.	Students identify ways technology has been used to address real-world problems.	Students know how to select and use information and communication technology tools and resources to collect, organize, and evaluate information relevant to a real-world problem.

Adapted from ISTE NETS, Resources for Student Assessment Publication, 2006

District Document 5: NETs Standards for Teachers

Educational Technology Standards and Performance Indicators for All Teachers

Building on the NETS for Students, the ISTE NETS for Teachers (NETS•T), which focus on pre-service teacher education, define the fundamental concepts, knowledge, skills, and attitudes for applying technology in educational settings. All candidates seeking certification or endorsements in teacher preparation should meet these educational technology standards. It is the responsibility of faculty across the university and at cooperating schools to provide opportunities for teacher candidates to meet these standards.

The six standards areas with performance indicators listed below are designed to be general enough to be customized to fit state, university, or district guidelines and yet specific enough to define the scope of the topic. Performance indicators for each standard provide specific outcomes to be measured when developing a set of assessment tools. The standards and the performance indicators also provide guidelines for teachers currently in the classroom.

1 TECHNOLOGY OPERATIONS AND CONCEPTS.
Teachers demonstrate a sound understanding of technology operations and concepts. Teachers:

- demonstrate introductory knowledge, skills, and understanding of concepts related to technology (as described in the ISTE National Education Technology Standards for Students)
- demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

2 PLANNING AND DESIGNING LEARNING ENVIRONMENTS AND EXPERIENCES.
Teachers plan and design effective learning environments and experiences supported by technology. Teachers:

- design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.
- apply current research on teaching and learning with technology when planning learning environments and experiences.
- identify and locate technology resources and evaluate them for accuracy and suitability.
- plan for the management of technology resources within the context of learning activities.
- plan strategies to manage student learning in a technology-enhanced environment.

3 TEACHING, LEARNING, AND THE CURRICULUM.
Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning. Teachers:

- facilitate technology-enhanced experiences that address content standards and student technology standards.
- use technology to support learner-centered strategies that address the diverse needs of students.
- apply technology to develop students' higher order skills and creativity.
- manage student learning activities in a technology-enhanced environment.

4 ASSESSMENT AND EVALUATION.
Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies. Teachers:

- apply technology in assessing student learning of subject matter using a variety of assessment techniques.
- use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.
- apply multiple methods of evaluation to determine students' appropriate use of technology resources for learning, communication, and productivity.

5 PRODUCTIVITY AND PROFESSIONAL PRACTICE.

Teachers use technology to enhance their productivity and professional practice. Teachers:

- use technology resources to engage in ongoing professional development and lifelong learning.
- evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.
- apply technology to increase productivity.
- use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.

6 SOCIAL, ETHICAL, LEGAL, AND HUMAN ISSUES.

Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and apply those principles in practice. Teachers:

- model and teach legal and ethical practice related to technology use.
- apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.
- identify and use technology resources that affirm diversity
- promote safe and healthy use of technology resources.
- facilitate equitable access to technology resources for all students.

District Document 6: Professional Development: General Computer Knowledge and Skills

Training		Beginners	Intermediate	Proficient
Basic Computer Usage Skills	- operating system - printing	User knows how to: - identify hardware components, peripherals and their purpose. -Identify icons, windows, and menus. - start up and shut down computers and peripherals. - use a mouse. - insert and eject diskettes, CD-ROMs, etc. - start an application and create a document. - name, save, saves as, retrieve, and revise a document. - create, name/rename folders and files. - print a document. - restart a frozen computer. - identify directly connected or networked printer problems.	User knows how to: -use icons, windows and menus. - use basic peripherals (i.e. CD-ROM, storage media, etc). - use software from a disk, hard drive, or CD-ROM. - initialize, format, and name diskettes. - copy documents between the computer and diskettes. -open and work with more than one application at a time. - organize the desktop. -choose the printer location (select a printer). -use print preview and options. - solve simple printer problems with a directly connected printer. - troubleshoot basic hardware, software, and printing problems before asking for support. - check cables for proper attachment to computer, peripherals, and power outlets.	User knows how to: -incorporate general knowledge of basic hardware and software into lesson design as appropriate (i.e. vocabulary, naming and saving conventions, printing, etc). - have his/her files and programs organized. -access and change control panels. - share files and printers on a network. -participate in the selection processes for purchasing technology tools for his/her site. - select and implement appropriate technology tools to support the teaching and learning process.

