SEPARATE COVER ITEM

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Document: Technology Plan

Technology Plan

Tracy Joint Unified

July 1, 2013 - June 30, 2016

This plan is for EETT and E-Rate.

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Background and Demographic Profile

The Tracy Unified School District (TUSD) Technology Plan duration is three years from July 1, 2013 to June 30, 2016. It is aligned with Districts Goals, the District Strategic Plan, Individual School Site Plans, and continues the expansion and foresight of the current Technology Plan Vision. The TUSD Technology Plan will be used for Erate planning and implementation.

Tracy Unified School District (TUSD) serves the needs of over 17,000 students in Tracy. Over 1,200 certificated, classified and management staff rely on e-mail, voice mail, instant messaging and faxes to communicate with each other, district staff, students and parents. Tracy Unified operates 20 schools for students from kindergarten through high schools. These schools consist of seven (7) K-5th schools, four (4) K-8th schools, two (2) 6th-8th schools, three (3) high schools, two (2) alternative education high schools, one (1) community day school and one (1) adult school. The student demographics for the district are identified as 46% Hispanic or Latino, 26% White, 10% Asian, 7% African American, 6% Filipino, 1% Pacific Islander and .5% American Indian or Alaska Native. 3.% of the student population were identified as multiple races.

Tracy is a city in San Joaquin County, California and has a population of over 81,000 people. San Francisco Bay Area's vigorous population growth has spilled over into the Tracy area as well as other locations near the Bay Area's edge. Many parents of TUSD's students continue to commute to Bay Area jobs.

Tracy was incorporated in 1910 and it grew rapidly after the first irrigation district was established in 1915. Although railroad operations began to decline in the 1950s, Tracy continued to prosper as an agricultural area. Today, the City seal reflects this history of railroads and agriculture. Between 1990 and 2004, our population more than doubled as people arrived from the Bay Area seeking a hometown feeling and a more relaxed way of life. This growth brought increased numbers of young families to Tracy, broadened our ethnic diversity and increased percentages of home ownership and household size. The economy has also diversified from its roots in agriculture and railroads, to its present day identity as a distribution center for many corporations, to its current initiatives to attract further businesses and scientific industries, including green and sustainability related businesses.

Tracy Unified School District, as a recognized leader in education, will prepare students to be responsible citizens of the 21st Century. Our safe and modern facilities, equipped with the latest technological tools, create a quality and effective learning environment for all of our students. Our world-class staff challenges students to reach their fullest potential by providing a dynamic, student-centered curriculum supported by community, business, college and university partnerships. Tracy Unified School District's students will become the leaders of tomorrow.

It is the vision of the Tracy Unified School District to create an educational community that prepares individuals to live, learn, communicate and work successfully in a technologically complex, rapid changing, information rich society. Learners should use technology effectively within a sound rigorous education setting. To be effective, technology and learning must complement each other to provide challenging learning opportunities. Learners are explorers, discoverers and creators of personal knowledge that can be applied to real world problem solving. Technology enables students to gather and organize information from primary sources world wide. It enables them to gain knowledge through enquiry and collaboration and to present and share it

with others. With teachers as their guides, students will value learning as a lifelong journey that begins here and now.

“Gateway to Tomorrow" is the Tracy Unified School District’s Strategic Plan. Our strategic plan serves as a reference and guide for decision-making and action.

DISTRICT MISSION

Tracy Unified School District, as a recognized leader in education, will prepare students to be responsible citizens of the 21st Century. Our safe and modern facilities, equipped with the latest technological tools, create a quality and effective learning environment for all of our students. Our world-class staff challenges students to reach their fullest potential by providing a dynamic, student-centered curriculum supported by community, business, college, and university partnerships. Tracy Unified School district's students will become the leaders of tomorrow.

TUSD STRATEGIC GOALS

Goal 1: Prepare all students for college and careers.

Goal 2: Ensure that all students meet or exceed grade level standards and that the achievement gap between the identified student subgroups is closed.

Goal 3: Provide a safe and equitable learning environment for all students and staff.

Goal 4: Utilize technology as a tool for improvement in instruction, and to increase efficiency in operations across the district.

Goal 5: Continuously improve fiscal, facilities and operational processes.

Goal 6: Develop and support a high performing workforce.

Goal 7: Develop and utilize partnerships to the achieve District goals

It is important to observe that it takes a team effort to make meaningful progress towards achieving our District’s weighty goals and objectives. Our teachers, administrators and support staffs work hard every day to provide students the quality learning experience envisioned in our strategic plan.

1. Plan Duration

July 1, 2013 - June 30, 2016

The Tracy Unified School District Technology Plan will be used for Erate planning and implementation. This July 1, 2013 - June 30, 2016 Technology Plan will be reviewed annually.

2. Stakeholders

Stakeholders		
Name	**Position**	**CDS**

The planning team for this Technology Plan consists of the following stakeholders:

- District Superintendent
- Assistant Superintendent of Educational Services and Human Resources
- Associate Superintendent of Business Services
- Director of Curriculum, Accountability and Continuous Improvement
- Director of Student Services
- Director of Staff Development
- Director of Instructional Media Center
- Director of Alternative Education
- Director of Special Education
- Director of Adult Education
- Director of Information Services and Educational Technology
- Communication Specialist
- Three principals
- Technology Advisory Council
- Two teachers
- Three parents
- Business Representatives

During the development of the Tracy Unified School District's three year technology plan, a multitude of meetings were conducted. Initially, information was collected from each school's technology support advisors and other school site teachers. Additional information was collected from teacher surveys, parent surveys, management meetings and principal meetings. Principals collected information, from teachers and school site parent organizations, which was included in the school site plans. Various businesses that provide technology equipment and services to the District provided technology demos, seminars, and technology updates to District staff. The collected information was further reviewed using electronic communications.

3. Curriculum

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

All school sites have two gigabit fiber access from the school site to the District Office. The District Office maintains a 500MB EaMIS OPT-I-MAN connection to the Internet. All classrooms have a minimum of one network computer. All school sites sites provide wireless network connectivity for teachers and students using both District and personally owned computers. All District network computers have access to Microsoft Office suite, Microsoft Portal sites for file storage and information access, and the Internet. Teachers have the ability to publish class curriculum and other information on their own Portal web site. All teachers and students have email accounts through the District email server. All teachers have access to the District's student information system for daily attendance, grade books and communication with parents/guardians. Video streaming of stored video content and local cable television channels is broadcast to all classrooms using the District's data network infrastructure. The District and all school sites each maintain their own web site accessible by the public.

All student computers maintain a variety of educational software and online resources that support developing core academics skills. Some of these include: Webpath Expression, Accelerated Reader, Study Island, Fun Brain, Freerice.com, Cool Math, Aleks, Highlights, Rosetta Stone, Brain-X, Math Buster, Star Math and Math Facts. Accelerated Reader and STAR Reading is used by fourteen schools for reading improvement. Rosetta Stone is used by sixteen schools for English language learner programs. Brain-X is used at all comprehensive high schools as self-paced intervention solutions to enhance learning performance.

Interactive whiteboards are used in most classrooms in two middle schools and several classrooms at K-5 and K-8 schools. Student response systems (SRS) are used in multiple classrooms at all schools. Additional SRS kits are available for checkout from many of the schools libraries. Document cameras are being used by multiple classrooms at all schools. LCD Projectors are available in all classrooms with 25% of these being ceiling-mounted connected to an integrated sound system. 90% of the school's libraries have a ceiling-mounted LCD projector with an integrated sound system.

All schools have a minimum of one computer lab and the age of computers varies from school to school. All libraries have between 25 and 40 computers that are networked with Internet access available to students and teachers throughout the day. The libraries open 30 minutes before school begins and are open 30 minutes after school ends. The majority of student computers at K-5 schools are located in the school's library. For K-8 and 6-8, there are one to four student computers in each classroom. For high schools, most student computers are located in the computer labs or libraries.

The District's acceptable-use policy is in the form of a contract signed by all students and parents each year. An Acceptable Use Agreement (AUA) must also be signed by all staff. There is also a reference to the District's AUA in a pop-up window each time a staff or student accesses network resources. Web-filtering, anti-spam and anti-virus software are implemented on the District's technology hardware.

