

Technology Plan



Bellflower Unified

July 1, 2010 - June 30, 2013

02/23/2010

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Background and Demographic Profile

The Bellflower Unified School District serves 14,653 students in an eight square mile area in southeast Los Angeles County. It includes most of Bellflower, a large portion of Lakewood and a small portion of Cerritos. The schools are surrounded by suburban neighborhoods in an area which is centrally located to universities and colleges. Cultural venues, recreational facilities and major attractions are nearby.

Bellflower Unified School District is just the right size to maintain local control. There are eleven (11) elementary schools, two comprehensive secondary schools (which include middle school and high school programs), one continuation high school and an alternative education center. The district also administers a large adult school program.

With Content and Performance Standards at every grade level, a strong curriculum, and textbooks for every student, the district is teaching fundamentals that will empower students to become active lifelong learners. For students at risk, opportunities are provided for an extended school day - further enabling them to become informed, productive, independent, and contributing citizens in today's diverse society.

Bellflower Unified School District offers programs and services in safe, clean, facilities which support classroom learning. These include computer labs, libraries, guidance programs, career academies, vocational training, health offices, cafeterias serving hot meals, tutoring programs, GATE programs at elementary schools, and advanced placement courses at high schools. The Board of Education consistently enforces a zero tolerance policy for drugs and weapons. The clean and attractive appearance of our campuses and the safety of our students is a priority.

The district is committed to providing students with a variety of options to meet their educational needs. Therefore, the following are offered:

- Healthy Start/Caring Connections: basic health care referrals for students of families in need.
- Special Education: services for students with learning, mental and physical disabilities.
- Job training and vocational education: services for adults who wish to begin a new career or upgrade their skills, including a Cosmetology School
- Adult high school reentry program: services for those who have postponed earning a high school diploma.
- ESL (English as a Second Language) program: English language and citizenship courses for adults wanting to learn English and/or become U.S. citizens.
- BAE (Bellflower Alternative Education) Center: quality educational program for students who have been expelled from Bellflower Unified School District schools, those referred by the Probation Department, and students assigned by the School Attendance Review Board.
- English Language Development Programs: services at each school for students to achieve success as they learn the English language.

The district's demographics represent the diversity of students and teachers:

Population	American Indian	Asian	Pacific Islander	Filipino	Hispanic	African American	White	Multiple or No Response
Students	0.3%	4.1%	1.1%	4.8%	52.4%	14.8%	16.6.0%	6.0%
Teachers	0.5%	6.6%	0.3%	2.3%	10.27%	3.3%	74.0%	2.4%

Other pertinent demographic information includes special populations' counts. 21.6 percent of district students are considered English Learner, 57.8 percent receive free/reduced priced meals, and 15.8 percent are part of the CalWorks program. In addition, 20.8 percent of graduates are eligible for UC-CSU admissions and the district 4-year adjusted drop out rate is at 11.3 percent, well below the statewide rate of 20.1 percent.

Student Academic Achievement

The standardized STAR test measures student achievement in the spring of each school year. The percentage of students scoring Proficient or Advanced on the 2009 STAR is listed below.

Bellflower Unified School District 2009 California Standards Tests Percent of Students Scoring at Proficient or Advanced					
Grade	English Language Arts	Math	Graded Science	Content Science	History
2	46	61			
3	39	65			
4	67	77			
5	55	58	51		
6	55	48			
7	49	27			
8	44	38	59		35
9	53	37		40	
10	43	21	45	45	36
11	40	21		35	44

The district growth API summary report for 2008- 2009 is listed below.

API							AYP					
	2008 Base	2009 Growth	Difference	Met Growth Target	Sub-groups	Both School wide and Sub-groups	All Components	ELA	Math	API	Grad Rate	PI Status
District												
BUSD	752	762	10	N/A	N/A	N/A	No	No	No	Yes	Yes	Not in PI
Elementary School												
Baxter	826	828	2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Not in PI
Foster	837	852	15	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Not T1
ILC	888	896	8	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Not T1
Jefferson	745	761	16	Yes	No	No	No	No	Yes	Yes	N/A	Not in PI
Las Flores	810	795	-15	No	No	No	No	No	Yes	Yes	N/A	Not in PI
Lindstrom	837	843	6	Yes	No	No	Yes	Yes	Yes	Yes	N/A	Not T1
Pyle	745	770	25	Yes	Yes	Yes	No	No	Yes	Yes	N/A	Not in PI
Ramona	737	754	17	Yes	Yes	Yes	No	No	Yes	Yes	N/A	Not in PI
Washington	766	784	18	Yes	No	No	No	No	Yes	Yes	N/A	Not in PI
Williams	779	789	10	Yes	No	No	Yes	Yes	Yes	Yes	N/A	Not in PI
Woodruff	751	768	17	Yes	No	No	No	No	Yes	Yes	N/A	Not in PI
Secondary Schools												
Bellflower	709	719	10	Yes	No	No	No	No	No	Yes	Yes	Not T1
Mayfair	755	759	4	No	No	No	No	No	No	Yes	Yes	Not T1
ASAM												
BAE	423	407	-16	D	D	N/A	No	No	Yes	No	Yes	Not T1
Somerset	474	509	35	D	D	N/A	Yes	Yes	Yes	Yes	Yes	Not T1

1. Plan Duration

July 1, 2010 - June 30, 2013

2. Stakeholders

A District Technology Planning Committee was formed in order to recommend specific actions that need to be taken to meet short and long-term goals. The Committee consists of a variety of stakeholders who will implement the plan, including district curriculum and information technology staff, outside consultants, site administrators, teachers, and parents. The following chart lists Committee members' names, titles and affiliations:

Name	Title	Affiliation
Mrs. Lisa Azevedo	Assistant Superintendent of Instructional Personnel and Programs	Instructional Personnel and Programs
Steven Yuchno	Director of Technology	Department of Educational Technology
Tracy Rutkoski	Director of Curriculum and Instruction	Instructional Personnel and Programs
Charlene Bowden	Director of Assessment and Instructional Support Services	Instructional Personnel and Programs
Phil Eichar	Network Administrator	Department of Educational Technology
Geri Holderbaum	Technology Technician	Department of Educational Technology
Esperanza Zamora	Clerk	Department of Educational Technology
Cari Ignarra	Director of Student Support Services	English Learner Services
Mark Kailiponi	Assistant Principal	Mayfair High School
Nathan Drown	Vocational Technical Teacher	Mayfair High School
Mark Allen	Teacher	Thomas Jefferson Elementary
Holly Hennesy	Teacher	Bellflower High School
Keri Menebroker	Teacher	F. E. Woodruff Elementary
Michelle Myers	Teacher	Stephen Foster Elementary
Julie Skorka	Teacher	Albert Baxter Elementary
Eileen Jones	PTA	Intensive Learning Center

Other contributors to the Bellflower Unified School District's Technology Plan include:

Name	Title	Affiliation
Thuy Binh	Chief Business Officer	Bellflower Unified School District
Marcy Delgado	Associate Superintendent	Bellflower Unified School District
Patrick Dixon	Principal	Bellflower Educational Alternatives
Isel Taylor	Principal, Elementary School	Washington Eelmentary
Maria Ingram	Account Manager	CISCO Systems
Bob Cook	Senior Account Manager	NIC Partners.
Monica Parker	Account Manager II	Verizon Business
Damian Mendoza	President	Accelerate Software

All of these stakeholders participated in the development of this plan by formalizing and documenting a set of guiding principles for the next three years including:

- development of instructional programs and teaching strategies
- training of faculty, staff, and community members
- acquisitions of hardware and software
- utilization of outside resources within the arena of educational technology

Due to severe financial constraints in effect throughout California during this plan’s development period, and the contractual imperative to compensate classroom teachers and other district staff for substitute costs and time spent collaborating outside of work hours, opportunities for stakeholders to meet face to face to provide input for this plan’s creation were severely limited. In response, the Department of Educational Technology developed and implemented online collaboration process that was employed in the creation of this plan.

After an initial face to face stakeholder meeting in early October, 2009, stakeholders used a number of online resources including workgroup shares on the districts’ network, special, e-mail lists with an editing clearing house contact, and the CTAP online Technology Plan Builder to offer input on plan creation. In addition to its regular services The Department of Educational Technology also offered a designated telephone contact to stakeholder/planners.

Based on the information collected for this Technology Plan, the following long-term aims were developed by the District Technology Planning Committee and used to formulate the goals, objectives, and benchmarks for this District Technology Plan. The district aims:

- To enhance and improve the education and services provided to the children, the community and the staff of this district
- To move Bellflower Unified School District into the top 10% nationally in children’s access and use of technology-integrated education

3. Curriculum

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

Technology Access Chart					
School	Total Student Computers	Student-to-Computer Ratio	Classroom Computers	Computer Lab Computers	Library/Media Centers Computers
Baxter Elementary	158	3.5: 1	91	66	1
Intensive Learning Center	157	4.5:1	109	44	4
Foster Elementary	179	4.0:1	118	60	1
Jefferson Elementary	153	4.3:1	107	43	3
Las Flores Elementary	54	3.9:1	32	21	1
Lindstrom Elementary	183	4.5:1	135	40	2
Pyle Elementary	206	2.9:1	147	53	6
Ramona Elementary	200	3.6:1	127	70	3
Washington Elementary	268	3.2:1	195	64	9
Williams Elementary	142	3.9:1	76	62	4
Woodruff Elementary	205	3.7:1	114	80	11
Bellflower Alternative Education Ctr.	13	3.8:1	13	0	0
Bellflower High	657	4.8:1	426	172	59
Mayfair High	645	5.6:1	599	40	6
Somerset Continuation	128	2.9:1	128	0	0
DISTRICT TOTAL/AVG	3348	4.4:1			

* “Student computers” are defined as computers that are placed physically at the student level and not on a teacher’s desk. Any computer sitting on a teacher’s desk would be considered a “staff computer”.

All computer counts are based on the February 8, 2008 California State Technology Survey. Figures for 2009 are not available. CDE cancelled the annual survey and made survey instrumentalities unavailable.

Student access outside school hours:

Student access to technology outside school hours varies by school site. Most sites offer extended library/media center hours providing access to computers after school. Additionally, at most sites there are teachers who volunteer their time and their classrooms for students to use technology on an informal basis.

Special programs offer additional access. Through enrichment programs, students are given after school access to computers and other technology equipment including digital cameras, scanners and video cameras. Many schools offer intervention programs where technology is used after school and through extended year programs. High school students can gain additional access through ROP classes offered before and after school.

Current teacher access to technology:

All high school and middle school teachers have assigned desktop computers for instructional use. At the elementary schools, teachers have access to laptop-sharing programs and share student computers located in their classrooms, labs (including computer carts), and library/media centers.

Teachers have access to presentation equipment either through computer carts with LCD projectors or connections to installed CATV systems in classrooms.

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

Bellflower Unified School District schools identified their current technology use in the 2010 California Ed Tech Profile. Based on these results, the most common uses of technology for teachers who use technology include:

- Word Processing
- Access content specific software or Web-based resources
- Use online student assessment tools

To a lesser degree, the common uses of technology for teachers include:

- Create reports or projects
- Research using the internet or CD ROMS
- Solve problems or analyze data
- Present material electronically

The most common uses of technology for students include:

- Reinforcement and practice
- Word processing
- Research, using the Internet and/or CD-ROMs
- Create projects or reports

To a lesser degree, common uses of technology for students include:

- Access demonstrations or simulations
- Present material electronically
- Solve problems and analyze data

The following chart averages current frequency of student technology use across the district:

Frequency of Student's Use of Technology	
Grade	Computer Use/Week
K-1	45-60 minutes/week
2-3	60 minutes/week
4-6	75 minutes/week
7-8	2.5 hours/week
9-12	3 hours/week
Alternative	10 hours/week
Continuation	5 hours/week

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

Technology will be aligned to the curricular goals and academic content standards for student achievement, based on:

- Bellflower Unified School District's Technology Standards (See Appendix A)
- California State Content Standards
- National Educational Technology Standards for Students, Teachers and Administrators (N.E.T.S.)
- WASC
- Bellflower Unified School District's School Board policies

The Bellflower Unified School District Local Educational Agency (LEA) Plan describes the district's mission and its curricular goals. In a respectful, student-centered, safe, clean and orderly environment, all students are expected to make continuous and measurable, progress toward mastery of the Bellflower Unified School District Academic Content and Performance Standards. These standards, based on the California State Curriculum Standards for grades K-12 and locally adopted in 1999, drive the district's instructional program. Standards guides are published for all grade levels. Standards based and technology supported grade reporting is utilized in grades kindergarten through six, and all high school course outlines are standards based. Online access to standards is provided on the district intranet.

In addition, each school site uses existing technology to disaggregate data to inform its Single Plan for Student Achievement. As a result of this activity each school site plans systematic interventions to assist all students in meeting and exceeding standards and in passing the California High School Exit Examination (CAHSEE) before graduation. In each site's Single Plan specific curricular strategies are outlined and annual achievement targets are set for the school significant subgroups within the school. Frequent, varied assessments are employed to measure progress toward academic goals. At the high school level, the Western Association of Schools and Colleges Accreditation Report, along with its interim documentation, serves as a comprehensive guide to each school's effort to produce academically proficient, college and career capable, young citizens.

The district believes that technology is a vital tool for curriculum delivery. In support of the technology curriculum, the district has adopted the Bellflower Unified School District Technology Standards (Appendix A). These standards, based on the National Educational Technology Standards for Students, Teachers and Administrators (N.E.T.S.) provide an approved context for classroom technology use.

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.