Training		Beginners	Intermediate	Proficient
E-mail	- in house system - web based system	User knows how to: -explain the three main components of an email address. - explain telecommunication terms, (i.e. CC, BCC, Signature, attachment, etc.). - launch an email program, retrieve, read, and send email. -to save, print, and delete email as appropriate. -practice appropriate netiquette related to email. -compose, edit, and send new email messages. - explain netiquette to his/her classroom, co-workers, and other members of the community.	User knows how to: - create and use an address book. - recognize and use web links embedded in a message. - use CCs and BCCs email to interact with one or a group of people. - use reply to sender, reply to all, and forwarding as appropriate.	User knows how to: - manage an address book (i.e. setting up mailing groups, etc). -locate, open, and manage attached files. my voice inflections. - employ email as a tool to interact with and provide information to students, parents and other community members. - select and implement effective classroom management techniques using email in a limited number of educational settings. - select and implement appropriate email tools to effectively support the teaching and learning process. - incorporate netiquette practices in his/her classroom instruction.

Training		Beginners	Intermediate	Proficient
Word Processing	- Microsoft Word - iWork Pages	User knows how to: - identify word processing terms, such as font, style, tab, margin, table, etc. -open, save, print, and delete a document. - type, select, correct, and delete text within a document. - apply and change fonts, characters, and paragraph formatting as appropriate. - create tables using built-in software assistance (i.e. wizards, etc.). - transcribe handwritten documents into word-processed documents. - create a simple word-processed document. - adjust tabs and margins. - change on-screen view mode and magnification.	User knows how to: - preview a document to identify layout or print problems. - regularly use basic proofing tools (i.e. spell check, grammar check, etc.). - access and use the program Help function. - navigate in a large document. - copy, cut, and paste text within and between documents. - use styles to change the appearance of paragraphs and outlines. - regularly use templates to create documents. - regularly create enhanced word-processed documents for classroom use, (i.e. student worksheets, lesson handouts, etc.). - apply borders to documents. - create numbered and bulleted lists. -add and delete page breaks, and create headers and footers.	User knows how to: - find and replace text within a document. - save word processing documents in other file formats (i.e. TXT, HTML, RTF, etc.). - retrieve documents with the Find File command. - format text in columns with different fonts and colors. - create templates for personal and/or student use. - regularly use word processors to create lesson plans, articles, reports, etc. - regularly design lessons that utilize word processing as part of the activity. - enhance documents by inserting graphics. - incorporate drawing tools as appropriate. - resize and relocate graphics within a document.

Training		Beginners	Intermediate	Proficient
Presentation Software Skills (multimedia)	- Microsoft Powerpoint -Keynote	User knows how to: - define presentation and multimedia terms (i.e. slides/cards, slideshow, etc). -create, open, modify, and save presentations. - define available tools (i.e. drawing, text, etc). - use templates or wizards to create new presentations. -insert text, format text, or add text boxes to a presentation. - add new slides or cards. -navigate using scrollbar, slide sorter, menu, key commands, etc. -switch between different page views. - apply backgrounds and clip art. - print presentation slides. - describe the educational uses of presentation software.	User knows how to: -connect, configure, and troubleshoot peripheral devices for presentation. - insert or change slide or card design. - re-arrange the order of the slides or cards in the presentation. -create and edit navigational buttons to help users move through a presentation. - incorporate sound. - define different image types (i.e. TIFF, GIF, PCX, etc). -incorporate hypertext links, animations from library, movies from library, and clip art from other sources. - demonstrate an understanding of basic design elements (i.e. color, design, space, and composition, etc.). - print using advanced printing options.	User knows how to: - create a presentation to automatically play using timed settings. - organize presentation resources in a folder on the desktop or server. - apply transitions and effects, if appropriate, to slides or cards. - create presentations that are clear and easy to understand. -record and insert sound into presentation. - print handouts that enhance the instructional objectives (i.e. outlines, notes, etc.). -follow fair use and copyright law for text, graphics, and sound.