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

Teachers currently use technology in a multitude of ways to enrich their teaching and meet the needs of all students. Teachers use Aeries ABI, a web-based application that interfaces to the District student information system to maintain their grade book which provides the teacher and the student with instant and continual knowledge of a students' progress in academic areas. Aeries ABI is also used by teachers to track daily attendance. Aeries Parent Link, a web-based interface to Aeries ABI, provides student grades, attendance and other information to students and parents. Teachers communicate and collaborate with students, parents, staff and colleagues via email.

Technology increases teacher productivity in classroom and school management. Teachers receive meeting agendas via email, District and school notices, emergency notes, and other educational related documents for printing. Technology is everywhere in the schools, serving in every facet and enhancing what the school can do for students and parents.

Teachers share course content, information, and feedback with students and parents through the use of "Portal websites", team websites or class websites. All teachers have Portal sites for information storage. Teachers provide links to opportunities for further learning on these Portal sites. Portal and other websites are used for providing students information such as announcements, calendar events, bell schedules, daily bulletins, schedule of assignments, digital publications, etc.

Teachers use Datawise, a data warehouse system, for developing and analyzing student curriculum assessments and standard state tests. Scores are tracked and maintained through this assessment system which also allows for comparisons and study of progress. The Internet and other educational software are used for lesson plan preparation and instructional presentations. Teachers throughout the grade levels go online to get Open Court and math materials to print out and can also print out anything from the desktop or Internet as a whole class set, streamlining the production process. Students take tests, conduct research, type papers, and prepare presentations using technology.

The Vision software system is used extensively to monitor and instruct. The monitoring and recording subroutines make it easy to document student behavior. Vision provides immediate control over student access and behavior, allowing the teacher to redirect the students as needed. The ability to lock out an entire class or even turn the student computers off all once makes it easier to administer instruction. The Deepfreeze software system is used on student computers to manage, simplify and secure computers by eliminating computer damage and downtime and providing teachers less time to resolve physical hardware and software problems and more time to teach.

Most classrooms have one or more student computers in which many teachers use for additional reading opportunities with students who may either need additional help or as a reward. Teachers utilize online video streaming to provide students with real life visuals for standards being taught. Teachers use the Internet to research areas of concern, as well as to enrich their curriculum. Classrooms make extensive use of LCD projectors to deliver curriculum content. Computers used with LCD projectors are used to teach everything form effective writing to research and to

facilitate spontaneous students led learning. Document cameras have replaced overhead projectors and are used as visual presenters to students in the classroom. Teachers use various models of wireless tablets that enable them to teacher from anywhere in the classroom.

It is the goal of the librarian and other teachers at K-5 schools to facilitate keyboarding and computer familiarity for students starting at a younger age than second grade. In the libraries, there are scheduled times for Rosetta Stone, for Accelerated Reader Math Facts in a Flash, and, for younger children, classzone.com. Older students also type papers in the library's computer lab and work on presentations using programs such as Microsoft PowerPoint. The libraries open 30 minutes before school begins and are open 30 minutes after school ends.

Students have access to Study Island. Study Island is a web-based program which allows students to review standards that have been taught in a fun way and can be accessed by students both at home and at school. Students may choose different formats for their sessions. Students can answer questions in a multiple choice format, play games proving understanding of the material, or take tests based on a state standard. This program provides teachers with immediate assessment data based on student performance to drive classroom instruction.

Students utilize the computers in the library and are taught at an early age how to use the online library index to find books in the library, check a book's status, and then locate the book on the shelves. Classes are taken to a library for library catalog and Internet searches. Students are encouraged to use library computers to complete writing assignments if they don't have access to computers at home. Computer labs are used by students as an additional source of not only practice using a keyboard, but computer skills and in addition, supplemental educational resource. Students take advantage of the various educational software available in the lab to enhance their understanding in writing, social studies, spelling, math and science. AlphaSmart word processors are used by students with particular note taking issues.

Students use the Accelerated Reader (AR) program as a tool to assess their comprehension of books they have just completed. Students utilize AR to check book levels and point values of books they are reading to help decide if a book is appropriate in helping to reach reading goals set by the teacher. Teachers use AR to check student comprehension with regards to stories. There is also a reading level component which teachers use to lead their students to appropriate reading material. Students also use Scholastic's BookFLIX to enhance students' reading skills.

To increase interest and assist with the management of class and meetings, almost every middle school classroom contains a DVD player, a SMART board, Document Camera and a LCD projector. This allows information to be graphically presented so the audience not only hears the presentation but they see examples and videos of what is being presented. Student participation is increased by allowing students to share and display their thoughts, ideas, or information on the Interactive White Board. DVD players are used with the social studies, English, math and science curriculum.

Teachers use the Internet, Microsoft Word and Microsoft Publisher to create visual materials for low achieving students and English learners. Rosetta Stone is used in computer labs at all schools to assist non-English speaking students learn English. After school hours, parents may use the computers in the school's computer lab to learn English. In K-5 schools, English Language Learners also use Rosetta Stone in a pull-out program with a District ESL specialist.

The Internet is used to help students practice state standards. For example, grades 2-5 use a math website (www.thatquiz.org) to practice state standards for math. Students can practice learning

time on clocks all the way up to algebra. Students can log in to the teacher Portal sites and take tests to show what they have learned. 5th graders use the Internet to practice their states and capitals, which is a state standard. The Internet is used for research purposes to do research on planets, US states, presidents, and other famous people for preparing reports. DVDs are used to supplement curriculum with summaries of lessons, vocabulary building, and previewing the lesson. Lower grades use computers as a research source for space reports, and visuals for vocabulary words and phonics review.

In the middle schools, technology use ranges from simple word processing to graphic intensive programs. Every grade level core class is required to submit research reports that require the use of Microsoft Word, PowerPoint, and sometimes Publisher. The gathering of information occurs in the computer lab or the library. Every student learns to organize the information gathered, correctly cite, and present it using one form of Microsoft Office or another. Students then present the information to their classes using Interactive White Boards and LCD projectors. Classes schedule the use of the computer lab and library. The computer lab is also used by students to learn the basic skills of typing and word processing. Upper grade students use the computers in the lab to type various projects and reports on Microsoft Word, access the Internet as a research tool, and use Paint and Power Point to produce presentation visuals. USB connected microscopes are used in the microscope unit with provided software to support state standards in science.

Students, that have trouble grasping concepts or students that require additional resources, benefit from the use of technology in the classroom. Presenting information and integrating videos into lectures help students to understand curriculum. The students that have trouble in science have a chance to use Crocodile Clips, a program that lets the student run simulated experiments in science which come with voice guided instructions. Math for struggling students is enhanced by the use of PLATO, a remediation software application, which is available in the computer lab and the library.

At the high schools, classroom computer labs provide courses as varied as graphics arts, Driver Education, Algebra 1, computer programming, computer-aided drafting, office productivity, keyboarding, and CAHSEE remediation. The hardware supports each of these subjects by allowing students to view daily lesson plans, conduct research, create word processed documents, author multimedia presentations, write and test code, and take assessments. The particular mix of these activities varies daily according to the needs of that course. In addition to office productivity software, most labs also have course specific software. Science courses regularly use technology in many of their laboratory activities. For example, probes connected to calculators or computers, can be used to measure, record, and graph variables such as speed, pH, or dissolved oxygen content during laboratory investigations. In the computer-aided drafting courses, students make drawings, design projects, print designs, and use the printouts to guide construction. Engineering and physics simulation programs are used to design and build bridges and rockets, and building, programming, and operating robotic machines. AP biology is a web based course in which students' access information entirely on the Internet, including lessons, labs and tests. Students use the Internet to search for word definitions, take educational quizzes and games, and research recycling information and background information on novels for Language Arts assignments. The library and Career Center have computer labs where teachers without classroom student computers can engage the whole class in an activity. Teachers use the Internet and a web based program for college and career exploration. The Choices Program is used in the high school library and Career Center to determine student's interest in future careers. Brain-X is used to enhance skills the student needs to pass the California high school exit exam.

The high school math department uses LCD projectors to display teachers and students PowerPoints, online math websites like the new Algebra 1 publisher's Classzone.com, and a document camera to show students work and instruction. Classzone.com is used to aid instruction, as a student resource to do assignments and review, an online textbook, practice quizzes, state test practice, homework tutoring and teacher resources like PowerPoint and animation for interactive instruction. The District Portal provides instructional assignments developed by teachers including PowerPoints to share with the department such as a "STAR Algebra 2 Review" PowerPoint.