The section that follows describes what Bellflower Unified School District expects its students to achieve academically, and describes how, through meaningful integration of technology, student academic achievement can be improved

Goal 3d1: All Bellflower Unified School District students will demonstrate sustainable growth in academic achievement toward meeting or exceeding state and district academic standards.

Objective 3d1.1: By August 2013, and in succeeding years, all diploma eligible students will pass the California High School Exit Exam by the conclusion of their senior year.
Year 1 Benchmark: By August 2011 95% of all diploma eligible students will pass the California High School Exit Exam and graduate with their class.
Year 2 Benchmark By August 2012 98% of all diploma eligible students will pass the California High School Exit Exam and graduate with their class:
Year 3 Benchmark: By August 2013 100% of all diploma eligible students will pass the California High School Exit Exam and graduate with their class.

Objective 3d1.2: By August 2011, and in every succeeding year, 100% of all API sub-group targets will be met.
Year 1 Benchmark: By August 2011, all schools measured will meet all API sub-group targets
Year 2 Benchmark: By August 2012, all schools measured will continue to meet all API sub-group targets.
Year 3 Benchmark: By August 2013, all schools measured will continue to meet all API sub-group targets.

Objective 3d1.3 : By August 2013, and in succeeding years, 90% of all students measured will meet or exceed grade level standards as measured by the STAR program
Year 1 Benchmark: By August 2011, 60% of all students measured will meet or exceed grade level standards as measured by the STAR program
Year 2 Benchmark: By August 2012, 75% of all students measured will meet or exceed grade level standards as measured by the STAR program
Year 3 Benchmark: By August 2013, 90% of all students measured will meet or exceed grade level standards as measured by the STAR program

Implementation Plan 3d: To meet the academic achievement goal and objectives above the following actions will be taken by the specified persons according to the specified timelines. Monitoring and evaluation will be performed by the indentified individuals using the specified instruments.			
Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Monitoring of California High School Exit Exam results	July 2010 and annually thereafter	All district stakeholders	Director of Assessment and Instructional Support Services
Monitoring of API growth targets	July 2010 and annually thereafter	All district stakeholders	Director of Assessment and Instructional Support Services
Monitoring of STAR results	July 2010 and annually thereafter	All district stakeholders	Director of Assessment and Instructional Support Services
Use of electronic and on-line components of core textbook adoptions	July 2010 and annually thereafter	Teachers and technology support personnel	Principals, Director of Curriculum and Instruction, Director of Educational Technology
Use of district licensed software programs	July 2010 and annually thereafter	Teachers and technology support personnel	Principals, Director of Curriculum and Instruction, Director of Educational Technology
Use of school implemented intervention software	July 2010 and annually thereafter	Teachers and technology support personnel	Principals, Director of Curriculum and Instruction, Director of Educational Technology
Use of teacher designated internet learning and reference supplements	July 2010 and annually thereafter	Teachers and technology support personnel	Principals, Director of Curriculum and Instruction, Director of Educational Technology
Evaluation Instrument(s) - Data To Be Collected: California High School Exit Exam results; API annual growth measurements, STAR results			

- 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.

In order to enable students to use technology as a tool to improve academic achievement, the district will need to ensure that students have had the opportunity to learn computer knowledge and skills including, word processing, Internet search and retrieval, email skills, spreadsheets, electronic publishing, and courseware.

The district also places high priority on aligning the teaching of information literacy skills with technology use. Information literacy is locating, selecting, organizing, presenting, and assessing information in and through a variety of media technologies and contexts to meet diverse learning needs and purposes. At each grade level, the district includes information literacy standards in its technology learning standards. (See appendix A, standard 10, for each grade level.)

These skills will be taught through a variety of courses and instructional opportunities, provided both inside and outside of the classroom, beginning in kindergarten and continuing through grade 12.

Goal 3e1: All Bellflower Unified School District students will be proficient in technology and information literacy skills.

Objective 3e1.1 : By June 2013, and in all succeeding years, 100% of all elementary students will meet District Technology Standards as evidenced by their technology grade on their Standards-Based Report Card.
Year 1 Benchmark: By June 2011, and in all succeeding years, 85% of all elementary students will meet District Technology Standards as evidenced by their technology grade on their Standards-Based Report Card
Year 2 Benchmark: By June 2012, and in all succeeding years, 95% of all elementary students will meet District Technology Standards as evidenced by their technology grade on their Standards-Based Report Card
Year 3 Benchmark: By June 2013, and in all succeeding years, 100% of all elementary students will meet District Technology Standards as evidenced by their technology grade on their Standards-Based Report Card

Objective 3e1.2: By June 2012, and in all succeeding years, 100% of all middle and high school students will meet District Technology Standards as evidenced by student portfolio work samples.
Year 1 Benchmark: By June 2012, and in all succeeding years, 100% of all middle and high school students will meet District Technology Standards as evidenced by student portfolio work samples.
Year 2 Benchmark: By June 2012, and in all succeeding years, 100% of all middle and high school students will meet District Technology Standards as evidenced by student portfolio work samples.
Year 3 Benchmark: By June 2012, and in all succeeding years, 100% of all middle and high school students will meet District Technology Standards as evidenced by student portfolio work samples.

Objective 3e1.3: By June 2013, and in all succeeding years, 90% of all high school students will produce a multimedia project prior to graduation.
Year 1 Benchmark: By June 2011, and in all succeeding years, 50% of all high school students will produce a multimedia project prior to graduation.
Year 2 Benchmark: By June 2012, and in all succeeding years, 75% of all high school students will produce a multimedia project prior to graduation.

Year 3 Benchmark: By June 2013, and in all succeeding years, 90% of all high school students will produce a multimedia project prior to graduation.

Implementation Plan 3e: To meet the information literacy and technology objectives above the following actions will be taken according to the specified timelines Monitoring and evaluation will be performed by the indentified individuals using the specified instruments.			
Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Monitoring of elementary student technology grades on their Standards-Based Report Card	July 2010 and annually thereafter	All elementary stakeholders	Site Principals, Director of Assessment and Instructional Support Services
Monitoring of middle and high school students portfolio work samples as evidence of meeting District Technology Standards	July 2010 and annually thereafter	All middle and high school stakeholders	Site principals
Monitoring of high school students multimedia projects	July 2010 and annually thereafter	All high school stakeholders	Site principals
Provision of high speed access to the district network and the internet in all instructional areas	2010-13	Director of Technology,	District students, parents and staff
Provision of access in each classroom to a means of presentation achieved by connecting a computer with Internet access to a TV monitor or a projection device.	2010-13	Director of Technology, Director of Maintenance and Operations, Site Principals	Director of Technology responsibility for selection of appropriate standard devices. Director of Maintenance responsibility for appropriate device installation. Site principals responsible for monitoring of increasing device counts.
Utilization of standardized grade and subject appropriate diagnostic remediation/ reinforcement/ and enrichment software, and standardized courseware	2010-13	Director of Curriculum and Instruction, Director of Technology	Director of Curriculum and Instruction responsibility for selection of appropriate standardized software as district needs change and software becomes available. Director of Technology responsibility for installation and maintenance of selected software.
Assessment of training and professional development needs by means of Ed Tech Profile survey	Annually, February 2010-2013	Principals, Director of Educational Technology	Principals responsible for survey completion, Director of Educational Technology responsible for survey aggregation and results distribution.

Implementation Plan 3e: To meet the information literacy and technology objectives above the following actions will be taken according to the specified timelines Monitoring and evaluation will be performed by the indentified individuals using the specified instruments.

Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Provision of intensive ongoing professional development	2010-13	Director of Curriculum and Instruction, Director of Assessment and Instructional Support Services, Director of Technology	Director of Curriculum and Instruction, Director of Assessment and Instructional Support Services and Director of Technology share responsibility for monitoring of Ed Tech Profile reports and attendance at training sessions as well as training evaluations suggesting changes to the training program as needed.
Provision of the following additional resources to K-6 schools a ratio of 5 students to 1 (5:1) networked, multimedia computer with internet access at least two (2) computer labs, with possibilities including mobile wireless labs and portable computing devices 45 minutes per week of computer access for K/1 1 hour per week of computer access for 2/3 1.5 hours per week of computer access for 4/6 staffed after school programs providing access to the computer lab	By June 2013	All Elementary Site Stakeholders, Elementary Principals, Director of Educational Technology	Site Principals will monitor ratios making computer purchases as needed when funding is available. Director of Educational Technology will collaborate on selection of appropriate hardware and creation and / or upgrade of technology facilities.
Provision of the following additional resources to 7-8 middle grade classes at the high schools: a ratio of 4.75 students to 1 (4.75:1) networked, multimedia computer with internet access at least two (2) computer labs, with possibilities including mobile wireless labs and portable computing devices 3 hours per week of computer access staffed access before and after school in the Library Media Center and/or a computer lab	By June 2013	All Middle Grades Site Stakeholders, Middle School Principals, High School Principals, Director of Educational Technology	Site Principals will monitor ratios making computer purchases as needed when funding is available. Director of Educational Technology will collaborate on selection of appropriate hardware and creation and / or upgrade of technology facilities.

Implementation Plan 3e: To meet the information literacy and technology objectives above the following actions will be taken according to the specified timelines Monitoring and evaluation will be performed by the indentified individuals using the specified instruments.

Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Provision of the following additional resources to 9-12 classes at the high schools: a ratio of 4.75 students to 1 (4.75:1) networked, multimedia computer with Internet access at least four (4) computer labs, with possibilities including mobile wireless labs and portable computing devices 4 hours per week of computer access, not including time spent in computer electives staffed access before and after school in the Library Media Center and/or a computer lab.	By June 2013	All High School Site Stakeholders, High School Principals, Director of Educational Technology	Site Principals will monitor ratios making computer purchases as needed when funding is available. Director of Educational Technology will collaborate on selection of appropriate hardware and creation and / or upgrade of technology facilities.
Provision of the following additional resources to Somerset Continuation High School: a ratio of 2 students to 1 (2:1) networked, multimedia computer with internet access at least two (2) computer labs, with possibilities including mobile wireless labs and portable computing devices 4 hours per week of computer access, not including time spent in computer electives staffed access before and after school in the computer lab.	By June 2013	All Somerset Site Stakeholders, Somerset Principal, Director of Educational Technology	Site Principal will monitor ratio, making computer purchases as needed when funding is available. Director of Educational Technology will collaborate on selection of appropriate hardware and creation and / or upgrade of technology facilities.

Implementation Plan 3e: To meet the information literacy and technology objectives above the following actions will be taken according to the specified timelines Monitoring and evaluation will be performed by the indentified individuals using the specified instruments.			
Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Provision of the following additional resources to Bellflower Alternative Education Center: a ratio of 1 students to 1 (1:1) networked, multimedia computer with Internet access at least one (1) computer lab, with possibilities including mobile wireless labs and portable computing devices 4 hours per week of computer access, not including time spent in computer electives	By June 2013	All BAE Center Stakeholders, BAE Staff, Director of Alternative Programs, Director of Educational Technology	BAE Staff and Director of Alternative Programs will monitor ratio, making computer purchases as needed when funding is available. Director of Educational Technology will collaborate on selection of appropriate hardware and creation and / or upgrade of technology facilities.
Evaluation Instrument(s) - Data To Be Collected: From Data Director, percentage of passing technology grades. From high school and middle school student work product for assessment and review. From Ed Tech Profile survey, results to guide professional development, from California Technology Survey (if available) counts to improve student access.			

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

Bellflower Unified School District Board Policy 6163 states our governing body’s intent that “all students use the internet in a safe, responsible, and proper manner in support of the district’s instructional program.” District stakeholders regard instruction in the appropriate and ethical use of information technology as crucial to fulfilling the Board’s stated intent that students learn to use technology in a responsible and proper manner.

Prior to the completion of this plan, a teacher committee, under the direction of the Director of Curriculum and Instruction met and selected CTAP *Cybersafe* as the district’s curriculum for instruction in the appropriate and ethical use of information technology.

Additionally, the district’s mandatory annual Acceptable Use Agreement explicitly prohibits use of its network to transmit materials which violate intellectual property law; including the unauthorized sharing of music, video or any other material under copyright.

Goal 3f.1: All Bellflower Unified School District teachers and students will receive regular instruction addressing the security of student information and work product on the internet.

Goal 3f.2: All Bellflower Unified School District teachers and students will receive regular instruction in avoiding plagiarism and distinguishing the lawful from the unlawful uses of copyrighted works and downloaded materials

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Select an appropriate curriculum for use in district-wide ethical use instruction.	July 2010	Director of Curriculum and Instruction, Selected Committee of Stakeholders and Teachers	Director of Curriculum and Instruction to manage curriculum adoption.	District curriculum adoption documentation, Board of Education minutes, Citizens Task Force records
Teachers are introduced to the selected curriculum and instruction begins	By July 2010 and ongoing	Site principals, Director of Curriculum and Instruction	Director of Curriculum to monitor introduction of curriculum. Site Principals to monitor beginning of instruction.	Student work samples, Acceptable Use Agreements
Lessons are completed at each grade level according the district's pacing guides for the curriculum.	By July 2010 and ongoing	Site principals Director of Curriculum and Instruction	Site principals to monitor curriculum delivery and collect student work samples. Director of Curriculum and Instruction to supply pacing guides	Student work samples

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)

Bellflower Unified School District Board Policy 6163 asserts our governing body's intention to protect students from access to inappropriate matter on the internet. All district computers with internet access include technology protection measures that block, or filter access to, visual depictions that may be obscene, depict sexualized or pornographic situations, or may otherwise be construed as harmful to minors. The operation of these measures is continuously enforced, and district staff monitors all system activity.