Training		Beginners	Intermediate	Proficient
Spreadsheet Software Skills	- Microsoft Excel - iWork Numbers	User knows how to: - create, open, and save a spreadsheet. - navigate using the mouse and tabs. - undo unwanted changes. - locate cells based on column/row addresses. -select, move, copy, delete, clear and insert cells. -change typeface, font size and other cell attributes. - select an entire column or row. - resize cells and rows. - enter text and data into specific cells. -adjust layout and margins. - use print preview and print document with title. - set up print options for grid lines, zoom, etc. - describe the educational uses of spreadsheets.	User knows how to: -define spreadsheet terms (i.e. cells, alignment, formula, etc). -sort cells. -replicate a formula or range of cells (i.e. "fill"). - create simple bar or pie charts, create a variety of charts and label graphs appropriately. - select charts for appropriate data representation. - add shading and borders. -change text cell alignment and justification. - create formula cells (i.e. sums, average, etc). - format cells for appropriate content (i.e. text, decimal alignment, currency, etc.). -create and edit headers, footers, and page numbers. -change page margins. -search for and replace text within a document. - print a specific range of cells, pages, and sheets. - create new spreadsheets related to content area.	User knows how to: - move or copy sheets between spreadsheet files. - align and rotate text and numbers within a cell. - change size, placement, and title of charts. - import/export charts and data into other applications (i.e. word processing, etc). - save in a variety of formats (i.e. Tab Delimited, CSV, DBF, DIF, SYLK, etc). - utilize grade book templates. - maintain student records in a spreadsheet. - import/export charts and data into a word processing application. - design curricular lessons requiring use of spreadsheets. - create appropriate charts for a content lesson.

Training		Beginners	Intermediate	Proficient
Database Software Skills	- FileMaker	User knows how to: - format fields to reflect appropriate data (i.e. date, name, currency, etc). - create, open, and save a database. - define database terms (i.e. records, fields, etc.). - select, move, copy, delete, clear and insert fields and records. -Find command to locate a specific record. - enter text and data into appropriate fields. - sort data to produce reports (i.e. alphabetical listings, etc). - format text and numbers in records or layouts (i.e. boldface, currency, time, etc). - describe the educational uses of databases. - identify lessons that require the manipulation of data.	User knows how to: - explain differences among report, query, search, and find. -use print preview to identify print and layout problems. - find and replace data in records and fields. - create and modify report layouts. - find or define data to print only required records (i.e. students reading at grade level, etc). - import data from other applications. - create new databases related to content area (i.e. world populations, animal data, etc). - design curricular lessons that utilize databases to enhance learning outcomes.	User knows how to: - add/edit headers and footers. - sort, match, and go to specific records. -import/export data from a database. -merge database information with word processing documents to produce "form letters." - create new layouts or edit existing layouts for specific productivity or curricular goals. - develop student assignments that require management and manipulation of a variety of data.
Peripherals	- Digital still and motion cameras - Scanner - Tablets - Video/photo editing software	User knows how to: -Turn on and off the digital camera. -focus and take a picture. -record a video clip. -turn the scanner on. -place the document to be scanned on the scanner. -adjust and scan the document or a portion of it. -save the scanned document as .jpg, .tiff, etc.	User knows how to: -connect the digital video or motion camera to the computer. - transfer pictures to iPhoto. -transfer clips to iMovie. - view scanned document. -crop, retouch, and fix the red eye in iPhoto. -split the video clips. -create a short movie in iMovie. -create a slide-show in iPhoto. -add music to the slide show. -save slideshow for future use.	User knows how to: -export a slideshow from iPhoto. -extract/add sounds from clip in iMovie. -explore the talk over option in iMovie. -create and change titles for all or some of the images in slide show. -add background music to an iMovie. -determine file size of pictures, movies, slideshows -transfer projects to playback medium