The Modern Language departments at the high schools use video tapes, CD's, test generating disks and Aver Key. As for learning for special needs students, students are provided time to practice on a computer, review an oral reading from a disk or tape and use practice materials generated from the Internet.

PowerPoint presentations are printed regularly for students with writing limitations on their 504 and IEP plans. Internet resources are also used frequently for student learning- research and support. Students access teacher Portal sites from home and also the textbook website support materials for extension activities. When a student has special needs, computers are employed as deemed necessary in any action plan. In lower grades, vocabulary review and books on CD assist students who require additional resources.

Teachers use LCD projectors and VCR/DVD players to instruct state standards in social studies. CD/DVDs provide both text and audio material that allows for teachers to roam the room and ensure that students are following along. Websites with historical documents that include images and text are used to teach students about historical content and historical thinking skills. Internet access to PBS video-clips is used to deliver history content. Students use Trackstar to investigate historical events and people.

In Math, the three IMP 2 courses, the Speech and Debate course, and IMP 3 were taught using student computers in the classroom, one machine for every 2 students. The daily agenda, the text, and assignments were all made available through the teacher's Portal site. There are also numerous course specific links to places on the Internet for learning resources such as Geometry constructions, Algebra "how to" pages, etc.

School yearbooks are developed by students in an electronic format using web software to compose, submit and store information and documents. In addition to Word and other Office software, students use a number of photograph software applications to manage and submit photographs.

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

The Technology Plan was developed to align with the District Goals, District Strategic Plan and Individual School Plans.

The two Districts Targets are:

Target #1: By June 2013, 90% or more of all students will demonstrate grade level /subject matter proficiency as measure by appropriate state tests. Schools that exceed 90% will demonstrate a growth of five percentage points annually.

Target #2: 100% of students will meet or exceed graduation requirements by completing one of the four following programs:

- Standard High School Diploma
    - Pass California High School Exit Exam
    - Pass Algebra/IMP
    - Complete Subject Matter Requirements
- Certificate of Completion
    - Complete program as defined by IEP
- General Education Designed Certificate
- California High School Proficiency Exam

As identified by the Tracy Unified Strategic Plan, the vision is that Tracy Unified School District's students will become lifelong learners and the leaders of tomorrow. Key performance measures to attain the District's vision, mission and strategic goals include:

- 100% of students will pass CAHSEE by end of grade 12 or meet IEP goals for certification.
- 5% increase in the percent of students passing CAHSEE in grade 10.
- 100% of students will graduate.
- 5% increase in graduates eligible for admission to a university.
- 5% increase in percent of 3rd graders scoring proficient on CST ELA.
- District and schools will meet API targets overall and for subgroups.
- Decrease the achievement gap between subgroups by 10% on API.
- District and schools will meet AYP targets overall and for subgroups.
- 5% increase in the number of students scoring proficient or advanced in 8th and 9th grade Algebra on CST.
- District and schools will meet AMAO targets (Title III for English Learners).
- 5% increase in the number of students meeting grade level standards as measured by District assessments.
- 80% of parents, staff, and students will show satisfaction in school safety and climate.
- Eliminate disproportionately in suspension for 48900(k) so that the percent of suspensions reflects the student demographics.
- 98% attendance.
- 100% compliance with local, county, state, and federal health and safety regulations.

The District offers students a variety of ways to meet content standards and pass the CAHSEE by utilizing technology to support the curriculum. Students are provided opportunities for recovering credits and preparing themselves for the CAHSEE Exit Exam by offering classes during school, after school and during the summer. These programs include: CyberHigh, BrainX is used at all of the District’s comprehensive high schools as well as the two continuation high schools.

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.

Tracy Unified will provide state of the art technology for classrooms and support services. To be effective, technology and learning must complement each other to provide challenging learning opportunities. Technology serves the goals of the Tracy Unified School District by contributing to:

Student learning through involvement with authentic challenging tasks

New roles for students, teachers, support staff and parents

Anytime, anywhere learning and support opportunities

Creating of a culture that supports learning both in the classroom and beyond the school walls

Increased productivity

Non-traditional learning opportunities

As identified by the Tracy Unified Strategic Plan:

***Strategic Goal 3*:** Use technology as a tool to improve classroom instruction and school operations.

In order to better serve students it is important that our district technology goals support student learning in a variety of venues. Availability of computer labs, teachers who are well trained in the effective use of an array of technological tools in the classroom and lab setting are just the beginning of how technology can support and improve student learning. Parent and student access to assignments and lessons online will also serve to facilitate student learning at their own pace and at home, if warranted.

Goal 3d.1: Use Student Response Systems (SRS) to assess student attainment of the district standards and common core state standards (CCSS) and the state's new common core standards so as to meet or exceed API and AYP targets overall and for subgroups.

Objective 3d.1.1: 100% of 6th-8th grade teachers will use Student Response Systems (SRS) to assess student attainment of the district standards and the new common core states standard (CCSS) so as to meet or exceed API and AYP targets overall and for subgroups.

Benchmarks:

- Year 1: 35% of 6th-8th grade teachers will use Student Response Systems (SRS) to assess student attainment of the district standards and the new common core states standard (CCSS) so as to meet or exceed API and AYP targets overall and for subgroups.
- Year 2: 70% of 6th-8th grade teachers will use Student Response Systems (SRS) to assess student attainment of the district standards and the new common core states standard (CCSS) so as to meet or exceed API and AYP targets overall and for subgroups.
- Year 3: 100% of 6th-8th grade teachers will use Student Response Systems (SRS) to assess student attainment of the district standards and the new common core states standard (CCSS) so as to meet or exceed API and AYP targets overall and for subgroups.

Implementation Plan

Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Implement for 35% of teachers at each 6th-8th grade level at each school. Order SRS systems and schedule trainings for teachers.	August 2013	Principal, Director of Staff Development, Director of Curriculum Accountability and Continuous Improvement, Director of Information Services and Educational Technology	Purchase orders. Training evaluation forms. Training sign-in sheets.	Training evaluation forms. Training sign-in sheets.
Training of 35% of teachers in the 6th-8th grade level at each school. Teachers will develop powerpoint assessments of curricular benchmarks. Teachers will collect data on students' attainment of common core content standards. Continue to modify powerpoints to obtain additional assessment data on students' understanding.	December 2013	Principal, Director of Staff Development, Director of Curriculum, Accountability and Continuous Improvement	At least one Powerpoint presentation each week.	Student assessments.
Implement for 70% of teachers at each 6th-8th grade level at each school. Order SRS systems and schedule trainings for teachers.	August 2014	Principal, Director of Staff Development, Director of Curriculum Accountability and Continuous Improvement, Director of Information Services and Educational Technology	Purchase orders. Training evaluation forms. Training sign-in sheets.	Training evaluation forms. Training sign-in sheets.
Training of 70% of all 6th-8th grade teachers. Teachers will develop powerpoint assessments of curricular benchmarks. Teachers will collect data on students' attainment of common core content standards. Continue to modify powerpoints to obtain additional assessment data on students' understanding.	December 2014	Principal, Director of Staff Development, Director of Curriculum, Accountability and Continuous Improvement	At least one Powerpoint presentation each week.	Student assessments.

Implement for 100% of teacher at each 6th-8th grade level at each school. Order SRS systems and schedule trainings for teachers.	August 2015	Principal, Director of Staff Development, Director of Curriculum Accountability and Continuous Improvement, Director of Information Services t of the district's teache	Purchase orders. Training evaluation forms. Training sign-in sheets.	Training evaluation forms. Training sign-in sheets.
Training of 100% of 6th-8th grade teachers. Teachers will develop powerpoint assessments of curricular benchmarks. Teachers will collect data on students' attainment of common core content standards. Continue to modify powerpoints to obtain additional assessment data on students' understanding.	December 2015	Principal, Director of Staff Development, Director of Curriculm, Accountability and Continuous Improvement	At least one Powerpoint presentation each week.	Student assessments.