Prior to the completion of this plan a committee a teacher committee, under the direction of the Director of Curriculum and Instruction met and selected CTAP *Cybersafe* as the district's curriculum for instruction in the safe use of information technology.

In addition, the district’s mandatory annual Acceptable Use Agreement explicitly encourages students to guard their privacy against predators, instructing them against the dissemination of names, personal addresses, e-mail contact information or telephone phone numbers.

Goal 3g.1: The district will continue to maintain, refine and improve the internet filtering systems protecting students from inappropriate matter on the internet.

Goal 3g.2: All Bellflower Unified School district teachers and students will receive regular instruction addressing internet safety including instruction on protection of personal information and protection of personal work product.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Annually evaluate, modify and/or renew the district’s internet and e-mail filtering software to assure effectiveness in restricting on-line activities that may be construed as harmful to minor students.	Beginning July 2010 and at least annually thereafter	Director of Educational Technology, Network Manager	Director of Educational Technology to monitor software blocking reports and respond to filtering requests. Network Manager to install and implement filtering improvements	Parent, student, teacher and staff reports, Acceptable Use Agreements
Assure enforcement and renewal of district Acceptable Use Agreement as detailed in current administrative regulations.	Beginning July 2010 and at least annually thereafter	Site teachers and administrators, Director of Educational Technology	Site teachers and administrators to collect and register AUA in SIS. Director of Educational Technology to monitor site compliance	SIS Reports
Select an appropriate curriculum for use in district-wide internet safety instruction.	October 2009	Director of Curriculum and Instruction, Selected Committee of Stakeholders and Teachers	Director of Curriculum and Instruction to manage curriculum adoption.	Parent, student, teacher and staff reports, Acceptable Use Agreements
Teachers are introduced to the selected curriculum and instruction begins	By July 2010 and ongoing	Site principals, Director of Curriculum and Instruction	Director of Curriculum and Instruction to monitor introduction of curriculum. Site Principals to monitor curriculum delivery,	Lesson Plans, Student work samples
Lessons are completed at each grade level according the district’s pacing guides for the curriculum.	July 2010 and ongoing	Teachers, Site principals Director of Curriculum and Instruction	Site principals to monitor curriculum delivery and collect student work samples. Director of Curriculum and Instruction to supply pacing guides	Student work samples

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

The Bellflower Unified School District is ADA compliant and ensures equal and appropriate access to all students. If a student requires assistive technologies, they will be purchased to meet their needs, as outlined in their IEP.

The following chart outlines what is available to special populations at schools in the district:

Special Populations	Access
Advanced Placement	AP students are offered access to SAT and AP preparation software. Additionally, advanced students may enroll in online courses through higher education institutions and Nova Net.
English Language Learners (ELL)	ELL students are provided access through regular education classes. Some schools use electronic translators. Additional software such as Rosetta Stone, Read 180, Imagine Learning, Success Maker, Waterford, Accelerated Reader and Fast Forward are also used. When needed, instructional software is purchased in Spanish versions.
GATE	After school programs are available at the elementary schools providing additional technology access including computers, digital cameras, scanners, and video cameras.
Physical Disabilities	All students with physical disabilities are provided access through regular education classes. When needed, additional assistive technologies are purchased such as point sticks, track ball mice, large print readers, and voice recognition programs. The district ensures all facilities including computer labs have wheelchair accessibility.
Special Education	Special education students are provided access through their regular education classes. Additionally, specific diagnostic remedial/ reinforcement/ and enrichment software such as Accelerated Reader, Read 180, Cornerstone, and Fast Forward are used. After school and extended year programs for special education students also utilize these technologies.
Title 1	All Title 1 students are provided access through regular education classes. After school and extended year programs utilize technology, Accelerated Reader, Accelerated Math and Read 180.

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.

Current administrative uses of technology include Aeries administrative software for student demographics, scheduling, standardized test scores, grades, transcript data, assessments, attendance data, discipline data, bilingual information, and medical and emergency data. Access to the full system client is provided to all site principals, counselors, attendance clerks, secretaries, school health personnel, and district level personnel. At the high schools, all teachers have access over the district intranet and the internet cloud to the Aeries Browser Interface (ABI). This capability allows online attendance reporting, grade book, grade history, grade reporting and web-based access to an important subset of student discipline records and student demographics.

Based on state requirements for interface with the new California Longitudinal Pupil Assessment Data System (CALPADS) and California Longitudinal Teacher Information Data Education System (CALTIDES) systems the district has also identified a need to continue to upgrade and modify the Aeries system to provide the California Department of Education (CDE) and the district's central office with near real time access to a broad array of student and stakeholder data. To this end, a centralized Structured Query Language version of Aeries (Aeries CS) was installed and implemented in July, 2009.

In the coming months, the district plans to continue to augment the AeriesCS system by installing and operating a number of Schools Interoperability Framework Zone Integration Servers .Our first implementation, scheduled for completion by the opening of the next school year, will link AeriesCS enrollments to system-wide student network log-ins maintained in Microsoft Active Directory. By 2012 the district plans to leverage the knowledge gained by this first implementation to install and operate an automated SIF-ZIS interface to the CDE's CALPADS system.

Although, overall, the district is satisfied with the comprehensive nature of the Aeries Student Information System, the last few years have witnessed an increase in demand for timely, accurate and easy to access demographic and assessment data at all levels of the organization. Driven by the complex demands of the state's assessment and accountability system, and a desire to make solid, standards-based assessments a feature of every classroom, the district, in mid-2006, adopted Achieve Data Solutions Data Director web-based assessment data warehouse as its solution of choice.

Data Director utilizes regular uploads from the Aeries system, an on-demand item bank, an extensive database of California state standards, and scanned data input capability to provide all teachers and instructional staff with secure, any time, any where, access to students' instructional histories and a comprehensive a set of state of the art collaboration tools

In 2008-09 the district, pleased with breadth of Data Director's solution set, undertook to move all of its elementary level standards based grade reporting and progress reporting tasks to the system. School year 2010-11 will see the completion of an ongoing effort to leverage Data Director's capabilities to provide classrooms with a comprehensive set of standards based technology assisted benchmark assessments for all core subject areas at all STAR grade levels. Working with Data Director's partner, Action Learning Systems, the district has added one core

subject area each year to its custom built benchmarking system. At this writing, specified benchmark assessments have completed for the science and mathematics subject areas. English Language arts benchmarks will be completed in implemented during the 2009-10 school year. Within the scope of this plan, history - social science benchmarks remain to be completed.

Data Director makes district-wide student level benchmark results available to teachers within one week after scanning and scoring. During the course of this plan the district will undertake to shorten this timeline.

Goal 3i.1: The Bellflower Unified School District will effectively utilize technologies that improve stakeholder access to, and dissemination of, student and district records.

Goal 3i.2: The Bellflower Unified School District will continue to develop and improve a technology assisted local assessment system closely linked to state standards.

Objective 3i.1.1: By June 2013 the district will install and operate sufficient Schools Interoperability Framework Zone Integration Servers to link all operational databases utilizing Structured Query Language for complete single entry interoperability.
Year 1 Benchmark: By September 2010 and in all succeeding years, SIF - ZIS will be used to provide all enrolled student users, including new and mid-year enrollees, with individual network log-ins through Microsoft Active Directory.
Year 2 Benchmark: By September 2012 the district will use a SIF - ZIS to provide update automation between Aeries CS, CALPADS and CALTIDES.
Year 3 Benchmark: By July 2013 and in all succeeding years, the district will utilize SIF - ZIS to link all operational databases utilizing Structured Query Language for complete single entry interoperability.

Objective 3i.2.1: By June 2013 the district will complete three years of ongoing improvement of its technology enabled local assessment system closely linked to state standards.
Year 1 Benchmark: By June 2011 the district, its stakeholders, and its partners will complete a comprehensive set of standards based technology assisted benchmark assessments for all core subject areas at all STAR grade levels.
Year 2 Benchmark: By July 2012 the district, its stakeholders, and its partners will reduce the one week gap between the scanning and scoring of benchmark tests and the on-line availability of student level results to less than one week.
Year 3 Benchmark: By June 2013 the district, its stakeholders, and its partners will undertake a comprehensive review and revision of the technology based local benchmark assessment system to improve the usability of the data for classrooms.

Implementation Plan 3i: To meet the student records, assessment, and administrative uses goals above the following actions will be taken according to the specified timelines. Monitoring and evaluation will be performed by the identified individuals using the specified instruments.

Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Acquire and / or sponsor development of SIF - ZIS for Aeries CS and Active Directory	By June 2010	Director of Educational Technology, Network Manager	Director of Educational Technology will oversee cost analysis and feasibility study for expanded SIF - ZIS utilization. Network Manager will issue final specifications for server and software acquisition.
Install, implement and support of SIF - ZIS for Aeries CS and Active Directory	By September 2010	Network Manager, Director of Educational Technology	Network Manager will install and implement server and software and support its use. Director of Educational Technology will monitor and evaluate system performance.
Acquire and / or sponsor development of SIF - ZIS for Aeries CS and CALPADS / CALTIDES	By June 2012	Director of Educational Technology, Network Manager	Director of Educational Technology will oversee cost analysis and feasibility study for expanded SIF - ZIS utilization. Network Manager will issue final specifications for server and software acquisition.
Install, implement and support SIF - ZIS for Aeries CS and CALPADS / CALTIDES	By September 2012	Network Manager, Director of Educational Technology	Network Manager will install and implement server and software and support its use. Director of Educational Technology will monitor and evaluate system performance.
Acquire and / or develop SIF - ZIS for Aeries CS and additional local or remote operational databases utilizing Structured Query Language.	By January 2013	Director of Educational Technology, Network Manager	Director of Educational Technology will oversee cost analysis and feasibility study for expanded SIF - ZIS utilization. Network Manager will issue final specifications for server and software acquisition.
Install, implement and support of SIF - ZIS for Aeries CS and additional local or remote operational databases utilizing Structured Query Language.	By July 2013	Network Manager, Director of Educational Technology	Network Manager will install and implement server and software and support its use. Director of Educational Technology will monitor and evaluate system performance.

Implementation Plan 3i: To meet the student records, assessment, and administrative uses goals above the following actions will be taken according to the specified timelines. Monitoring and evaluation will be performed by the identified individuals using the specified instruments.

Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Develop the benchmark blueprints and complete history-social science BUSD Benchmarks for all STAR tested grade levels and areas of study.	By June 2011	Director of Assessment and Instructional Support Services, Director of Curriculum and Instruction	Director of Assessment and Instructional Support Services and Director of Curriculum and Instruction will collaborate with partners and teachers to develop and provide assessments and monitor program results.
Study, recommend and implement steps to reduce the one week gap between the scanning and scoring of benchmark tests and the on-line availability of student level results to less than one week.	By June 2012	Director of Assessment and Instructional Support Services.	Director of Assessment and Instructional Support Services will develop, and recommend changes to district practices and collaborate with stakeholders to implement available efficiencies.
Review and revise as necessary the technology based local benchmark assessment system	By July 2013	Director of Assessment and Instructional Support Services, Director of Curriculum and Instruction	Director of Assessment and Instructional Support Services and Director of Curriculum and Instruction will collaborate with partners and teachers to revise benchmark assessments to improve instructional data.
Evaluation Instrument(s) - Data To Be Collected: From District purchasing records, evidence of SIF-ZIS acquisitions. From CDE CALPADS and CALTIDES web portals, compliance with data certification windows. From other district, state and federal programs, compliance with new or established data certification windows. From Data Director, evidence of comprehensive benchmark administrations. From benchmark shipment and data posting dates, evidence of reduced days to posting. From partner records and teacher interviews, record of assessment revision and improved classroom usability.			

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.

Parents can access BUSD teachers and administrators in a variety of ways. One of the Bellflower Unified School District's most important values is face-to-face, one-on one, teacher and parent interaction. All teachers have access to telephones.

The district's website (<http://www.busd.k12.ca.us>) contains district information, school accountability report cards, job openings, the district's mission statement, calendars, school site and district contact information, high school newsletters, and information regarding Board

members and district personnel. Links to individual school web pages with direct contact information for site principals can also be found at the district site.

All district personnel have access to an active email account in the district’s domain. The district also supports access to private web mail for adult employees. Some teachers maintain individual teacher websites outside of the district domain. The district considers it a priority to protect teacher privacy, so teacher email addresses are not posted on the district website. Staff e-mail addresses are, however, provided to parents at the staff member’s discretion.

Ahead of the timelines suggested in the districts’ 2007-10 Technology Plan, and in response to stakeholder requests, parent access to Aeries Browser Interface (ABI) was enabled for the district’s high schools in late September, 2009. The BUSD implementation of the parent web link to ABI allows authorized parents secure, private, real time access to their student’s demographic data, transcript, class schedule, standardized test scores, contact information, graduation status and teacher’s grade book.

In order to develop consistent practices in use of district/school websites, the district is engaged in long-term planning for expanding district/school web utilization by enhancing its ongoing use of Aeries Browser Interface and telecommunications based solutions like School Messenger and Edu-Link. Additionally, the district has an interest finding a supportable structure to encourage the posting of teacher developed and maintained websites inside the district domain.

With a strong value for one-on-one parent/teacher interaction and a priority that teacher time be spent most valuably teaching in the classroom, the district is currently satisfied with its use of technology for parent-to-school interaction.

Goal 3j: The Bellflower Unified School District will continue to be accessible to parents while using the most effective tools for its needs.

Objective 3j.1: June 2013 the district will expand the use of telecommunication based parent information and notification systems
Year 1 Benchmark: By September 2010 the district will identify a preferred school to home telecommunications solution.
Year 2 Benchmark: By September 2012 Select a preferred home to school telecommunications solution vendor and begin required implementation activities
Year 3 Benchmark: By July 2013 The district will fully implement a district supported home to school telecommunications solution.