Training		Beginners	Intermediate	Proficient
Internet Resources	- SDCOE Portal - California Streaming	User knows how to: - launch an Internet browser and use the tool bar. -access the help feature of an Internet browser to find information on using the browser. -access the history feature to view a list of previously visited web sites. - hide and display the toolbar on an Internet browser. - access the Internet through a modem or network connection. - change window sizes in a browser. - point and click to navigate on existing links. - save a web page as a file on my computer. - enter a URL to access or open a specific web site. - explain basic Internet terminology (i.e. HTML, URL, links, download, etc.). -explain the use of email as a means of communication with others. -explain how chat, newsgroups, and threaded discussion lists are used to communicate with members of a group. - do a basic keyword search using an Internet browser or electronic reference source. -be aware of issues involving the use of the Internet in the classroom for instruction. - evaluate the information I locate on the Internet for accuracy. - determine if the source of the information I locate on the Internet is credible and unbiased. -be aware of Internet resources that can be used for student learning and/or classroom management.	User knows how to: - change the settings on an Internet browser tool bar. - refresh or reload a web page in an Internet browser. - configure preferences for an Internet browser. - set the home page in an Internet browser. - copy text on a web page and paste it into a document. - copy graphics on a web page and paste it into a document. - download files from the Internet. - access bookmarks in Internet browsers. -explain the anatomy of a URL. - explain the differences among a search index, a search engine, and a metasearch tool. - use Boolean logic in a search. -explain the issues involving the use of the Internet in the classroom (i.e. AUP, copyright, student safety, classroom management, etc.). - organize the information learned from interpret. - interpret the research data. - filter information for relevancy to the lesson and content. - assess Internet resources to determine if they would be appropriate for integrating into a lesson and/or for classroom management.	User knows how to: - rename and organize links in a web browser Favorites or Personal toolbar. - configure page setup in an Internet browser to print citation resources. -use and manage multiple windows in a browser. - designate the helper applications to be used to open files that I download from the Internet. - export bookmarks as an html file and open them using another computer or browser. - add or delete a bookmark in an Internet browser. - organize bookmarks into sections and/or folders in an Internet browser. - troubleshoot URL address errors (i.e. 404 errors) to locate information - use chat, newsgroups, and threaded discussions lists to communicate with members of a group. - use the Internet and other electronic reference tools as a resource for lesson development. - use the advanced search features of a search index, search engine, metasearch tool, or an electronic reference resource. - use multiple search strategies to locate and validate information. - implement procedures and classroom management techniques addressing Internet use in the classroom for instruction. - incorporate information literacy strategies into lesson design.

Training		Beginners	Intermediate	Proficient
Internet Resources (cont.)				- use a wide variety of sources such as Internet, electronic reference, and others, when conducting research. - select and implement Internet resources into classroom lessons. - select and use effective classroom management techniques utilizing Internet resources.
Knowledge of State and Federal Law	-Piracy -Plagiarism -netiquette -Intellectual property -Licensing -Copyright Laws -Privacy -Internet Safety	User knows how to: -promote safe and healthy use of technology resources. -be able to explain plagiarism to students -describe netiquette rules and policy. -post copyright reminder on printers, websites and copies. -review state and national educational technology standards on information literacy to revise and update grade level requirements.	User knows how to: -model and teach legal and ethical practices related to technology use. -Integrate copyright, plagiarism, netiquette, reproduction and privacy lessons into technology curriculum. -train students and colleagues on use of all copyrighted materials. -promote and enforce environmentally healthy and safe practices in the use of technology.	User knows how to: -develop, implement and monitor policies and guidelines to ensure proper use of technology in classroom. -use multiple methods to assess and evaluate appropriate use of technology. -assess staff and student knowledge, skills and performance in proper use of technology. -integrate techniques for finding information on line. -discriminate useful resources. -participate in the development of policies that clearly enforce copyright law.