Goal 3d.2: Teachers will offer instruction to all K-12 English Language Learner (ELL) students using Rosetta Stone, Renaissance Learning, Imagine Learning, or BrainX to improve language abilities that will be used to increase understanding of district and the common core state standards (CCSS). Train the school site Administrators at each school site on these programs. Train teachers on these programs.

Objective 3d.2.1: 60% of all ELL students scoring below proficient will use Rosetta Stone, Renaissance Learning, Imagine Learning, or BrainX to improve ELA and Math Skills.

Benchmarks:

- Year 1: 20% of all ELL students scoring below proficient will use Rosetta Stone, Renaissance Learning, Imagine Learning, or BrainX to improve ELA and Math Skills.
- Year 2: 40% of all ELL students scoring below proficient will use Rosetta Stone, Renaissance Learning, Imagine Learning, or BrainX to improve ELA and Math Skills.
- Year 3: 60% of all ELL students scoring below proficient will use Rosetta Stone, Renaissance Learning, Imagine Learning, or BrainX to improve ELA and Math Skills.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**

Purchase additional licenses of Rosetta Stone, Renaissance Learning, Imagine Learning, and BrainX for all school sites. Install on all student lab and student classroom computers. Purchase microphone and Headsets.	Begin in 2013-2014	Principal, Director of Alternative Education, Directory of Instructional Media Center, Director of Staff Development, Director of Information Services and Educational Technology	School site administrators will monitor progress	Student assessments
Train 100% of 6th-8th grade teahers at each school site. Train teachers on these programs.	Begin in 2013-2014	Director of Staff Development, Principal	Director of Staff Development and school site administrator will monitor progress	Training sign-in lists
Instruct students on how to use these programs. Schedule student time to use these programs.	Quarterly	Teachers	Teachers will monitor students.	At least two student assessments per Qtr.

Goal 3d.3: K-5th grade teachers will deliver core academic lessons with integrated technology and students will create grade appropriate curricular technology projects.

Objective 3d.3.1: 75% of all 6th-8th grade teachers will deliver core academic lessons twice a week using available technology in the classroom. All students in these classrooms will create four grade appropriate technology projects per year.

Benchmarks:

- Year 1: 25% of all 6th-8th grade teachers will deliver core academic lessons twice a week using available technology in the classroom. All students in these classrooms will create four grade appropriate technology projects per year.
- Year 2: 50% of all 6th-8th teachers will deliver core academic lessons twice a week using available technology in the classroom. All students in these classrooms will create four grade appropriate technology projects per year.
- Year 3: 75% of all 6th-8th grade teachers will deliver core academic lessons twice a week using available technology in the classroom. All students in these classrooms will create four grade appropriate technology projects per year.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
Train teachers on use of technology equipment in the classrooms.	August - December each year.	District Technology Department and School Site Administrators.	Site administrators monitor lesson plans	Teachers lessons plans that use technology.

Teachers will develop and deliver core academic lesson plans which are integrated with the available technology in the classrooms.	September - April each year.	Teachers	Site administrators will monitor lesson plans	Student technology projects.
Students will develop grade appropriate technology projects focused on core academic content.	October - May each year.	Teachers	Teachers will monitor projects	Ongoing District Assessments and annual CST scores.

Goal 3d.4: All schools sites will include an approved technology component in the school site plans which will identify site goals to identify grade level technology projects that support academic content standards and improve learning.

Objective 3d.4.1: All school sites will have an approved technology component related to SBAC online assessments in the schools site plan. This technology component will also address telecommunications and information technologies.

Benchmarks:

- Year 1: One-third of all school sites will have an approved technology component related to SBAC online assessments in the schools site plan. This technology component will also address telecommunications and information technologies.
- Year 2: Two-thirds of all school sites will have an approved technology component related to SBAC online assessments in the schools site plan. This technology component will also address telecommunications and information technologies.
- Year 3: All school sites will have an approved technology component related to SBAC online assessments in the schools site plan. This technology component will also address telecommunications and information technologies.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
Identify action steps for technology use to identify grade level projects that support academic content standards using technology.	August - October each year	School Site Administrators and teachers.	Annual review of School Site Action Plan by District Administrators.	Student projects

Identify action steps for technology use to support technology literacy, appropriate and ethical use of technology, cybersafety and equitable access to technology at the school site.	August - October each year	School Site Administrators and teachers.	Annual review of School Site Action Plan by District Administrators.	Student projects

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.

The use of information literacy as a research process needs to be implemented across the grade levels to enhance students' safe and effective use of the Internet for research purposes. "Web Sites - Which Ones Do You Trust" was created by CTAP Region 3 with a federal library grant and is a comprehensive web quest designed to teach the basics on web searching, validating information etc. The site is hosted on the Adult Literacy and Technology Network (altn.org) and is appropriate for Grade 3-8 students. Alan November (novemberlearning.com) has an extensive list of resources that teachers may use to teach information literacy skills.

CTAP Region IV also has an entire syllabus of readily available materials on their web site that guide teachers in the development of the five-paragraph expository essay. The modules of instruction include asking deep questions, successful searching, empowering readers, critical note taking and expository writing. The syllabus makes use of many templates and scaffolding tools that can be created with hidden features of Microsoft Word. The modules are designed to teach the information literacy skill sets that students need to know.

Students will learn to select and use appropriate technology effectively for researching, communicating and collaborating projects in support of the California curriculum content standards.

Goal 3e.1: Students will understand acceptable internet behavior and demonstrate information literacy.

Objective 3e.1.1: All students will understand acceptable internet behavior and demonstrate information literacy using the internet in support of the development for their grade appropriate curricular technology projects.

Benchmarks:

- Year 1: 100% of students will understand acceptable internet behavior and demonstrate information literacy using the internet in support of the development for their grade appropriate curricular technology projects.

- Year 2: 100% of students will understand acceptable internet behavior and demonstrate information literacy using the internet in support of the development for their grade appropriate curricular technology projects.
- Year 3: 100% of students will understand acceptable internet behavior and demonstrate information literacy using the internet in support of the development for their grade appropriate curricular technology projects.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
K-5 students will learn to access the internet and use bookmarks to find information and copy, paste and save their work. Students will understand and demonstrate basic responsible, legal, ethical and appropriate conduct using technology systems.	Each semester	Teachers	Grade level review of training days in sheets, lesson plans, end of the year student use surveys. Grade level teachers will collect assignments, projects, and reports data by the end of semester.	Principal/Assistant Principal will analyze data from Grade level lead teachers or Department chairs to determine if plan goals have been met in January and May of each year and will recommend plan modifications. Technology Committee will be presented with this data for needs assessment at the end of each semester.
6-8 students will receive instruction and demonstrate their ability to conduct safe and ethical searches for information, evaluate internet resources and use accurate and appropriate citations. Students will understand and demonstrate basic responsible, legal, ethical and appropriate conduct using technology systems. Students will understand and demonstrate responsible behavior in accordance with acceptable use policies and agreements, copyright laws, and other laws and rules related to the legal and ethical use of technology systems.	Each semester	Teachers	Grade level review of training days in sheets, lesson plans, end of the year student use surveys. Grade level teachers will collect assignments, projects, and reports data by the end of semester.	Principal/Assistant Principal will analyze data from Grade level lead teachers or Department chairs to determine if plan goals have been met in January and May of each year and will recommend plan modifications. Technology Committee will be presented with this data for needs assessment at the end of each semester.

9-12 students will learn to evaluate information and include in a report with accurate and appropriate citations. Students will understand and demonstrate basic responsible, legal, ethical and appropriate conduct using technology systems. Students will understand and demonstrate responsible behavior in accordance with acceptable use policies and agreements, copyright laws, and other laws and rules related to the legal and ethical use of technology systems. End of year 2: Students will demonstrate their ability to use bookmarks and web sites to safely find information and use available information resources effectively. Students will continue to receive instruction and demonstrate their ability to conduct safe and ethical searches.	Each semester	Teachers	Grade level review of training days in sheets, lesson plans, end of the year student use surveys. Grade level teachers will collect assignments, projects, and reports data by the end of semester.	Principal/Assistant Principal will analyze data from Grade level lead teachers or Department chairs to determine if plan goals have been met in January and May of each year and will recommend plan modifications. Technology Committee will be presented with this data for needs assessment at the end of each semester.

Goal 3e.2: All students will acquire technology skills to support the development for their grade appropriate curricular technology projects.