Objective 3j.2: June 2013 the district will evaluate the expansion of ABI parent access to elementary schools and take appropriate action.
Year 1 Benchmark: By July 2011 the district administration will undertake to assess the teacher and stakeholder benefits of expansion of ABI parent access to the elementary level and perform a cost analysis of any proposed expansion of services.
Year 2 Benchmark: By July 2012, the district will pilot implementation of ABI parent access at one or more elementary schools.
Year 3 Benchmark: By July 2013 the district will implement ABI parent access at the elementary level.

Objective 3j.3: June 2013 the district will study, evaluate and plan, for support of school and teacher developed web sites inside the district domain
Year 1 Benchmark: By July 2011 the district administration will undertake to assess the teacher and stakeholder benefits of the expansion school and / or teacher developed web sites inside the district domain, and perform a cost analysis of any proposed expansion of services.
Year 2 Benchmark: By July 2012, the district will pilot the expansion school and / or teacher developed web sites inside the district domain for a selected group of schools and/or teachers.
Year 3 Benchmark: By July 2013 the district will implement an expansion school and / or teacher developed web sites inside the district domain for all schools and/or teachers.

Implementation Plan 3j: To meet the home to school communication goals above the following actions will be taken according to the specified timelines. Monitoring and evaluation will be performed by the identified individuals using the specified instruments.			
Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Study, assess and select a school to home telecommunications solution that is the best fit for the district's needs.	By July 2012	Site Principals, Director of Assessment and Instructional Support Services, Director of Educational Technology Director of Curriculum and Instruction	At direction of the, the Site Principals, the Director of Educational Technology, and the Network Manager in collaboration with other stakeholders, will assess available solutions and approve a selection.
Acquire, install, train, and implement a school to home telecommunications system for the district	By July 2013	Director of Educational Technology, Network Manager, Director of Assessment and Instructional Support Services	Director of Educational Technology will manage acquisition. Network Manager will install. Director of Assessment and Instructional Support Services will monitor training. All stakeholders including teaches will assess implementation effectiveness.
Assess benefits and costs of expansion of Aeries Browser Interface (ABI) for use in the district's elementary schools.	By July 2011	Assistant Superintendent for Instructional Personnel and Programs, Director of Assessment and Instructional Support Services	Assistant Superintendent for Instructional Personnel and Programs, Director of Assessment and Instructional Support Services in collaboration with other stakeholders including teachers, will assess benefits and operational implications of expansion of Aeries Browser Interface (ABI) for use in the district's elementary schools..

Implementation Plan 3j: To meet the home to school communication goals above the following actions will be taken according to the specified timelines. Monitoring and evaluation will be performed by the identified individuals using the specified instruments.

Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Implement Aeries Browser Interface (ABI) for use in the district's elementary schools.	By July 2013	Site stakeholders, Director of Educational Technology, Network Manager.	Director of Educational Technology will manage acquisition. Network Manager will install. Director of Assessment and Instructional Support Services will monitor training. All stakeholders will assess implementation effectiveness.
Assess benefits and costs of the expansion school and / or teacher developed web sites inside the district domain, and perform a cost analysis of any proposed expansion of services	By July 2012	Director of Educational Technology	Director of Educational Technology will conduct cost and benefit analysis and propose any necessary enhancement of support services.
Install necessary hardware and software infrastructure for support of school and / or teacher developed web sites inside the district domain and train any teachers selected for pilot.	By September 2012	Network Manager, Director of Educational Technology	Network Manager will install infrastructure. Director of Educational Technology will direct selection and training of teachers for pilot
Implement school and / or teacher developed web sites inside the district domain for district - wide use	By July 2013	Director of Assessment and Instructional Support Services, Director of Educational Technology Director of Curriculum and Instruction	Director of Assessment and Instructional Support Services, Director of Educational Technology Director of Curriculum and Instruction will collaborate on the training of teachers and other stakeholders. Director of Educational Technology will supervise support of the district's resource.
Evaluation Instrument(s) - Data To Be Collected: From partners, stakeholders and state and CEPTA online resources product recommendations for school to home telecommunications solutions and solutions for web publishing for sites and teachers. From high schools and stakeholder groups, anecdotal and narrative data on ABI Parent Portal implementation. From potential vendors cost information. From stakeholder and teacher interviews record of improved home to school communication over internet and telecommunications.			

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.

Individual(s) Responsible	Responsibilities
Director of Assessment and Instructional Support Services	Monitor elementary technology grades, CA High School Exit Exam results, API growth targets, and grade level standards for technology. Oversee expansion of benchmark tests.
Director of Educational Technology	Oversee cost analysis / feasibility study for expanded Aeries functionalities. Develop plan for need expansion(s) of district/school web utilization. Evaluate and select software components.
Network Manager	Install district selected software and hardware and supervise support of same
Director of Curriculum and Instruction	Oversee selection of curriculum, provide materials and monitor teacher training for internet safety and citizenship curriculum.
Assistant Superintendent for Instructional Personnel and Programs	Recommend expansion of Aeries Browser Interface to the elementary level.
Site Principals and teachers	Monitor middle and high school student work samples for technology skills and graduating high school multimedia projects Monitor elementary technology grades. Monitor delivery and evaluate effectiveness of internet safety and citizenship curriculum.

4. Professional Development

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

In order for students to master technology and be able to use it in alignment with curriculum goals, all teachers at the Bellflower Unified School District will need to be provided with the necessary training and support to learn and to utilize technology in the classroom.

Teachers and administrators are requested to complete the Ed Tech Profile Survey every year. The survey measures general computer knowledge and skills, word processing, email, Internet search and retrieval, publishing, databases, spreadsheets, presentation software, and instructional technology.

Our district has been working with certificated staff proficiencies for several years through the CTAP region and technology trainings that have been offered by the district. The data shows that as of September 2009, 95% of teachers and administrators in the district have completed the *EdTechProfile* (formerly the *CTAP2 Online Assessment*).

Based on the latest sample of respondents, the majority of self-reporting BUSD certificated staff members possess technology application proficiencies that exceed the beginning level. Certificated personnel are most proficient at word processing skills. In spite of ongoing, and district help desk supported, implementations of Aeries Browser Interface (ABI) and Data Director, the smallest number of respondents report themselves proficient with database software.

The chart below scores and summarizes the district's 2008-09 *EdTechProfile* results and compares those results to the results reported in 20005-06.

Assessment Levels:			
0.00 - 1.00 Beginning or Introductory Level	1.00 - 2.00 Intermediate Level		2.00 - 3.00 Proficient Level
Proficiency Sub-category	2008-09 Number of participants	2005-06 Proficiency Score	2008-09 Proficiency Score
General computer knowledge and skills	599	2.15	2.14
Internet Skills	598	1.85	2.04
E-mail skills	595	2.10	2.10
Word processing skills	601	2.30	2.71

Assessment Levels:			
0.00 - 1.00 Beginning or Introductory Level	1.00 - 2.00 Intermediate Level		2.00 - 3.00 Proficient Level
Proficiency Sub-category	2008-09 Number of participants	2005-06 Proficiency Score	2008-09 Proficiency Score
Presentation software skills	601	1.60	1.70
Spreadsheet software skills	601	1.55	1.57
Database software skills	601	1.30	1.32

The EdTech Profile Survey assessment tool will be used for district planning of professional development activities. It is critical that all teachers and administrators take the survey.

All teachers in the district additionally take an annual Staff Development Survey, which includes a technology section that asks them to prioritize their technology professional development needs.

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

In order to successfully implement this plan to meet the professional development goals of its adult learners, the district will need to, as funding permits:

- Develop training opportunities to support the implementation of technology including training specific to new or added features of district adopted software including Aeries Browser Interface and Data Director.
- Offer varying, flexible scheduling options
- Offer stipends/compensation for trainers, assistants and trainees
- Offer equipment or software incentives, when available
- Purchase equipment, materials, food/refreshments, and other incentives
- Allow time for curriculum development
- Incorporate components of technology training into other staff development activities
- Offer opportunities for online training and other distance learning programs
- Offer opportunities for video training
- Offer AB825 days focused on technology implementation.
- Schedule training during summer months and Saturdays
- Utilize SEETC consortium for cross-district training
- Utilize LACOE for training

The following is the district goal describing expectations of certificated progress in the acquisition of technical proficiency, internet safety knowledge and the ethical use of technology.

Goal 4b1: The Bellflower Unified School District will assess and monitor staff technology proficiencies, internet safety, and knowledge of ethical use of electronic learning resources.

Objective 4b.1.1: By August 2011 and in all succeeding years, all teachers and administrators will complete the EdTechProfile Survey to report current technology skill data
Year 1 Benchmark: By August 2010 98% of all teachers and administrators will complete the EdTechProfile Survey to establish current data of technology skills.
Year 2 Benchmark: By August 2011 100% of all teachers and administrators will complete the EdTechProfile Survey to establish current data of technology skills.
Year 3 Benchmark: By August 2012 and in each succeeding year 100% of all teachers and administrators will complete the EdTechProfile Survey to establish current data of technology skills.

Objective 4b.1.2: By August 2010 and in all succeeding years, all teachers and administrators will receive direct instruction on internet safety and ethical use of electronic learning resources utilizing their preferred adult learning modality, as funding permits.
Year 1 Benchmark: By August 2010 and in each succeeding year, all teachers and administrators will receive direct instruction on internet safety and ethical use of electronic learning resources
Year 2 Benchmark: : By August 2011 and in each succeeding year, all teachers and administrators will receive direct instruction on internet safety and ethical use of electronic learning resources
Year 3 Benchmark: : By August 2012 and in each succeeding year, all teachers and administrators will receive direct instruction on internet safety and ethical use of electronic learning resources

Objective 4b.1.3: By July 2010, and in all succeeding years, certificated staff will annually update their individual Ed Tech Profile Survey.
Year 1 Benchmark: By July 2010 all surveys are updated.
Year 2 Benchmark: By July 2011 all surveys are updated.
Year 3 Benchmark: By July 2012 all surveys are updated.

Objective 4b.1.4: By August 2010 and in succeeding years, the district will review the results of the EdTechProfile Survey and plan training offerings according to those results as funding permits.
Year 1 Benchmark: By September 2010 and in each succeeding year profile results are received, funding review is completed, and training is planned and made available.
Year 2 Benchmark: By September 2011 and in each succeeding year profile results are received, funding review is completed, and training is planned and made available.
Year 3 Benchmark: By September 2012 and in each succeeding year profile results are received, funding review is completed, and training is planned and made available.

Objective 4b.1.5: By August 2011, the district will assess appropriate technology skills for classified staff to determine training needs and repeat the assessment in succeeding years as funding permits.
Year 1 Benchmark: By August 2010 an assessment is developed.
Year 2 Benchmark: By August 2011 assessment is completed.
Year 3 Benchmark: By September 2012 training begins.

Implementation Plan: To meet the district staff development goal for assessment and monitoring of staff technology proficiencies, internet safety, and knowledge of ethical use of electronic learning resources goal above, the following actions will be taken according to the specified timelines. Monitoring and evaluation will be performed by the indentified individuals using the specified instruments.

Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Monitor percentage of teachers and administrators who complete the EdTech Profile Survey	July 2010 and annually thereafter	Assistant. Superintendent of Instructional Personnel and Programs; Site Principals	Assistant. Superintendent of Instructional Personnel and Programs will oversee percentage of completion of survey by administrators; Site Principals will oversee percentage of completion by teachers.
Train teachers and administrators on internet safety and ethical use of electronic learning resources utilizing their preferred adult learning modality	July 2010 and annually thereafter	Assistant Superintendent of Instructional Personnel and Programs, Director of Curriculum and Instruction, Director of Educational Technology, Site Principals	Assistant Superintendent of Instructional Personnel and Programs will oversee development of training; Director of Curriculum and Instruction and Director of Educational Technology will develop and implement training plan; Teachers will train. Site Principal will monitor training of staff.
Update Ed Tech Profile surveys	July 2010 and annually thereafter	Assistant. Superintendent of Instructional Personnel and Programs; Site Principals	Teachers will update profile. Assistant. Superintendent of Instructional Personnel and Programs will oversee updating of plan by administrators; Site Principals will oversee updating by teachers
Plan and execute trainings for teachers and administrators based on EdTech Profile Survey results	July 2010 and annually thereafter	Teachers for training. Director of Curriculum and Instruction, Director of Assessment and Instructional Support Services, Director of Educational Technology, Site Principals	Site Principals will monitor staff training needs. Teachers will train, Director of Curriculum and Instruction, Director of Assessment and Instructional Support Services, Director of Educational Technology will monitor delivery and completion of trainings.

Implementation Plan: To meet the district staff development goal for assessment and monitoring of staff technology proficiencies, internet safety, and knowledge of ethical use of electronic learning resources goal above, the following actions will be taken according to the specified timelines. Monitoring and evaluation will be performed by the indentified individuals using the specified instruments.

Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Plan and execute trainings for teachers, administrators and staff based on ongoing district instructional priorities, including use of district adopted data warehousing and student information systems	July 2010 and annually thereafter	Director of Curriculum and Instruction, Director of Assessment and Instructional Support Services, Director of Educational Technology, Site Principals	Site Principals will monitor staff training needs. Teachers will train. Director of Curriculum and Instruction, Director of Assessment and Instructional Support Services, Director of Educational Technology will monitor delivery and completion of trainings.
Perform classified staff technology assessment to determine training needs	2013	Associate Superintendent, Site Principals	Associate Superintendent oversees classified staff assessment in district; Site Principals will oversee classified staff assessment at school site.
Evaluation Instrument(s) - Data To Be Collected: Ed Tech Profiles; Classified staff assessment; training plans, materials and sign-in sheets.			