Appendix H: Goals and Benchmarks Evaluation Form

CDS # **37-68387**
District Name: **Solana Beach School District**

EETT grant recipient should continue to measure the performance of their education technology implementation plan. Describe the progress towards the goals and benchmarks in your technology plan as specified below. The information provided will enable the technology plan reviewer additional analysis and guidance to evaluate the revised technology plan and will serve as a follow up document should the district be selected for a random EETT review.

1. *Describe your district's progress in meeting the goals and specific implementation plan for using technology to improve **teaching and learning** as described in Section 3.d., Curriculum Component Criteria, of the Criteria for EETT Technology Plan described in Appendix C (Provide descriptive narrative in one to three paragraphs).*

2. *Describe your district's progress in meeting the goals and specific implementation plan for providing **professional development** opportunities based on the needs assessment and the Curriculum Component goals, benchmarks, and timeline as described in Section 4.b., Professional Development Component Criteria, of the Criteria for EETT Technology Plan described in Appendix C (Provide descriptive narrative in one to three paragraphs).*

For the grant period ending June 30, 2012

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

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

The Solana Beach School District has made progress toward the goals and benchmarks of the 2007-2012 Technology Plan to improve teaching and learning. The District has continued to expand staff to support technology use in the classrooms. Computer lab instructors, site repair technicians and a software support trainer were available to provide support and training for all staff as they continue to expand their implementation of computer assisted instruction and assessments. Increased use of online resources from the Internet, including United Streaming and California Streaming, have already impacted instruction in many classrooms. Upper grade teachers use an online grade book program and all teachers use the online report card software. Home to school communication is enhanced by the increased use of email between parents and district staff members. An automated telephone messaging system has been used so that site administrators can leave messages with parents in times of emergency or as a group communication tool for special events.

All schools in the Solana Beach School District scored at or above the Statewide performance target of 800 according to the 2010 Academic Performance Index (API) Base reports. District schools continue to exceed prior year rankings.

	2010 API
	Base
Carmel Creek	953
Skyline	928
Solana Highlands	952
Solana Pacific	965
Solana Santa Fe	944
Solana Vista	879

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

The Solana Beach School District has made progress toward the goals and benchmarks of the 2007-2012 Technology Plan in providing professional development in technology skills as well as technology use in instruction. These training opportunities were offered to staff based on survey results. The District has 100% participation in the EdTechProfile Survey each year up until it was no longer required. Teachers continue to make progress and increase their levels of proficiency. The District offers teachers training opportunities during the school year, in the summer and off-track times, before and after school, and during release time. Applications, such as Microsoft Suite (Word, Excel, Powerpoint), Filemaker Pro, iLife Suite (iWork, iTunes, iCal, iMovie, iPhoto, iDVD), Mavis Beacon, United Streaming, California Streaming, Compass Learning (program operations and interpreting reports), and online textbook software, are offered at each school site. If a school site has a unique system installed (e.g. News Broadcasting, Dynocom or Safari multimedia distribution systems), the teachers receive customized training in the operation of the specific system. The District began a program for pre-service interns and beginning teachers to ensure they are proficient using technology through the BTSA program. The use of technology and resources in the classrooms continue to expand. The District continues to explore staff development training delivery methods to provide high quality training and ongoing support for all staff to use technology to improve teaching and learning.

Professional Development opportunities have been provided monthly and are attended voluntarily by teaching staff. This Technology Plan will address the frequency and timing of professional development opportunities by providing class release time for teaching staff. The district will address the necessity to provide ongoing, systematic professional development.