Objective 3e.2.1: All students will acquire keyboarding, word processing, spreadsheet, database and multimedia presentation literacy skills to support the development for their grade appropriate curricular technology projects.

Benchmarks:

- Year 1: 100% of students will acquire keyboarding, word processing, spreadsheet, database and multimedia presentation literacy skills to support the development for their grade appropriate curricular technology projects.
- Year 2: 100% of students will acquire keyboarding, word processing, spreadsheet, database and multimedia presentation literacy skills to support the development for their grade appropriate curricular technology projects.

- Year 3: 100% of students will acquire keyboarding, word processing, spreadsheet, database and multimedia presentation literacy skills to support the development for their grade appropriate curricular technology projects.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**

K-5 students will learn, identify and be able to key using correct finder placement on a keyboard. Students will identify basic computer components and peripherals, and learn the basic tools and icons of the desktop. Students will learn to use grade appropriate software such as painting, drawing, word-processing and charting/graphing software to create words, sentences, and basic graphs/charts in a document. ELL students will learn to use Rosetta Stone, Renaissance Learning, Imageine Learning and BrainX. Students will learn to develop, save and retrieve a Word document based on a content standard. Students will select and use an appropriate local or network printer. Students will continue to learn to use painting, drawing and charting/graphing software. Students will learn to use presentation software and network functions to access, store, and create documents for curricular projects. Students will learn to organize information for presentation to others. Students will collaborate with a peer on an assignment based on a content standard. Students will use a computer and peripherals, and painting, drawing and charting/graphing software.	Each year	Teachers	Semester review of training days in sheets, lesson plans, end of the year student use surveys. Grade level teachers will collect assignments, projects, and reports data by the end of semester.	Lesson plans, student use survey, student projects.

6-8 students will select the most appropriate device and demonstrate proficiencies in keyboarding and other input/output devices. Students will learn to demonstrate the ability to identify information and organize it for a presentation or project using a presentation program. Students will learn to use grade appropriate spreadsheet and database software. ELL students will learn to use Rosetta Stone, Renaissance Learning, Imagine Learning and BrainX. Students will utilize peripherals and support equipment, including but not limited to graphing calculators, digital cameras and microscopes and then integrate results and findings into Word or Excel. Students will learn to use a spreadsheet and database to collect information resources for bibliographies and appropriately citing information sources. Students will learn to organize information from multiple sources and then incorporate photos and illustrations into a research project. Students will learn to sort and filter data using spreadsheets and databases to collect and manipulate information then and organize the information resources. Students will demonstrate the ability to organize information for presentations to others. Students will collaborate with peers to determine appropriate technology to enhance a project based on a content standard. Students will learn to organize information from multiple sources	Each year	Teachers	Grade level teachers will collect assignments, projects, and reports at the semester. Semester review of assignments, projects, and reports by Technology Committee.	Assignments, projects, and reports

9-12 tudents will demonstrate applied keyboarding skills and other input/output devices proficiently. Students will learn to use multimedia and desktop publishing software to build a written, oral and multimedia presentation. Students will learn to use integrated and desktop publishing software to create written projects. Students will learn to use spreadsheet and database software. Students will learn to use Student Response Systems to evaluate attainment of curricular standards. ELL students will learn to use Rosetta Stone, Renaissance Learning, Imagine Learning and BrainX. Students will demonstrate and apply peripherals and support equipment across appropriate curricular areas using Word, Excel and PowerPoint. Students will learn to produce a written research paper that incorporates graphs, charts and other visuals into the paper. Students will learn to use spreadsheet, database and desktop publishing software to create newspapers or newsletters. Students will learn to use integrated software to create and publish written multimedia projects with images and visuals. Students will demonstrate the ability to organize information for presentation to others. Students will demonstrate technology collaboration with peers in completing a class group assignment based on a content standard. Students will learn how to make oral presentations utilizing technology such as	Each year	Teachers	Principal/Assistant Principal will analyze data from Grade level lead teachers or Department chairs to determine if plan goals have been met in January and May of each year and will recommend plan modifications. Technology Committee will be presented with this data for needs assessment at the end of each semester.	Data from needs assessment

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

All students are provided a District network account that provides the student access to a District email account and access to a personal web portal site which they may access anytime from any computer. All students accessing District resources from student computers located in the Library, computer labs and classrooms use a secure generic account assigned to a specific computer. All students sign an Acceptable Use Agreement (AUA) each year before accessing any District technology resources.

Goal 3f.1: All students will learn about the ethical and lawful use of information technology and copyrighted works. This will included: copyright and fair use, understanding the difference between lawful and unlawful downloading and file sharing and avoiding plagiarism.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
Library media teachers and library technicians will introduce and review copyright and fair use guidelines and present grade-level appropriate lessons regarding copyright laws with all students. Students will take a quiz on their understanding of appropriate and ethical use of information technology and create a bibliography work page. Library staff will be provided online access to iSafe's Intellectual Property lesson plans related to Copyright and Fair Use, CyberEthics and Peer-to-Peer Networks and Intellectual Property.	First semester of school year â€“ annually.	Director of Instructional Media; High School LMTs and K-8 Library technicians.	Library Staff Meeting Agenda; Lesson Plans; and library calendar.	Student quizzes. Student bibliographies work page.

Teachers will include follow-up instruction on copyright and fair use guidelines and present grade-level appropriate lessons regarding copyright laws as part of the lesson plan pertaining to the students' development of the grade appropriate curricular technology project. Students will take a quiz on their understanding of appropriate and ethical use of information technology and create a bibliography work pages as part of their curricular technology projects. Teachers will be provided online access to iSafe's Intellectual Property lesson plans related to Copyright and Fair Use, CyberEthics and Peer-to-Peer Networks and Intellectual Property.	Throughout year.	Teachers	Teacher lesson plans. Student quizzes. Bibliographies for student's curricular technology projects	Lesson plans, quizzes, bibliographies

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)

Goal 3g.1: All students will be educated about Internet safety as stated in AB 307. This Internet Safety education will be focused on appropriate online behavior, cyberbullying and social networks.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**

Conduct workshop training for all Library media teachers. Library media teachers and library technicians will introduce and review how to maintain safety and responsibility in Cyberspace, interact with other individuals safely and responsibly, and increase student's awareness about cyber bullying using grade-level appropriate lessons. Library staff will be provided online access to iSafe's Intellectual Propery lesson plans. Students will take a quiz on their understanding of Internet safety.	First semester of school year â€“ annually.	Director of Instructional Media; High School and K-8 Library technicians.	Library Staff Meeting Agenda; Lesson Plans; and library calendar.	Student quizzes.
Teachers will include follow-up instruction to all students on how to maintain safety and responsibility in Cyberspace, interact with other individuals safely and responsibly, and increase student's awareness about cyber bullying pertaining to the students' development of the grade appropriate curricular technology project. Teachers will be provided online access to iSafe's Intellectual Property lesson plans. Students will take a quiz on their understanding of Internet safety.	Throughout year.	Teachers	Evaluation of lesson plans and quizzes.	Teacher lesson plans. Student quizzes.
Expand the District's public web site to include curriculum support, lesson plans and ideas for assisting all students in understanding Internet safety.	Throughout the year	Director of Instruction Media; Director of Information Services and Educational Technology.	Public District web sites and Team Portal web sites.	Public District web sites and Team Portal web sites.

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

All students, including special populations, will have access to technology by using a district-wide information network with access to the district's unified cloud platform that allows any learning-station on a school site or at home to access core resources of information; provide electronic communications among users, and share relevant software tools using a common user interface that supports both Bring Your Own Device (BYOD) and 1:1 initiatives.

The district-wide information network will support Internet filtering in compliance with the Child Internet Protection Act (CIPA).

All schools will implement mobile wireless tablets, document cameras, LCD projectors and student response systems (SRS), or equivalent technology to increase the number of teachers using technology to deliver core academic lessons and provide students the technology to create grade appropriate curricular technology projects.

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.

Tracy Unified School District has been using the Aeries Browser Interface (ABI) application from Eagle Software for the last seven years. ABI is an application accessed through a web browser and used by all District teachers to update attendance, gradebook and grades in the Aeries student information system.