The following is the district goal describing district expectations for the acquisition of skills that will allow teachers to meaningfully utilize technology in the curriculum.

Goal 4b2: All Bellflower Unified School District teachers will integrate technology within their curriculum to meet grade level standards.

This table outlines training targets for teacher proficiencies in using technology to improve teaching and learning through the integration of technology into the curriculum. As funding permits, training programs to improve staff technology use will be offered each year. All trainings will correspond with professional development needs and preferred adult learning modalities identified in the yearly EdTechProfile Survey.

Personal Proficiency Training	Description of Staff Uses of Technology	Description of Staff Activities to Assist Students
Basic Skills	Starts up and shuts down computer and peripherals; uses a mouse; inserts and ejects flash drives, CD-ROMs, etc.; uses software from disk, hard drive, CD-ROM; creates, name/renames folders and files; names, saves, saves as, retrieves, and revises a document; prints a document. Touch types on a keyboard.	Assists students with basic computer skills.

Personal Proficiency Training	Description of Staff Uses of Technology	Description of Staff Activities to Assist Students
Troubleshooting	Troubleshoots basic hardware, software, and printing problems before accessing the appropriate level of support; checks cables for proper attachment; solves simple printer problems with directly connected printer.	Assist students in basic computer skills, including set-up, start-up, log-on, password, and program use.
Word Processing	Copies, pastes text within and between documents; uses styles to change the appearance of the document; uses borders, bullets, numbers, page breaks, headers, and footers; creates tables; understands elements of basic design (e.g. white space, page layout, etc.); incorporates digital images from external sources.	Creates enhanced word processed documents for classroom use; designs lessons that utilize word processing as part of the activity; develops student assignments that embed elements of effective design. Develops newsletters, lesson plans, and classroom assignment materials.
Messaging/ Electronic mail	Uses email as a tool to interact with and provide information to students, parents, and other community members. Opens attachments.	Designs curricular lessons, which utilize email; selects and implements appropriate email tools to support teaching and learning; incorporates etiquette in instruction.
Internet Search and Retrieval	Uses advanced search features to conduct online research; understands Boolean logic; conducts multiple search strategies to locate and validate information; uses information literacy skills and incorporates strategies within lessons. Bookmarks sites. Understands basic navigational tools.	Selects and implements Internet resources appropriately into lesson design; selects and uses effective classroom management techniques. Incorporates information literacy issues such as Internet citations, copyright and plagiarism, and site bibliographies. Virtual reality activities.
Multimedia Presentation	Creates and presents multimedia presentation using PowerPoint or other presentation software: incorporates sound, uses available tools, imports graphics, and incorporates hypertext links. Connects, configures and troubleshoots peripheral devices for presentation.	Designs curricular lessons, which utilize multimedia, to enhance learning outcomes; assists students in the use of presentation software and peripherals. Use in presentations for parent conferences.
Subject Specific Software	Learns effective use of courseware, including probes and other content specific technology. Aligns use with curriculum.	Designs curricular lessons, which integrate courseware, including probes and other content specific technology.
Spreadsheet	Creates and modifies spreadsheets: imports/ exports charts and data, aligns and rotates text and numbers, creates charts, labels graphs appropriately. Maintains student records via spreadsheet or grade book.	Designs curricular lessons requiring the use of spreadsheets and charts; creates appropriate charts for content lessons.

Objective 4b.2.1: By June 2013, and in all succeeding years, 90% of all teachers will self report as possessing personal proficiency in basic computer skills, including basic troubleshooting.
Year 1 Benchmark: By June 2011, 75% of teachers self-report as proficient.
Year 2 Benchmark: By June 2012, and in each succeeding year, 90% of teachers self-report as proficient.
Year 3 Benchmark: In June 2013, and in each succeeding year, 90% of teachers self-report as proficient.

Objective 4b.2.2: By June 2013, and in all succeeding years, 90% of all teachers will self report as proficient in the skills necessary to instruct students in the District’s Technology Grade Level Standards as defined by the Technology and Information Literacy rubric.
Year 1 Benchmark: By June 2011, 50% of teachers self-report as proficient.
Year 2 Benchmark: By June 2012, 75% of teachers self-report as proficient.
Year 3 Benchmark: In June 2013, and in each succeeding year, 90% of teachers self-report as proficient.

Implementation Plan: To meet the district staff development goal for classroom technology integration the following actions will be taken according to the specified timelines. Monitoring and evaluation will be performed by the identified individuals using the specified instruments.			
Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Monitor percentage of teachers proficient in basic skills, including basic troubleshooting.	June 2011 and annually thereafter	Site principals	Site principals will monitor percentage of teachers proficient in basic skills
Monitor percentage of teachers proficient in the skills necessary to instruct students in the District’s Technology Grade Level Standards	June 2011 and annually thereafter	Site principals	Site principals will monitor percentage of teachers proficient in the skills necessary to instruct students in the District’s Technology Grade Level Standards
Evaluation Instrument(s) - Data To Be Collected: Ed Tech profile results data.			

The following goal describes what is expected of administrators to manage and lead their school sites in using technology.

The state’s Principal Training Act will provide training for district and site leadership in the following areas:

- School financial and personnel management
- Core academic content standards
- Curriculum Frameworks and instructional materials aligned to the state academic standards
- The use of student assessment instruments and specific strategies to master the use of STAR assessment data
- School management technology to improve student performance

- Instructional leadership and management strategies regarding the use of instructional technology to improve student performance

Goal 4b3: In the area of technology, all Bellflower Unified School District administrators will be effective managers and instructional leaders at their school sites.

Objective 4b.3.1: By June 2013, All BUSD administrators will self report as attaining at least an intermediate proficiency level in Internet and e-mail skills and word processing, presentation, and spreadsheet software.
Year 1 Benchmark: By July 2010 75% of all administrators will report as intermediate or above in all skills.
Year 2 Benchmark: By June 2011 90% of all administrators will report as intermediate or above in all skills.
Year 3 Benchmark: By June 2012 all administrators will report as intermediate or above in all skills.

Objective 4b.3.2: By July 2010, and in all succeeding years, administrators will be able to use the six areas mandated and funded by the Governor’s Principal Training Act, established by Assembly Bill 75.
Year 1 Benchmark: By July, 2010, all school site administrators will be able to use the six areas mandated and funded by the Governor’s Principal Training Act, established by Assembly Bill 75.
Year 2 Benchmark: By June, 2011, all school site administrators will continue to use the six areas mandated and funded by the Governor’s Principal Training Act, established by Assembly Bill 75.
Year 3 Benchmark: : By June, 2012, all school site administrators will continue to use the six areas mandated and funded by the Governor’s Principal Training Act, established by Assembly Bill 75.

Implementation Plan: To meet the district staff development goal for administrative staff development the following actions will be taken according to the specified timelines. Monitoring and evaluation will be performed by the identified individuals using the specified instruments			
Activities	Timeline	Person(s) Responsible	Monitoring & Evaluation
Monitor technology proficiency levels of administrators as reported as aggregated by the EdTechProfile.	August 2010 and ongoing	Assistant Superintendent of Instructional Personnel and Programs	Assistant Superintendent of Instructional Personnel and Programs will oversee administrator technology proficiencies and leadership skills.
Support and monitor training as provided in Module 3 of AB430 Principal Training Act.	August 2010 and ongoing	Assistant Superintendent of Instructional Personnel and Programs	Assistant Superintendent of Instructional Personnel and Programs will oversee administrator technology proficiencies and leadership skills.
Evaluation Instrument(s) - Data To Be Collected: Ed Tech profile results data			

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.

Individual(s) Responsible	Roles and Responsibilities
Site Principals	<ul style="list-style-type: none"> •Oversee EdTechProfile Survey completion by all teachers •Oversee classified staff assessment at school site •Monitor teacher technology proficiencies •Monitor teacher training in internet safety and ethical use
Asst. Superintendent of Instructional Personnel and Programs	<ul style="list-style-type: none"> •Oversee EdTechProfile Survey completion by all administrators •Monitor administrator technology proficiencies and leadership skills
Director of Curriculum and Instruction	<ul style="list-style-type: none"> •Develop and oversee district staff development in all program areas
Director of Assessment and Instructional Support Services	<ul style="list-style-type: none"> •Collaborate in development and monitoring of district staff development areas concerning assessment.
Director of Educational Technology	<ul style="list-style-type: none"> •Collaborate in development and monitoring of district staff development areas concerning technology.
Assoc. Superintendent of Business Services	<ul style="list-style-type: none"> •Oversee classified staff assessment

5. Infrastructure, Hardware, Technical Support, and Software

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

Existing Hardware: The following is a break down of each school site's existing computers that will support the curriculum and professional development components of this plan.

Location	4 years or older	Between 3-4 years	Between 2-3 years	Between 1-2 years	Less than 1 year	TOTAL (by site)
Baxter Elementary	76	22	14	46	0	158
Bellflower USD Intensive Learning Center	56	49	6	10	36	157
Foster Elementary	149	0	22	8	0	179
Jefferson Elementary	75	35	8	11	24	153
Las Flores Elementary	9	20	2	3	20	54
Lindstrom Elementary	108	40	12	12	11	183
Pyle Elementary	130	40	1	16	19	206
Ramona Elementary	76	16	57	31	20	200
Washington Elementary	36	58	54	38	82	268
Williams Elementary	45	40	56	0	1	142
Woodruff Elementary	104	0	60	15	26	205
Bellflower Alternative Education Ctr.	13	0	0	0	0	13
Bellflower High	510	23	5	10	109	657
Mayfair High	250	41	64	53	237	645
Somerset Continuation High	103	0	0	25	0	128
TOTAL (by age)	1740	384	361	278	585	3348

Non-instructional district computers include 235 administrative computers used at school sites and district departments. In total, there are approximately 3,583 computers currently in the district.

Current Hardware Standards

The Bellflower Unified School District has set purchasing standards for computers, printers and networking equipment. Standards are also being recommended for projectors, scanners, and other peripherals. The purchasing standards and recommendations are updated periodically to align with emerging and changing technologies. The Department of Educational Technology acts as a resource for purchasing advice for all school sites.

Donated Computers

It is district policy that the Department of Educational Technology evaluates all proposed computer donations in order to determine that units are useful and cost effective. Any school site or department receiving donated equipment must purchase the appropriate software licenses. Any existing software must be removed and only District owned software will be installed.

Existing Internet Access: Bellflower Unified School District currently has in place a Fiber optic and T-1 wide area network (WAN). The district's point of connection to the internet cloud is located at the Alondra Annex. The Los Angeles County Office of Education, the district's ISP, is connected to the Alondra Annex via 100MB point to point TLS data circuit. At this time there exists a fiber optic line from all but one site to Alondra. The remaining site employs a point-to-point T-1 data line. All WAN data lines are connected to sites with Cisco routers at each end. The district's Internet connection is equipped with firewalls, content filters, and URL filters. The firewall consists of a Fortigate appliance.

The district is very proactive in regards to Internet safety, privacy protection, and compliance of the Child Internet Protection Act (C.I.P.A.). In addition to URL filtering, additional electronic monitoring is performed using Total Traffic Control.

The standard for networking equipment for LANs and WANs is Cisco products (switches and routers). Protocols currently supported are Appletalk, IP, IPX, and SPX. Network operating systems currently include Mac OSX, LINUX, and MS 2003, with MS 2003 becoming the standard and all others used as needed for specific functions.

A typical Main Distribution Frames (MDF) at each location is placed in physically safe environment. It consists of rack mounted or cabinet secured Dell or Apple servers, Cisco switches, uninterruptible power supplies, an LTO tape backup, patch panels for copper and fiber optics, domain controllers, and Cisco routers. The typical Intermediate Distribution Frame (IDF) will follow suit, with the appropriate equipment of like make and model and located as may best suit network connectivity and security.

All BUSD classrooms, with the exception of computer labs, have two to five network drops. All network drops connect to the internet upon configuration. Since 2005, all new classrooms have five drops installed at construction. Computer labs are installed at one drop per workstation. Lab sizes range from 15 stations to 42 stations.

Existing Electronic Learning Resources: The district currently has the following current software purchasing standards:

Operating Systems:	Windows XP or MAC OS 10.x
Internet Browser:	Internet Explorer
Productivity Tools:	Microsoft Office 2003
Email:	Microsoft Outlook (MS Exchange)
Anti-virus protection:	Sophos Anti-virus
Library systems:	Winnebego/Spectrum

Software purchasing standards are updated periodically to keep pace with emerging technologies.

Currently, there are no required district standards for instructional software programs; however the Department of Educational Technology acts as a resource to all schools for information on the quality and alignment of software to standards. In order to research and select appropriate learning tools, the district uses the California Learning Resource Network (CLRN) and the California Technology Assistance Program (CTAP). The district also finds teacher review of different software programs to be essential to determining recommendations for other teachers and schools within the district.

Existing Technical Support: Technical support at Bellflower Unified School District comes from multiple sources including manufacturer warranties, district technicians and site level technicians.

Technical support at the district level is performed by staff in the Department of Educational Technology. The Department is run by the Director of Educational Technology who assists in the planning, development and implementation of K-12 instructional technology programs, oversees the administrative student information system, manages technology support staff, provides leadership and support to technology committees, uses technical expertise to assist staff and administration in developing solutions to hardware, software, network, and user-related problems, monitors C.I.P.A. compliance, the District's Acceptable Use Policy, information security and various grant requirements, and makes recommendations concerning the development, acquisition, and utilization of software, hardware, networks and emerging technologies. A small portion of the Director's time (2%) is spent on classroom desktop support.