Appendix C: Criteria for EETT Technology Plans

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

- *EETT Requirements are listed on Appendix D – EETT Technology Plan Requirements*

1. PLAN DURATION CRITERION	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
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)	9	The technology plan describes the LEA 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). The plan must include a specific start and end date (7/1/xx to 6/30/xx).	The plan is less than three years or more than five years in length.
2. STAKEHOLDERS CRITERION Corresponding EETT Requirement(s): 7 and 11 (Appendix D).			
Description of how a variety of stakeholders from within the school district and the community-at-large participated in the planning process.	9	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 the district actively sought participation from a variety of stakeholders.
3. CURRICULUM COMPONENT CRITERIA Corresponding EETT Requirement(s): 1, 2, 3, 8, 10, and 12 (Appendix D).			
a. Description of teachers' and students' current access to technology tools both during the school day and outside of school hours.	11	The plan describes the technology access available in the classrooms, library/media centers, or labs for all students and teachers.	The plan explains technology access in terms of a student-to-computer ratio, but does not explain where access is available, who has access, and when various students and teachers can use the technology.
b. Description of the district's current use of hardware and software to support teaching and learning.	15	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.

c. Summary of the district's curricular goals that are supported by this tech plan.	18	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.
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.	19	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.
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.	25	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.
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	27	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 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.
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.	33	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.

h. Description of or goals about the district policy or practices that ensure equitable technology access for all students.	34	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.
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.	36	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.
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.	41	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.
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.	42	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.
4. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA Corresponding EETT Requirement(s): 5 and 12 (Appendix D).			
a. Summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development.	44	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	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.

		in the plan by discrete skills that include Commission on Teacher Credentialing (CTC) Standard 9 and 16 proficiencies.	
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.	48	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.
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.	52	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.
5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT CRITERIA Corresponding EETT Requirement(s): 6 and 12 (Appendix D).			
a Describe the existing hardware, Internet access, electronic learning resources, and technical support already in the district that will be used to support the Curriculum and Professional Development Components (Sections 3 & 4) of the plan.	53	The plan clearly summarizes the existing technology hardware, electronic learning resources, networking and telecommunication infrastructure, and technical support to support the implementation of the Curriculum and Professional Development Components.	The inventory of equipment is so general that it is difficult to determine what must be acquired to implement the Curriculum and Professional Development Components. The summary of current technical support is missing or lacks sufficient detail.
b Describe the technology hardware, electronic learning resources, networking and	57	The plan provides a clear summary and list of the technology hardware, electronic	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

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.		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.	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.
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.	63	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.
d Describe the process that will be used to monitor Section 5b & the annual benchmarks and timeline of activities including roles and responsibilities.	64	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.
6. FUNDING AND BUDGET COMPONENT CRITERIA Corresponding EETT Requirement(s): 7 & 13, (Appendix D)			
a List established and potential funding sources.	65	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 Estimate annual implementation costs for the term of the plan.	66	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.
c Describe the district's replacement policy for obsolete equipment.	71	Plan recognizes that equipment will need to be replaced and outlines	Replacement policy is either missing or vague. It is not clear that the replacement policy could be implemented.

		a realistic replacement plan that will support the Curriculum and Professional Development Components.	
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.	71	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.
7. MONITORING AND EVALUATION COMPONENT CRITERIA Corresponding EETT Requirement(s): 11 (Appendix D).			
a Describe the process for evaluating the plan's overall progress and impact on teaching and learning.	72	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 Schedule for evaluating the effect of plan implementation.	74	Evaluation timeline is specific and realistic.	The evaluation timeline is not included or indicates an expectation of unrealistic results that does not support the continued implementation of the plan.
c Describe the process and frequency of communicating evaluation results to tech plan stakeholders.	76	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.
8. EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS TO MAXIMIZE THE USE OF TECHNOLOGY CRITERION Corresponding EETT Requirement(s): 11 (Appendix D).			
a. 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	77	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	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.

providers or potential future outreach efforts.)		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.	
9. EFFECTIVE, RESEARCHED-BASED METHODS, STRATEGIES, AND CRITERIA Corresponding EETT Requirement(s): 4 and 9 (Appendix D).			
a Summarize the relevant research and describe how it supports the plan's curricular and professional development goals.	78	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 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.	82	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.