The District uses DataWise as its Electronic Learning Assessment Resource. DataWise is a data warehouse of state and local assessment data that is available to every teacher and administrator. DataWise includes two major components. Performance Analysis is the component used to review and analyze student assessment information in a variety of different report formats. Test Delivery is used to create and administer assessments and includes some reports that can be used to analyze student performance as well to analyze the assessments themselves.

DataWise has been in use in the district since the spring of 2006. It was initially used to record the results of district assessments, along with the results of state assessments. Over the past six years the use of DataWise has expanded to create assessments, administer the assessments through scanned answer documents, and to analyze the results of these assessments. DataWise is currently used at Kindergarten through grade 12. At the primary grades teachers enter the results of assessments administered to students without scanned answer documents. From grade 4 through grade 12 most district assessments have been set up in DataWise and are administered using the scanned answer documents. The only exceptions are performance assessments for which only the results are entered. These include writing assessments and reading fluency assessments.

The DataWise technology allows teachers to quickly score district assessments by scanning answer documents. Teachers can immediately access the results which include the percent correct as well as results by standard and by actual item. Results for individual students are available, as well as summary results for groups of students. Teachers can view results for their own students.

Site administrators can view results for their schools while district level administrators can view district-wide data.

Using the Test Delivery component of DataWise, teachers can access results of district assessments as soon as answer documents are scanned. These results include results on the specific California content standards linked to the assessments. Additionally, district assessment results are posted to the Performance Analysis system so that teachers and site administrators can view the results of scanned assessments alongside those that are entered by teachers. In addition to district assessment results, the results of state assessments can be viewed and analyzed through the Performance Analysis component. The state assessments include all STAR tests, CELDT (California English Language Development Test), and CAHSEE (California High School Exit Exam). Teachers and administrators can analyze both district and state assessment results side by side. The DataWise program displays those results by performance level and standard so that students who have not scored proficient on a particular standard can be identified with a single mouse click. This allows individual teachers and site administrators to identify students for intervention on key standards assessed on the annual state tests as well as those that are linked to the high school exit exam. While state assessment results provide data by strand within each content area, district assessment results allow for more specific analysis by standard so that teachers and administrators can target instruction and intervention to specific standards to improve student achievement.

In addition to being able to analyze student assessment results by student, grade, and school, results can be disaggregated by demographic subgroups such as those used for state and federal accountability. Teachers and administrators can monitor student achievement on state standards by subgroup and use this information to predict the results on state and federal accountability measures.

Data in the DataWise data warehouse is available to teachers on a daily basis. State assessment results are loaded into the program as soon as they are made available by the test contractors. The delays in making this data available to teachers and administrators are not a result of local technology and are beyond district control. The results of district formative and benchmark assessments are available to teachers and administrators immediately once those results have been scanned or entered. All teachers and administrators have access to the data warehouse from any computer on the district network as well as from home.

To increase the use of technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs the District needs to continue to offer teachers and administrators more training workshops for Aeries, ABI and DataWise. In addition, systems to ensure that teachers actually enter assessment data will be implemented using Aeries ABI.

Goal 3i.1: All teachers will continue to utilize the District's standard electronic attendance system along with electronic gradebook and recordkeeping programs (Aeries ABI) and the District's standard electronic learning assessment resource system (Datawise) to deliver assessment tests and to review and analyze student assessment information.

Objective 3i.1.1: All teachers will continue to utilize the District's standard electronic attendance system along with electronic gradebook and recordkeeping programs (Aeries ABI). All teachers

will continue to utilize the District's standard electronic learning assessment resource system to deliver assessment tests and to review and analyze student assessment information (Datawise) as the district transitions into the expansion of Aeries ABI to include all assessment and testing data

Benchmarks:

- Year 1: 100% of teachers will utilize the District's standard electronic systems (Aeries ABI and Datawise) for electronic attendance, electronic gradebook and recordkeeping, and data assessments.
- Year 2: 100% of teachers will utilize the District's standard electronic systems (Aeries ABI and Datawise) for electronic attendance, electronic gradebook and recordkeeping, and data assessments.
- Year 3: 100% of teachers will utilize the District's standard electronic systems (Aeries ABI and Datawise) for electronic attendance, electronic gradebook and recordkeeping, and data assessments.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
New teachers will be trained on Aeries ABI and Datawise.	July - August each year.	School Site Department Heads, School Site Administrators, Director of Curriculum, Accountability and Continuous Improvement, Director of Information Services and Educational Technology.	Student assessments reports from Aeries and Datawise reports.	Student assessments reports from Aeries and Datawise.
All teachers will continue to use the District's standard systems (Aeries ABI and Datawise) for electronic attendance, electronic gradebook and recordkeeping, and data assessments.	Annually	School Site Department Heads, School Site Administrators, Director of Curriculum, Accountability and Continuous Improvement, Director of Information Services and Educational Technology.	Student assessments reports from Aeries and Datawise.	Student assessments reports from Aeries and Datawise.

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

The district utilizes multiple means to provide communication between district staff and teachers, students and parents. The information that teachers update in ABI is accessible to parents through ABI Parent Portal. Using ABI Parent Portal, a web based application; parents may view their child's attendance, grades, discipline, assessments, testing, event calendar and homework assignments if the teachers are using these features in ABI. Teachers and parents may use ABI and

ABI Parent Portal to communicate via email with each other. Principals have the permission to send email communications to all parent contacts available in the school site Aeries student information system.

Principals may also send out telephone communications using the School Connects Synrevoice system to all parent contacts maintained in the school site Aeries student information system. In-addition, the Superintendent's office may send out district-wide telephone communications to all parent contacts. The district will be upgrading the district-wide telephone notification system to include the ability for teachers to send out telephone communication to parent contacts of their students.

All district teachers may create Team Portal web sites on the Student Portal and granting permissions to their students or other staff to access content. The Team Portal web sites may be used to post information for students such as: homework assignments, calendars, blogs, discussion boards, links to educational resources, etc. Teachers may create a separate Team Portal web site for each class period. Teachers may setup permissions to limit which students have access to which Team Portal web site or to grant student permissions to contribute (upload documents) to a specific Team Portal web site. All District teachers may create public web sites to post general information regarding their class curriculum. Links to teacher public web sites are available on each school's public web site. The district's public web site provides links to each school's public web site. Teachers' email addresses and school phone numbers will be published on both the schools' and the teachers' public web sites, and parents will be encouraged to contact teachers via email or telephone. District teachers and administrators will continue to be trained each year on using the districts portal and public web sites.

The District will explore the opportunities to provide parents web access to digital recordings of district and school events such as: graduations, spelling bees, ceremonies, music concerts, drama plays, science fairs, art shows, etc. Based on this study, the District will implement a digital video distribution network and through succeeding years continue to expand the District's digital video library of school programs and events.

Goal 3j.1: Increase parent participation utilizing Aeries ABI Parent Portal.

Objective 3j.1.1: Increase parent use of Aeries ABI Parent Portal by 15% to access their student's educational information.

Benchmarks:

- Year 1: Increase parent participation in the Aeries ABI Parent Portal by 5%.
- Year 2: Increase parent participation in the Aeries ABI Parent Portal by 5%.
- Year 3: Increase parent participation in the Aeries ABI Parent Portal by 5%.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**

Include information regarding parent access to Aeries ABI Parent Portal in school newsletters, school web sites, the District web site, emails to parent, and automated phone messages to parents.	Each Year	Administrators; Director of Information Services and Educational Technology.	Evaluation of Aeries reports	Annual Aeries reports

Goal 3j.2: Maintain public web sites for district and school information and increase teacher public web sites.

Objective 3j.2.1: All school sites will maintain a public web site that contains current information regarding school events, announcements, publications, student clubs, newsletters, curriculum, etc. and increase teacher public web sites by 30%.

Benchmarks:

- Year 1: Increase the number of teacher public web sites by 10%.
- Year 2: Increase the number of teacher public web sites by 10%.
- Year 3: Increase the number of teacher public web sites by 10%.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
Maintain school's public web site and include as action item in school site plan. Increase the number of teacher public web sites by 10%.	Each year	School Site Administrators, Director of Curriculum, Accountability, and Continuous Improvement, Director of Information Services and Educational Technology.	Evaluation of school web sites, School Site Plans, and teacher web sites.	School web sites. School Site Plan. Teacher public web sites.

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.