The district also employs a full-time Network Administrator who assists in the organization and direction of technical and resource services, provides installation, operation, repair and diagnosis of networks, supervises outside contractors, configures and maintains hardware and software infrastructure, provides user support assistance, administers large LAN/WAN environment and communicates with vendors to research pricing. The Network Administrator spends the majority of his time performing network support and managing administrative software and programs. A small percentage (10%) of time is spent supporting classroom desktops.

There are three full-time Computer Repair Technicians on staff at the district who perform the majority of classroom desktop support including: assisting students and staff in the use of instructional technology, troubleshooting problems, repairing hardware, software and network components, installing and configuring desktop and networking equipment, communicating with vendors to research pricing, maintaining records and produces reports relating to work orders and repair, and tracking, inspecting and initiating warranty repairs. The majority (70%) of the Technicians' time is spent supporting classroom desktops. Their remaining time is split between administrative desktop support (15%), network support (10%), and record keeping (5%).

Additional support from the district level includes a Data Technician who manages the student information system, a Technology Technician who manages technology grants, professional development, software licensing, Data Director, the internal website and classroom desktop support (5%), and a Clerical Assistant who performs clerical duties, department phone support and some one-on-one training.

School sites also employ staff to manage technical support at the site level. There are six school sites that have classified, full-time or part-time Site Technology Technicians who assist students and staff on the use of technology, support lab use, perform basic troubleshooting on computer hardware and software, initiate work orders, perform general repairs and maintenance on computers and video equipment, and coordinate inventory records. These Site Technology Technicians spend 60% of their time performing hands-on assistance in the use and teaching of technology, 25% of their time performing classroom desktop support, 10% of their time performing administrative desktop support, and 5% of their time record keeping.

All elementary schools in the district utilize Technology Facilitators. These individuals are teachers who receive stipends to provide 2.5 hours per week of non-instructional time for the support of technology. These Facilitators provide leadership and support for instructional technology use and lead staff development for the effective use of software. Activities include planning, coordination, evaluation, basic troubleshooting, and assistance with prioritization of repair. The Facilitator works closely with the school principal and staff to meet school technology needs. Because of the very local nature of the needs that these individuals are required to meet, it is difficult to generalize about their activities on an hourly basis. However, one Technology Facilitator at a school that also employs a Site Technology Technician spends 20% of their 2.5 hours per week performing classroom desktop support. Technology Facilitators at schools without a Site Technology Technician typically spend 40% of their 2.5 hours per week performing classroom desktop support.

Computer-to-Technical Support Staff Person Ratio

In order to provide a measurement to set objectives for future technical support needs, a computer-to-classroom desktop support staff person ratio has been generated. Several of the staff members who support technology at the site and district level perform multiple functions. As a result, a percentage of their time will be used to calculate the ratio in full-time equivalent (FTE) personnel units.

The following chart identifies what percentage of time each technical support person is spending performing desktop support for classrooms:

Position	% of time used for desktop support	FTE units in desktop support
Director of Educational Technology	2% desktop support	.02 FTE
Network Administrator	10% desktop support	.10 FTE
Computer Repair Technicians	70% desktop support (3 full-time)	2.1 FTE
Technology Technician	5% desktop support	.05 FTE
Site Technology Technician	25% desktop support (4 full-time, 2 part-time)	1.125 FTE
Site Technology Facilitators	hours/week (7 at 40% of 2.5 hours 4 at 20% of 2.5 hours)	.23 FTE
TOTAL		~3.625 FTE

Based on this 3.625 FTE for classroom desktop support and a count of 3,348 student computers, the computer-to-technical support staff person ratio is 924:1.

Response Time

The district currently schedules Computer Repair Technicians to visit school sites 3.5 days per month which is approximately 1 full day per week. Typically, teachers will have computers in their classrooms repaired on the scheduled day that the Technician is on their school site. Emergency technical problems are handled on a case-by-case basis where response time can be immediate if necessary. Typically, the response time is directly related to the prioritization of the technical problem.

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

Hardware Needed:

Student Computer Needs

The following chart breaks down the number of new computers needed at each school site in order to reach recommended student-to-computer ratios of 5:1 at the elementary level and 4.75:1 at the middle and high school levels.

Location	Current Ratio	# of new computers need to meet recommended ratio
Baxter Elementary	3.5:1	0
Bellflower USD Intensive Learning Center	4.5:1	0
Foster Elementary	4.0:1	0
Jefferson Elementary	4.3:1	0
Las Flores Elementary	3.9:1	0
Lindstrom Elementary	4.5:1	0
Pyle Elementary	2.9:1	0
Ramona Elementary	4.7:1	0
Washington Elementary	3.2:1	0
Williams Elementary	3.9:1	0
Woodruff Elementary	3.7:1	0
Bellflower Alternative Education Ctr.	3.8:1	37
Bellflower High	4.8:1	17
Mayfair High	5.6:1	116
Somerset Continuation High	2.9:1	55

Location	Current Ratio	# of new computers need to meet recommended ratio
Total		225

The current student to multimedia Internet accessible computer ratios at several elementary schools and the high schools are satisfactory. However, the district does wish to decrease certain elementary and middle school (7/8) ratios to give equal access to all students. With 3,348 student computers currently in the district, and a five (5) year obsolescence policy, the district also has an ongoing need for replacement computers. (See Section 6c for details on the district's obsolescence policy.)

Staff Computer Needs

Currently teachers have access to technology either through the use of teacher designated computers or through the sharing of student computers in their classrooms, labs, or library media centers. As expectations for technology use in the classroom grow, and as teachers become more advanced in their technology skills, there may be a growing need for teachers to have access to computers dedicated to teacher use. The district will need to monitor current teacher use and assess the need for new teacher designated computers.

Peripheral Needs

In order to use computer technology for effective teaching and learning, peripheral equipment must also be utilized. The district has determined a need for additional LCD projectors, digital televisions, laser printers, digital cameras and scanners. The district highly recommends the use of laser printers over ink jet printers to minimize the long-term cost of ink replacement and maintenance. The following chart breaks down the estimated need for peripheral equipment

	All Schools 11 elementary schools 2 middle/high schools 1 continuation 1 alternative
	Goal
LCD Projectors for elementary schools	1 per lab 2 per site for check out
LCD Projectors for high schools	1 per lab 1 per building wing for check out
Digital television monitors with mounting	1 per classroom
Laser Printers (High-end*)	1 per lab
Laser Printers (Low-end*)	1 per classroom
Digital Cameras	1 per site
Scanners	1 per lab

* A high-end printer is comparable to a Hewlett Packard 4000 series printer. A lower-end printer is comparable to a Hewlett Packard 2000 series printer.

Teachers and stakeholders have also expressed a desire for the district to adopt purchasing standards for interactive white boards and electronic student response systems with the intention of broadening their use district wide. Pilot systems are currently in experimental use in several settings.

Electronic Learning Resources Needed:

Without hindering the autonomy of schools to select software programs to meet their needs, the district needs to monitor software purchasing to ensure that programs are safe for the network, aligned to standards, and licensed properly. The current Microsoft license prohibits the loading of software to a unit from unauthorized users. Currently, in order to install a program, a district technician must perform the process. The district needs to develop long-term procedures to manage new software installations that are efficient for schools while maintaining proper network safety, standards alignment, and licensing.

Networking and Telecommunications Infrastructure Needed:

Since 2005 it has been the district's practice to adequately wire all new instructional environments for data access. See section 5a.

Additional needs include bringing all schools up to networking equipment standards. Currently, a variety of legacy hubs and switches are still in use. It is the district's intention to phase out this equipment through application of obsolescence policies, purchasing replacement procedures and network upgrades. All hardwired LANs will need to be a minimum of Ethernet gigabit to the desktop with CAT 6 horizontal wiring and fiber backbones utilizing gigabit or better switching technologies. Additionally, hardwired networks will minimally include VLAN technologies and power over Ethernet in support of IP telephony. In support of cost containment and improved voice communication it is the district's intention to employ IP telephony district wide.

Currently, the district has all but two of its schools wired to the Alondra Annex via Verizon fiber TLS Ethernet connections. Connection speeds are 10 Megabits to 100 Megabits depending on school population and traffic needs. The remaining two schools are connected via copper T-1 data circuits. To speed and equalize data access for all of its sites, the district needs to deploy a leased network of gigabit fiber optic lines connecting all district sites.

Wireless networking may be utilized when appropriate and will conform to industry standards.

Physical Plant Modifications Needed:

All schools have sufficient power for their current use. However, as additional systems are installed, electrical capacity could become a problem. Additionally, there are several classrooms with limited electrical outlets, causing limitations on the physical placement of computers within these classrooms. Upgrades are a part of school modernization plans.

Physical space for new technology placements within classrooms and computer labs will become a challenge as the computer inventory of the district grows. The district recommends that schools

utilize space saving furniture, computer carts, and wireless technology (where feasible) to conserve space.

Technical Support Needed:

Based on the curriculum and professional development components of this plan, the district expects teachers to use technology for professional productivity and classroom instruction; administrators to use technology for school management, research and analysis; and students to use technology for communication, research and personal productivity. In order to manage these expectations, the technology that exists must be reliable. Without timely technical support, teachers, administrators and students will be hesitant to depend on technology and costly investments in computers and infrastructure will be underutilized.

The district has built its overall student computer count to 3,348 in the last few years by purchasing computer hardware through technology grants. The current technical support resources in the district are not adequate to meet the needs of teachers, administrators and students. This is due to the rapidly growing number of computers to service, an increase in use by students and teachers, as well as greater complexity in the management of classroom desktops due to licensing limitations. In order to address the need for additional support, a current ratio of 924:1 computer-to-classroom desktop support staff person has been generated to provide a measurement tool. (A breakdown of this ratio can be found in Section 5a.)

The district currently provides approximately one (1) full day per week/per school of Computer Repair Technician time. The district would like to increase high level Computer Repair Technician support to two (2) full days per week/per school in order to meet the growing demand for timely support. An additional equivalent of three (3) Computer Repair Technicians will be needed to meet this objective. With this recommendation, inclusive of the recommended 231 computers addressed in *Student Computer Needs* above, the ratio goal would be 575:1.

The escalation process for technical emergencies - technical problems that cannot be scheduled weekly need to be streamlined. The district would like to develop a process that quickly identifies and prioritizes technical problems to facilitate a swift response. Additionally, the district would like to improve the current tracking system for technical problems in order to better monitor troubleshooting activities.

5c. List of clear annual benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components as identified in Section 5b.

Year 1 Benchmark: By July 2011, contingent on the availability of sufficient funds from all potential sources, 33 percent of the student and staff computer and peripheral equipment needs, networking equipment needs, and technical support needs detailed above will be fulfilled.		
Recommended Actions/Activities	Timeline	Person(s) Responsible
Maintain existing computer to user ratios by assessing the utility of inventory for desired use and replacing up to 561 obsolete computers.	Ongoing through July 2011	Site principals
Increase inventories of computers for student use at high schools by 75 units.	Ongoing through July 2011	Site Principals
Replace staff computers as necessary to meet site and district needs	Ongoing through July 2011	Site Principals
Assess additional peripheral equipment needed to meet recommended goals and provide equipment to specification.	Ongoing through July 2011	Site Principals, Director of Educational Technology
Provide district software recommendations through district intranet and support standard practices for installation of software programs	Ongoing through July 2011	Director of Educational Technology, Educational Technology staff.
Implement and support leased network of gigabit fiber-optic circuits for intra-district data and voice communications.	Ongoing through July 2011	Director of Educational Technology, Educational Technology staff.
Replace networking equipment as necessary to provide power over Ethernet and gigabit speeds to the desktop.	Ongoing through July 2011	Director of Educational Technology, Educational Technology staff.
Implement and support industry standard wireless networking where appropriate	Ongoing through July 2011	Director of Educational Technology, Educational Technology staff.
Upgrade physical and electrical infrastructure as necessary to accommodate technology growth according to school modernization plans.	Ongoing through July 2011	Network Manager, Director of Maintenance and Operations
Decrease the ratio of computers to technical support staff.	Ongoing through July 2011	Associate Superintendent, Site Principals
Implement an escalation process for emergency technical problems	Ongoing through July 2011	Director of Educational Technology
Identify and implement an improved tracking system for technical support calls to monitor troubleshooting activity.	Ongoing through July 2011	Director of Educational Technology

Year 2 Benchmark: By July 2012 contingent on the availability of sufficient funds from all potential sources, an additional 33 percent of the student and staff computer and peripheral equipment needs, networking equipment needs, and technical support needs detailed above will be fulfilled.