Tracy Unified School District will monitor and evaluate, throughout the year, the technology objectives and goals which will be implemented towards the use of technology as a tool to improve classroom instruction and student achievement. Annual API, AYP, CELDT, CAHSEE, CST and STAR test results will be compared year-to-year. Teachers will monitor progress using student assessments and review of student technology projects. School site administrators and District committees will evaluate teacher lesson plans. District administrators will monitor and evaluate

school site plans throughout the year. The District and schools will also collect information from staff and student surveys.

4. Professional Development

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

Tracy Unified School District has approximately 850 teachers and administrators. Staff technology assessment was accomplished through a a district wide survey to all certificated staff to determine their current technology proficiency and the future staff development in using technology devices and integrating technology into the curriculum. Approximately 76% of the District's teaching staff and administrators responded to the district's technology survey to assess their proficiency with software applications, technical skills, information literacy skills and their ability to integrate technology with activities to enhance learning and teaching. The top two skills that teachers identified as being proficient were email skills at 73% and word processing skills at 65%. Teachers identified as beginners in using software applications such as presentation skills (38%), spreadsheet skills (41%) and database skills (21%). At least 78% of the teaching staff rated their skills at intermediate or proficient levels for general computer knowledge and skills, email skills and word processing skills.

Of certificated staff responding to the district's technology survey, 85% attended 1-8 hours and 21% attended 9-20 hours of formal professional development in the use of computers and the Internet during the last three years. 79% of certificated staff had a preference for education technology development focused on integrating technology into the curriculum. 85% of certificated staff has a preference for small group technology training rather than one-on-one informal technology training or online web-based technology training.

The latest district technology survey on proficiency analysis identifies certificated staff as being proficient in email, word processing, general computer knowledge and email skills. Certificated staff is at the intermediate level in the use of the Internet, presentation and spreadsheet software skills. The greatest area of need is integrating technology with curriculum and instruction. While some certificated staff is proficient in specific areas, there is a definite need for ongoing and consistent training. Certificated staff need specific training in the use of software including, but not limited to: eMail, Word, Powerpoint, Excel, Access, Aeries ABI, Sharepoint 2010, Datawise, Rosetta Stone and VBrick ETV. Certificated staff also need specific training in the use of technology equipment in the classroom including, but not limited to: LCD projectors, document cameras, smart whiteboards, student response systems, and wireless tablets.

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.

The District will provide professional development opportunities in technology skills with paid in-service days, workshops and online classes. All teachers and administrative staff will meet professional and personal proficiency goals in basic computer skills and technology integration to support grade appropriate academic content standards and improve learning. The District's goal is to increase the total percentage by 10% each year of the teachers and administrative staff that achieves an intermediate or advanced skill level.

Goal 4b.1: Teachers and administrative staff will participate in staff development training to enhance their skills in understanding basic computer information and integrating technology into the curriculum.

Objective 4b.1.1: 70% of the teachers and administrative staff to participate in technology training in the following areas: information literacy, Internet research and curricular integration, Word processing, PowerPoint, Excel spreadsheets, video distribution/streaming, email, document cameras, LCD projectors, wireless tablets, smartboards, student response systems, Internet safety, student record keeping, two way home-school communication, flipping the classroom skills, and BYOD and 1:1 programs in the classroom, through staff development days which are offered on staff buy-back days, paid in-service days, and during the summer. Teachers and administrative staff will also be offered the option of participating in online classes.

Benchmarks:

- Year 1: 50% of the teachers and administrative staff to participate in technology training.
- Year 2: 60% of the teachers and administrative staff to participate in technology training.
- Year 3: 70% of the teachers and administrative staff to participate in technology training.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
Evaluate current technology training provided by Staff Development. Develop a District wide staff development plan that will meet District curriculum and technology goals.	Each year	Director of Staff Development; Director of Curriculum, Accountability and Continuous Improvement; Director of Information Services and Educational Technology. School site Administrators, Teachers.	Training evaluation forms. Training sign-in sheets.	Training evaluation forms. Training sign-in sheets.

Provide technology training on District in-service days, District sponsored early release Monday's, and other times during the week. Attendees will complete class evaluation form for each training attended.	Schedule ongoing training sessions throughout year.	Director of Staff Development; Director of Curriculum, Accountability and Continuous Improvement; Director of Information Services and Educational Technology. School site Administrators, Teachers.	Training evaluation forms. Training sign-in sheets.	Training evaluation forms. Training sign-in sheets.

Objective 4b.1.2: 70% of teachers will create a collection of grade level appropriate curriculum consisting of lesson plans, curricular PowerPoint presentations and Microsoft Word documents on the District's Staff Portal and Student Portal.

Benchmarks:

- Year 1: 50% of the teachers will establish a basic accessible collection of PowerPoint and Microsoft Word documents on the district's Staff Portal and Student Portal.
- Year 2: An additional 10% of the teachers will establish a basic accessible collection of PowerPoint and Microsoft Word documents on the district's Staff Portal and Student Portal.
- Year 3: An additional 10% of the teachers will establish a basic accessible collection of PowerPoint and Microsoft Word documents on the district's Staff Portal and Student Portal.

Implementation Plan				
Activity	**Timeline**	**Person(s) Responsible**	**Monitoring & Evaluation**	**Evaluation Instrument**
Teachers will collaborate and create technology integrated lesson plans during District and school site sponsored early release Monday's, and other times during the week. Attendees will complete class evaluation form for each meeting attended.	Throughout year	Director of Staff Development; Director of Curriculum, Accountability and Continuous Improvement; Director of Information Services and Educational Technology, Administrators, Teachers	Training evaluation forms. Training sign-in sheets.	Training evaluation forms. Training sign-in sheets.

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.

Tracy Unified School District will monitor the professional development activities throughout the year and evaluate the progress at the end of each school year. All certificated staff will complete

the district's technology survey in May of each year. District administrative staff will review current staff development plan for technology skills and integration of technology into the curriculum along with the technology survey reports and update the plan in preparation for the next year of training.

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:

K-5

Each elementary school maintains an average of 150 computers. There is a minimum of 1 computer lab per school site with a minimum of 16 computers in each lab for student use. Each library has a minimum of 30 computers. Each school maintains a network file server.

6-8

Each middle school maintains an average of 204 computers. There is 1 computer lab per school site with a minimum of 35 computers in each lab for student use. Each library has a minimum of 30 computers. Each school maintains a network file server.

9-12

Each high school maintains an average of 520 computers. There is an average of 4 computer labs per school site with an average of 35 computers in each lab for student use. Each library has 50 computers. Each school maintains a network file server.

41% of the district's computers are over 10 years old and using Microsoft Windows XP operating system.

Existing Internet Access:

100% of the school site’s computers are connected to the Internet.

District Office maintains an EaMIS 1 GB circuit with 155 Mb/s bandwidth for Internet services.

All school sites are connected to the District Office with a 2 GB fiber which is used for both data, voice and video communications.

All school sites are using the district-wide voice over IP (VoIP) system for voice and fax communication services.

Each school site using VoIP has a minimum of six analog phone lines to support x911, fire alarm systems, intrusion systems and elevator phones.

Existing Electronic Learning Resources:

K-5

Each school site uses Windows operating system, Microsoft Office, Microsoft Enterprise Client Access License, antivirus, spyware, spam, Internet filtering, Deep Freeze and classroom management software, Aeries, Datawise, Destiny, VBrick, Renaissance Learning, Imagine Learning, Rosetta Stone, BrainX, typing programs, Leappads, Open Court, PhotoStory, ALEKS, and United Streaming.

6-8

Each school site uses Windows operating system, Microsoft Office, Microsoft Enterprise Client Access License, antivirus, spyware, spam, Internet filtering, Deep Freeze and classroom management software, Aeries, Datawise, Destiny, VBrick, Renaissance Learning, Rosetta Stone, BrainX, typing programs, and ALEKS.

9-12

Each school site uses Windows operating system, Microsoft Office, Microsoft Enterprise Client Access License, antivirus, spyware, spam and Internet filtering, Deep Freeze, and classroom management software, Aeries, Datawise, Destiny, Rosetta Stone, VBrick, BrainX, typing programs, AverKey, Choices, Adobe Design and Web Premium Creative Suite , AutoCad, and programming software,

All District staff and students are provided email accounts and file storage on the district's Microsoft Sharepoint servers.