Recommended Actions/Activities	Timeline	Person(s) Responsible
Maintain existing computer to user ratios by assessing the utility of inventory for desired use and replacing up to 561 obsolete computers.	Ongoing through July 2012	Site principals
Increase inventories of computers for student use at high schools by 75 units.	Ongoing through July 2012	Site principals
Replace staff computers as necessary to meet site and district needs	Ongoing through July 2012	Site principals
Assess additional peripheral equipment needed to meet recommended goals and provide equipment to specification.	Ongoing through July 2012	Site Principals, Director of Educational Technology
Provide district software recommendations through district intranet and support standard practices for installation of software programs	Ongoing through July 2012	Director of Educational Technology, Educational Technology staff.
Implement and support leased network of gigabit fiber-optic circuits for intra-district data and voice communications	Ongoing through July 2012	Director of Educational Technology, Educational Technology staff.
Replace networking equipment as necessary to provide power over Ethernet and gigabit speeds to the desktop.	Ongoing through July 2012	Director of Educational Technology, Educational Technology staff.
Implement and support industry standard wireless networking where appropriate	Ongoing through July 2012	Director of Educational Technology, Educational Technology staff.
Upgrade physical and electrical infrastructure as necessary to accommodate technology growth according to school modernization plans.	Ongoing through July 2012	Network Manager, Director of Maintenance and Operations
Decrease the ratio of computers to technical support staff.	Ongoing through July 2012	Associate Superintendent, Site Principals
Implement an escalation process for emergency technical problems	Ongoing through July 2012	Director of Educational Technology
Identify and implement an improved tracking system for technical support calls to monitor troubleshooting activity.	Ongoing through July 2012	Director of Educational Technology

Year 3 Benchmark: By June 2013, contingent on the availability of sufficient funds from all potential sources, the remaining 34% of the student and staff computer and peripheral equipment needs, networking equipment needs, and technical support needs detailed above will be fulfilled.

Recommended Actions/Activities	Timeline	Person(s) Responsible
Maintain existing computer to user ratios by assessing the utility of inventory for desired use and replacing up to 561 obsolete computers.	Ongoing through June 2013	Site principals
Increase inventories of computers for student use at high schools by 75 units.	Ongoing through June 2013	Site principals
Replace staff computers as necessary to meet site and district needs	Ongoing through June 2013	Site principals
Assess additional peripheral equipment needed to meet recommended goals and provide equipment to specification.	Ongoing through June 2013	Site Principals, Director of Educational Technology
Provide district software recommendations through district intranet and support standard practices for installation of software programs	Ongoing through June 2013	Director of Educational Technology, Educational Technology staff.
Implement and support leased network of gigabit fiber-optic circuits for intra-district data and voice communications.	Ongoing through June 2013	Director of Educational Technology, Educational Technology staff.
Replace networking equipment as necessary to provide power over Ethernet and gigabit speeds to the desktop.	Ongoing through June 2013	Director of Educational Technology, Educational Technology staff.
Implement and support industry standard wireless networking where appropriate	Ongoing through June 2013	Director of Educational Technology, Educational Technology staff.
Upgrade physical and electrical infrastructure as necessary to accommodate technology growth according to school modernization plans.	Ongoing through June 2013	Network Manager, Director of Maintenance and Operations
Decrease the ratio of computers to technical support staff.	Ongoing through June 2013	Associate Superintendent, Site Principals
Implement an escalation process for emergency technical problems	Ongoing through June 2013	Director of Educational Technology
Identify and implement an improved tracking system for technical support calls to monitor troubleshooting activity.	Ongoing through June 2013	Director of Educational Technology

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

Monitoring the continuous improvement of the district's data infrastructure is the primary job responsibility of the district's Director of Educational Technology. It is the Director's role to oversee the administrative and budgetary details of all of the district's technology development efforts. In this capacity he collaborates with his staff, the principals, technology facilitators,

teachers and staff at each site, and, on personnel and planning matters, with the Associate Superintendent, his direct supervisor.

Site principals have responsibility for monitoring and assessing the technology needs of the classrooms at their sites and for working with teachers, other stakeholders, and the Department of Educational Technology to manage the fulfillment of those needs. All sites organize Technology Committees composed of teachers, parents and students to assist the principal in these efforts.

On technical network hardware and software standards matters the Director of Educational Technology is assisted by is the Network Manager. The manager has responsibility for the design and installation of network and infrastructure improvements. He collaborates with the Director of Educational technology and the Director of Maintenance and Operations to set hardware and peripherals standards and monitor the district's hardware replacement program. The network manager also supervises the district computer repair technicians, and works with them to improve technical support based on feedback from the field.

The Director of Educational Technology meets monthly with the Superintendent and the district's Administrative Management Team to report on progress on the district's technology plans and priorities. Progress is also reviewed annually by the Associate Superintendent as in connection with the Director's annual employment evaluation.

6. Funding and Budget

6a. List of established and potential funding sources.

Established Funding Sources:

The district is committed to providing up to date technology equipment to all students at each site. The general use of technology has grown dramatically over the past five years, but as outlined in the previous sections of this plan, long and short term needs continue to exist. The Department of Educational Technology actively researches technology grant opportunities, alerts schools when opportunities exist, and assists schools where needed in the application process.

District Level Resources:

- General Fund
- Discount Programs E-Rate
- California Teleconnect Fund
- AB 430
- EETT
- Block Grant
- Title 1
- Special Education
- GATE
- Title 3 LEP
- ROP

School Site Resources:

- Small site level grants
- Community partnerships
- PTA / PTSA

Potential Funding Sources:

District Level Resources:

- General Fund
- Microsoft Vouchers as available
- EETT Competitive
- Other competitive grants as available

School Site Resources:

- Fundraisers

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

Item Description	Year 1	Year 2	Year 3	Funding Source Including E-Rate
1000-1999 Certificated Salaries				
Estimated Certificated Staff Extra Duty (Stipends)	\$115,000	\$115,000	\$115,000	General Fund, contingent on availability of unencumbered local funds
Certificated Staff Extra Duty	\$24,000	\$24,000	\$24,000	EETT, contingent upon ongoing availability
2000-2999 Classified Salaries				
Classified Staff - Full Time	\$483,000	\$516,000	\$549,000	General Fund, contingent on availability of unencumbered local funds
Estimated Classified Staff Extra Duty	\$7,500	\$7,500	\$7,500	General Fund, Contingent on availability of unencumbered local funds
3000-3999 Employee Benefits				
Benefits - Certificated, Extra Duty, Estimated	\$14,950	\$14,950	\$14,950	General Fund - contingent on availability of unencumbered local funds
Benefits - Certificated, Extra Duty	\$3,640	\$3,640	\$3,640	EETT- contingent on ongoing availability
Benefits - Classified, Full Time	\$164,220	\$175,440	\$186,660	General Fund - contingent on availability of unencumbered local funds
Benefits - Classified, Extra Duty	\$975	\$975	\$975	General Fund - contingent on availability of unencumbered local funds
4000-4999 Materials and Supplies				
Aeries SIS, Schools Interoperability Format / Zone Integration Server Agents	\$7,200	\$12,575	\$12,575	General Fund - contingent on availability of unencumbered local funds
Parent Information and Notification System	\$0	\$0	\$20,000	General Fund, Block Grant contingent upon availability of unencumbered local funds
Courseware	\$2,500	\$2,500	\$2,500	MultiFinder, General Fund, Microsoft Voucher as available
Classroom Web Site Content Management	\$0	\$18,000	\$3,000	General Fund - contingent on availability of unencumbered local funds
5000-5999 Other Services and Operating Expenses				
Leased Gigabit Fiber Network	\$260,400	\$260,400	\$260,400	E-Rate, General Fund

Telephone Trunking	\$12,000	\$12,000	\$12,000	E-Rate, General Fund
6000-6999 Equipment				
Networking Equipment	\$1,434,000	\$0	\$0	E-Rate 12 Priority 2, General Fund
VOIP Telephone Handsets	\$30,000	\$30,000	\$10,000	General Fund - contingent on availability of unencumbered local funds
Additional Computers	\$22,500	\$22,500	\$22,500	Multi-funded - General, Block Grant, Title 1, Title3, ROP, as available
Replacement Computers	\$504,900	\$504,900	\$504,900	General Fund - contingent on availability of unencumbered local funds
Whiteboard Evaluation Installations	\$44,850	\$44,850	\$44,850	Multi-funded - General, Block Grant, Title 1, Title3, ROP, as available
Totals:	\$3,131,635	\$1,765,230	\$1,794,450	

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

The district is recommending a 5-year lifespan for computers. It is highly recommended that Bellflower Unified School District schools plan for computer obsolescence in order to maintain student-to-computer ratios and continue to achieve academic objectives related to technology. Once equipment surpasses its lifetime, the cost of ownership rises quickly in technical support costs.

Within the first three to five years of life, warranties often cover the costs of repair. Beyond the first five years of life, the technical support for computers will be limited to units that are not beyond economic repair. Typically, this decision is made by a District Technician based on availability of parts or extensive time to fix the problem. For example, any damage to a computer's motherboard or serious damage to a laptop's LCD panel would be considered cost prohibitive to fix. Issues such as drive replacement however, would still be supported by the District Technicians within the lifespan of the unit. Beyond the five year lifespan of the unit, district support will be determined on a case-by-case basis as equipment ages.

Once equipment is considered obsolete, the Board declares the equipment surplus. The district then disposes of it in accordance with Board Policy.

The current estimates of replacement needs for student computers are 561 units per year. The district hopes to use this replacement policy to phase out older, non-multimedia Internet accessible units.

Currently there are 232 computers across the district for use of the Aeries and fiscal services programs. As needed, these computers will be replaced by the district to maintain the smooth operations of student record keeping and finances.

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

Technology budgeting is integrated into the District general budget process in a manner consistent with the Funding and Budget component. The Director of Educational Technology is responsible for monitoring modifications of the physical plant, acquisition of equipment, and updating of the budget. The Director of Educational Technology works closely with school site leadership and the District Technology Committed facilitate communication.

The Director of Educational Technology is the chair of the District Technology Committee and the supervisor of the Department of Educational Technology. When the need for feedback or an update of funding is determined, the Director of Educational Technology will approach the Associate Superintendent. The Associate Superintendent will then provide communication to the Superintendent's Cabinet and, at the Superintendent's direction, to the District Budget Committee. If a request is of a smaller nature or one that is time-critical, Associate Superintendent will go directly to the Superintendent's Cabinet for funding or advice.

7. Monitoring and Evaluation

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

School technology leaders, principals, the Program Administrator for Assessment, and the Director of Educational Technology will meet annually to evaluate technology's impact on student learning. Additionally the attainment of District curriculum goals and classroom and school management will be discussed. The discussion will be informed by a review multiple measures such as STAR, CAHSE, API, staff development feedback, and EdTechProfile results. The Director of Educational Technology, the Associate Superintendent, and the Assistant Superintendent of Instructional Personnel and Programs will then meet with the Superintendent to report on the outcome of this evaluation and the EdTechProfile results. An update will be presented to the District Technology Committee and planning for next year's staff development and budget needs will begin based on the findings. In addition, site technology plans which will include a monitoring and evaluation component reviewed by the Assistant Superintendent of Instructional Personnel and Programs.

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

Objectives:

The following section outlines evaluation instruments, data to be collected, schedule for evaluation, and program analysis and modification process for each objective in this plan.

Objective 3d1.1: By August 2012, and in succeeding years, all diploma eligible students will pass the California High School Exit Exam by the conclusion of their senior year.			
Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
California High School Exit Exam	Percentage of students passing exam	Annually beginning August 2012	Results will be collected and reviewed by the Director of Assessment and Instructional Support Services with recommendations for technology program modifications made to Site Principals.

Objective 3d1.2: By August 2010, and in every succeeding year, 100% of all API sub-group targets will be met.

Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
API scores	Measure of the number of schools who have met their API targets	Annually beginning August 2010	Results will be collected and reviewed by the Director of Assessment and Instructional Support Services with recommendations for technology program modifications made to Site Principals.

Objective 3d1.3 : By August 2012, and in succeeding years, 90% of all students measured will meet or exceed grade level standards as measured by the STAR program

Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Report cards, portfolios, student work samples	Percentage of students meeting grade level standards	Annually beginning August 2012	Results will be collected and reviewed by the Director of Assessment and Instructional Support Services with recommendations for technology program modifications made to Site Principals.

Objective 3e1.1 :By June 2012, and in all succeeding years, 100% of all elementary students will meet District Technology Standards as evidenced by their technology grade on their Standards-Based Report Card.

Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Elementary School Standards- Based Report Cards	Percentage of passing technology grades	Annually beginning June 2012	Student work products collected and reviewed by Site Principals to make recommendations for site modifications.

Objective 3e1.2: By June 2012, and in all succeeding years, 100% of all middle and high school students will meet District Technology Standards as evidenced by student portfolio work samples.

Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Middle and High School student portfolio work samples	Percentage of students showing evidence of meeting District Technology Standards	June 2012	Student work product collected and reviewed by Site Principals to make recommendations for site modifications.

Objective 3e1.3: By June 2012, and in all succeeding years, 90% of all high school students will produce a multimedia project prior to graduation.			
Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
High School student work samples	Percentage of graduating high school students with a multimedia project on record	June 2012	Student work product collected and reviewed by Site Principals to make recommendations for site modifications.

Objective 3i.1.1: By June 2013 the district will install and operate sufficient Schools Interoperability Framework Zone Integration Servers to link all operational databases utilizing Structured Query Language for complete single entry interoperability.			
Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Survey of interoperating applications	Points of data entry and overall data accuracy of student information	Annually beginning June 2010	Director of Educational Technology and Educational Technology staff perform analysis and study and develops report to recommend modifications.

Objective 3i.2.1: By June 2013 the district will complete three years of ongoing improvement of its technology enabled local assessment system closely linked to state standards.			
Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Training, development and implementation records for local Benchmark Assessment Program	Data Director ongoing records of student progress	Quarterly or at trimester beginning June 2010 through June 2013	Site principals, Director of Assessment and Instructional Support Services and Director of Curriculum and Instruction will review program development and use of program data with teachers and Technology stakeholders and recommend modifications to Assistant Superintendent for Personnel and Instructional Support Services. .

Objective 3j.1 : By June 2013 the district will expand the use of telecommunication based parent information and notification systems			
Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Network records of site utilization and participation in parent notification	Sites utilizing telecommunication based parent information and notification systems	June 2013	Director of Educational Technology monitors ongoing efforts to finance and install district-wide system.

Objective 3j.2: By June 2013 the district will evaluate the expansion of ABI parent access to elementary schools and take appropriate action.			
Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Planning and training records, ABI utilization records from Aeries SIS	Plan for expanded use is developed, training is delivered, and expansion is implemented	June 2013	Director of Educational Technology, Director of Assessment and Instructional Support Services and Director of Curriculum and Instruction will develop plan for approval of Superintendent's Cabinet. Director of Educational Technology will direct software modifications and installations; Site principals will direct and monitor training and implementation as directed.

Objective 4b.1.1: By August 2011 and in all succeeding years, all teachers and administrators will complete the EdTech Profile Survey to report current technology skill data			
Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
EdTechProfile Survey	Percentage of teachers and administrators completing survey, reports from the survey	August 2010	Site Principals will monitor teacher results and the Assistant Superintendent of Instructional Personnel and Programs will monitor administrator results. The results will be used to guide the development of professional development to address the assessment needs.

Objective 4b.1.2: By August 2010 and in all succeeding years, all teachers and administrators will receive direct instruction on internet safety and ethical use of electronic learning resources utilizing their preferred adult learning modality, as funding permits.			
Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Training records and lesson plans	Determine from records that required training and lessons are being delivered	Ongoing commencing in August 2010	Site Principals will monitor teacher results and the Assistant Superintendent of Instructional Personnel and Programs will monitor administrator results. The results will be used to guide the development of professional development to address additional training and instructional needs.

Objective 4b.1.3: By June 2010, and in all succeeding years, certificated staff will annually update their individual Ed Tech Profile Survey.

Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
EdTechProfile Survey	Analyze reports from the survey	Ongoing commencing in June 2010	Director of Educational Technology will use the reports to guide the development of professional development to address the assessment needs.

Objective 4b.1.4: By August 2010 and in succeeding years, the district will review the results of the EdTechProfile Survey and plan training offerings according to those results as funding permits.

Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
EdTechProfile Survey	Analyze reports from the survey	Ongoing commencing in August 2010	Director of Educational Technology will use the reports to guide the development of professional development to address the assessment needs.

Objective 4b.1.5: By August 2011, the district will assess appropriate technology skills for classified staff to determine training needs and repeat the assessment in succeeding years as funding permits.

Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Classified staff assessment	Percentage of classified staff completing assessment, reports from the staff assessment	August 2011	Site Principals will monitor their site's classified staff results and the Associate Superintendent will monitor all other results. The results will be used to guide the development of professional development to address the assessment needs.

Objective 4b.2.1: By June 2013, and in all succeeding years, 90% of all teachers will self report as possessing personal proficiency in basic computer skills, including basic troubleshooting.

Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
EdTechProfile Survey results, Training calendars, Sign-in Sheets, Training Evaluation Forms	Percentage of teachers proficient in the skills necessary to instruct students in the District's Technology Grade Level Standards, reports from the EdTechProfile	June 2013	Site Principals will analyze and the survey reports and monitor attendance at training sessions as well as training evaluations suggesting changes to the training program as needed.

Objective 4b.2.2: By June 2013, and in all succeeding years, 90% of all teachers will self report as proficient in the skills necessary to instruct students in the District’s Technology Grade Level Standards as defined by the Technology and Information Literacy rubric

Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
EdTechProfile Survey results, Training calendars, Sign-in Sheets, Training Evaluation Forms	Percentage of administrators technically literate in word processing, spreadsheets, Internet search and retrieval, electronic publishing, instructional courseware, and basic troubleshooting, EdTechProfile Survey reports	June 2013	The Assistant Superintendent of Instructional Personnel and Programs will analyze the survey reports and monitor attendance at training sessions as well as training evaluations suggesting changes to the training program as needed.

Objective 4b.3.1: By June 2013, All BUSD administrators will self report as attaining at least an intermediate proficiency level in Internet and e-mail skills and word processing, presentation, and spreadsheet software.

Evaluation Instrument(s)	Data To Be Collected	Schedule for Evaluation	Program Analysis and Modification Process
Training sign-in sheets; proof of attendance	Percentage of school site administrators attending AB430 training or equivalent	June 2013	The Assistant Superintendent of Instructional Personnel and Programs will monitor attendance at training sessions and schedule new administrators to attend AB430 training or equivalent...

Goals with Benchmarks:

Section five, the hardware and infrastructure portion of this plan, calls for a set of goals and benchmarks for improving hardware access and hardware infrastructure in the district. Proposed timelines for these efforts, subject to the availability of funding, (See Section 6) are outlined in the series of benchmarks comprising Section 5c.

Evaluation of district’s achievements in relation to these benchmarks is an annual process beginning with the Superintendent’s goal setting for staff at the beginning of each school year and ending with the Superintendent’s annual progress report to the Board of Education in August. In this meeting overall efforts to improve the district’s infrastructure in support of teaching and learning in the district are discussed and evaluated, and the district’s progress toward the achievement of state assessment goals is reported. The district’s annual technology improvements are included on the public agendas for this meeting.

The components of this plan are intended to represent stakeholder input to the district’s governing body in relation to technology improvement. As stated above, the monitoring and continuous improvement of the district’s technology infrastructure is the primary job responsibility of the Director of Educational Technology.

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

At the district level, the Director of Educational Technology has annual communication with the district's Citizens Task Force concerning technology planning outcomes. At these meetings community representatives of each school and at large community representatives appointed by each member of the governing Board are present.

Additional processes for communicating evaluation results of this plan are based at the school sites. As such, it is primary responsibility of the site principals with the assistance of their Technology Committees and Site Technology facilitators. Meetings are held at least twice a semester at the discretion of the principal and the Committee and the stakeholders. In these meetings, local implementation plans are discussed and necessary modifications to school based timelines can be made.

Other communications with stakeholders where plan outcomes are discussed and sunshined including the district's monthly Administrative Team meetings and regular discussions with vendors and vendor partners.

As the need arises, semi-annual newsletters and notices are created by the Educational Technology Department for posting to the district's internet and intranet sites.

8. Collaborative Strategies with Adult Literacy Providers

Bellflower Unified School District provides adult literacy classes through the Community-Based English Tutoring (CBET) program and adult ESL classes. Our CBET program provides a subsidized program of adult English language instruction to parents and other community members who in turn provide personal English tutoring to English learners. The participants use technology to improve their skills. A representative of those programs participated in the development of this plan.

The adult literacy programs in BUSD incorporate the use of technology throughout the curriculum. Many of the computers used by students during the traditional school day are also utilized by the adult school program for adult literacy classes in the evening. A variety of software (including Rosetta Stone) and other technology resources (such as the “In English” series) has been purchased for use in the adult literacy programs. Additionally, concerns and ideas involving the use of technology with our adult literacy programs continue to be addressed at each District Technology Committee meeting.

9. Effective, Researched-Based Methods and Strategies

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

The annotated bibliography that is included below describes the research that the district has and will use in the development and implementation of the technology plan. The research was selected for its focus on strategies and methods to integrate technology in order to improve learning, teaching, and management.

The CEO Forum school technology and readiness report: Key building blocks for student achievement in the 21st century. (2001). The CEO Forum

<http://www.ceoforum.org/downloads/report4.pdf>

This report concludes that effective uses of technology to enhance student achievement are based on four elements: alignment to curricular standards and objectives, assessment that accurately and completely reflects the full range of academic and performance skills, holding schools and districts accountable for continuous evaluation and improvement strategies, and an equity of access across geographic, cultural, and socio-economic boundaries.

How the research has been and will be used: Consistent with this research, the Bellflower Unified School District will carefully analyze learning resources and lessons both for alignment with California content standards and for the ability to measure growth/achievement on those standards in a variety of ways. Through ongoing data collection and analysis, the Bellflower Unified School District will continuously monitor its attainment of the goals and objectives of the 2007-2010 District Technology Plan, and will report results annually to the superintendent and the community through public meetings. Throughout the plan, attention is paid to providing equitable access to all students in our community, including students in special populations.

The CEO Forum school technology and readiness report. The power of digital learning: Integrating digital content. (2000). The CEO Forum.

<http://www.ericit.org/fulltext/IR020402.pdf>

This report provides an overall vision for digital learning and the main focuses are on the actions that need to be taken by the schools, teachers, students and parents in order to integrate digital content into the curriculum and as a result, creating the learning environments that develop 21st century skills. The overall vision includes areas in the need, power and potential of digital learning, reasons why digital content is essential to this type of learning, digital learning environments and developing these 21st century skills, the critical importance of professional development, models from the business community and finally readjustment (expanding the scope of technology integration).

How the research has been and will be used: In the development of the technology plan, Bellflower Unified School District uses and will continue to apply the research and steps recommended in the report. In alignment with the report, BUSD has identified educational goals and linked technology resources to those objectives; established student outcomes and performance standards that will be achieved by the inclusion of technological resources; and

determined a process for measurement and evaluation of the outcomes and a process to modify the plan accordingly.

Connecting the bits. A reference for using technology in teaching and learning in K-12 schools. (2000). The National Foundation for the Improvement of Education.
<http://www.ericit.org/fulltext/IR020862.pdf>

This book provides information for integrating technology into teaching and learning in K-12 schools, based upon findings from two past programs of the National Foundation for the Improvement of Education. "The Road Ahead" program explored how technology can facilitate teaching and learning in both formal and informal education settings, and the "Learning Tomorrow" program funded pilot projects that investigated how technology can improve teaching and learning for underserved students.

How the research has been and will be used: The research in this book was used in the discussion and development of ideas for integrating technology. As recommended throughout this document, the Bellflower Unified School District focused its attention first on establishing learning goals for students, not technology goals. The emphasis of the BUSD plan is to help teachers become comfortable and highly competent in the integration of technology throughout the curricula and project-based learning. Integral to the BUSD plan, and supported by this research, is the fact that successful integration of technology depends on teachers who are knowledgeable, have opportunities for continuous learning, and who challenge their students academically while providing the support necessary to ensure their success. The professional development programs at BUSD have been designed to incorporate these concepts.

Designs for learning: An introduction to high quality professional development for teachers. The California Department of Education.
<http://www.cde.ca.gov/pd/pdf/designsintro.pdf>

This document provides the framework for designing high quality professional development. It is based on three guiding principles: (1) High quality professional development helps teachers to more ably address the learning needs of every student, thereby improving the learning of all students; (2) High quality professional development designs will vary in accordance with the different phases of a teacher's development; and (3) Administrators who are actively involved in their own learning are better able to create and support conditions that result in high levels of teacher competency and students achievement.

How the research has been and will be used: BUSD has designed a professional development program consistent with the recommendations made in this document. The professional development programs address the needs of professionals at their respective levels. The training of administrators is also addressed in the BUSD plan. All professional development activities will be monitored, evaluated and modified, as described in the plan.

Ringstaff, Cathy; Kelley, Loretta. (2002). The learning return on our educational technology investment. A review of findings from research . West Ed.
http://www.wested.org/online_pubs/learning_return.pdf

This paper summarizes major research findings related to educational technology use and draws out implications for how to make the most of technology resources, focusing on pedagogical and policy issues. The distinctions between learning "from" computers and learning "with" computers are delineated. The findings of the research focus on adequate and appropriate teacher

training; changing teacher beliefs about learning and teaching; sufficient and accessible equipment, including adequate computer-to-student ratio; long-term planning; technical and instructional support.

How the research has been and will be used: Consistent with this research, the Bellflower Unified School District plan has been designed to address the benefits and rationale for both learning “from” technology (i.e., using computers to assist students in learning skills, etc.) and learning “with” technology (i.e., using technology to assist students with projects and other higher order thinking skills lessons). The plan also addresses sufficient and accessible equipment, especially as it relates to student-to-computer ratios, and technical and instructional support. Long-term planning and monitoring is built into the district’s plan.

Valdez, G., McNabb, M., et. al. (May, 2000). Computer-based technology and learning: Evolving uses and expectations. North Carolina Regional Educational Laboratory. <http://ericit.org/fulltext/IR020868.pdf>

This research report takes an in-depth look at the three distinct phases in technology uses and expectations: Print Automation, Expansion of Learning Opportunities, and Data-Driven Virtual Learning and, for each, addresses two very important and highly interrelated questions facing educators as they try to determine the best use of technology in K-12 settings: (1) What evidence is there that the use of computer-based technology in each phase has a positive effect on learning?; and (2) What significance do the findings from each phase have for educators today as they try to make technology-related decisions that have an impact on student learning?

How the research has been and will be used: Consistent with this research, and following the recommendations made in the report, the Bellflower Unified School District has designed and will continue to: implement a plan that provides an opportunity for technology to make learning more interactive; individualize and customize the curriculum to match learners’ developmental needs as well as personal interests; capture and store data for informing data-driven decision making; enhance avenues for collaboration among family members and the school community; and improve methods of accountability and reporting.

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.

In response to state interest, the Bellflower Unified School District will begin to expand its currently limited distance learning program. This will allow the district to provide opportunities for more students to experience Advanced Placement and other college preparatory courses, as well as courses that are difficult to staff due to the limited number of students electing to enroll in the course (i.e., foreign language classes such as Japanese and German).

The Assistant Superintendent of Instructional Personnel and Programs will facilitate the process of determining which courses have top priority and which technology is needed, if any, to allow for smooth video streaming and other methods of communication.

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

Education Technology Plan Review System (ETPRS)
Contact Information

County & District Code: 19 - 64303

School Code (Direct-funded charters only): _____

LEA Name: Bellflower Unified

*Salutation: Mr.

*First Name: Steven

*Last Name: Yuchno

*Job Title: Director of Educational Technology

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* Required information in the ETPRS