Existing Technical Support: The Tracy Unified School District currently provides technical support to all school sites with a centrally located staff of five Computer Technicians, three Computer Network Technicians, one Telephone/Cabling Technician and one Student Systems Technician which are all part of the Information Services and Educational Technology department. The district's Technology Helpdesk is monitored by one of the five Computer Technicians each day to handle support calls and emails.

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:

- Upgrade computers at schools sites, where applicable, from Windows XP to Windows 7.
- Replace existing non-usable/non-supported (i.e. Windows XP) computers in which don't support a Windows 7 upgrade.
- Implement new computers to support a 1:1 initiative.
- Replace existing non-usable peripherals (i.e. printers) at school sites.

- Implement additional computers at school sites to support online SBAC assessments.
- Replace existing non-usable LCD projectors at school sites.
- Implement additional document cameras for the classrooms.
- Implement additional student response systems (SRS) for the classrooms.
- Implement additional wireless tablets in classrooms.
- Implement integrated audio/visual systems in classrooms.
- Replace servers for the district's core services.
- Upgrade video distribution and management system.
- Upgrade all Microsoft 2003 Servers to Microsoft 2008 or 2012 Servers.
- Implement Cisco Identify Service Engine (ISE) 802.1x wired security for network at all schools.
- Implement additional video conferencing systems.
- Implement additional security cameras at schools.
- Upgrade Email archiving system.

Electronic Learning Resources Needed:

- Implement a district-wide virtual desktop infrastructure using Stoneware's webNetwork system as the district' unified cloud platform. Implement Microsoft terminal servers to support distribution of district/school applications from the unified cloud platform.
- Implement digital textbooks to support 1:1 devices.
- Upgrade existing Rosetta Stone licenses.
- Implement additional Imagine Learning licenses.
- Implement Aeries.Net, Aeries Analytics, Aeries Early Warning System, and Aeries Internet Registration systems.
- Replace district's telephone notification system.
- Implement digital state adopted textbooks for 1:1 initiative.

Networking and Telecommunications Infrastructure Needed:

- Upgrade district's existing EaMIS 1GB circuit 155 Mb/s for Internet services to 500Mb/s.
- Upgrade all fiber wide area network (WAN) connections between District Office and all school sites from 2 GB to 20 GB.
- Replace the district's Internet web filter.
- Implement Microsoft Sharepoint Server 2010.
- Implement Microsoft Office 2010.
- Implement Microsoft Windows 8 on all new computer devices.
- Implement Microsoft System Management Server 2012.

Physical Plant Modifications Needed:

- Upgrade HVAC system at District Office to provide fail-over redundancy.
- Upgrade cabling infrastructure at school sites to support additional computer labs.
- Implement back-up generator to support centralized core network infrastructure and provide support for fail over services.

Technical Support Needed:

- Obtain additional technical support by outsourcing specific technical services to third party vendors.

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.

The Tracy Unified School District provides a high speed state of the art digital data network system between all of its school sites. The network infrastructure 's primary purpose is to enhance educational and administrative activities at all sites with flexibility and support for future needs and activities. The districts network system supports the capability of carrying multiple data services such as high speed computer data networks, voice over IP telephone services and digital video for educational curriculum and physical security.

As education resources in electronic format continue to become available, the district needs to utilize effective strategies for providing student access to computers. Access to computers and other technology equipment is critical to support the goals and objectives in the curriculum and professional development sections of this plan. The district's goal is to provide one computer for each and every student and provide required technology resources for online SBAC assessments.

Year 1 Benchmark: 20% Implementation: District will increase bandwidth for Internet; increase bandwidth of network connections to schools; upgrade cabling infrastructure at schools; replace computers needed to replace for non-usable Windows XP computers in classrooms, libraries and computer labs; purchase computers necessary to support online SBAC assessments in computer labs at all schools; and replace one third of the necessary servers, software and other technology resources.		
Recommended Actions/Activities	**Timeline**	**Person(s) Responsible**
Increase bandwidth for Internet to 500 MB and network connections to all schools to 20 GB.	By June	ISET department
Purchase 1800 thin client Windows based computers to replace the non-usable Windows XP computers. Purchase 1200 thin client Windows based computers to support online SBAC assessments at all schools.	By June	ISET department

Purschase additional licenses of Renaissance Learning, Imagine Learning, BrainX, ALEXS, Rosetta Stone and CyberHigh.	By June	ISET department
Upgrade non-usable printers.	By June	ISET department
Upgrade servers and core network applications.	By June	ISET department
Implement Cisco ISE system.	By June	ISET department
Purchase Stoneware webNetwork.	By June	ISET department
Purchase the following Aeries systems: Aeries.Net, Aeries Analytics, Aeries Early Warning Systems, and Aeries Internet Registration System.	By June	ISET department
Upgrade Security Camera systems.	By June	ISET department
Upgrade Email Archiving system.	By June	ISET department
Upgrade telephone notification sysstem.	By June	ISET department
Upgrade the cabling and electrical infrastructure at all schools to support additional computer labs for online SBAC assessments.	By June	ISET department
Purchase 160 additional document cameras, wireless tablets, LCD projectors and student response systems for classrooms.	By June	ISET department
Purchase 100 new integrated audio/visual systems.	By June	ISET department

Year 2 Benchmark: 40% Implementation: District will upgrade HVAC system that supports core networking equipment; replace non-usable computers in classrooms, libraries and computer labs; purchase one fifth of computers necessary to support 1:1 student to computer ratio, and replace one third of the necessary servers, software and other technology resources.

Recommended Actions/Activities	Timeline	Person(s) Responsible
Upgrade HVAC system that supports core network equipment.	By June	ISET department
Purchase 700 thin client Windows based computers to replace non-usable computers. Purchase 3200 Windows based netbooks to support a student to computer ratio of 1:1.	By June	ISET department
Purchase digital subscriptions for stated adopted textbooks.	By June	ISET department, Instruction Media Center
Purchase additional licenses of Renaissance Learning, Imagine Learning, BrainX, ALEXS, Rosetta Stone and CyberHigh.	By June	ISET department
Upgrade non-usable printers.	By June	ISET department
Upgrade servers and core network applications.	By June	ISET department

Upgrade Video Distribution and Video Conferencing Systems.	By June	ISET department.
Purchase 160 additional document cameras, wireless tablets, LCD projectors and student response systems for classrooms.	By June	ISET department
Purchase 100 new integrated audio/visual systems.	By June	ISET department

Year 3 Benchmark: 60% Implementation: District will implement a backup generator for core networking equipment; replace non-usable computers in classrooms, libraries and computer labs; purchase one fifth of computers necessary to support 1:1 student to computer ratio; and replace one third of the necessary servers, software and other technology resources.		
Recommended Actions/Activities	**Timeline**	**Person(s) Responsible**
Purchase a back-up generator to support core network equipment.	By June	ISET department
Purchase 700 thin client Windows based computers to replace non-usable computers. Purchase 3200 Windows based netbooks to support a student to computer ratio of 1:1	By June	ISET department
Purchase digital subscriptions for stated adopted textbooks.	By June	ISET department, Instructional Media Center
Purschase additional licenses of Renaissance Learning, Imagine Learning, BrainX, ALEXS, Rosetta Stone and CyberHigh.	By June	ISET department
Upgrade non-usable printers.	By June	ISET department
Upgrade servers and core network applications.	By June	ISET department
Purchase 160 additional document cameras, wireless tablets, LCD projectors and student response systems for classrooms.	By June	ISET department
Purchase 100 new integrated audio/visual systems.	By June	ISET department

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

The Information Services and Educational Technology (ISET) department will receive and analyze data received from the district's Technology Advisory Board, Management Meetings, Staff Development Trainings, Continuous Improvement Team, Curriculum Council, School Plans and District’s Strategic Plan on an annual basis. The Director of Information Services and Education Technology (ISET) will update the action plan associated with District Goal 4 related to technology.

The ISET department meets weekly to review and discuss current issues and projects. The District’s Goal 4 references technology and is reviewed and updated annually by the Director of Information Services and Educational Technology in the Continuous Improvement Team

meetings. ISET staff use an electronic workorder system to track technology related service requests from district and school site staff. ISET communicates via monthly emails to all district staff to share technology updates and training material. Technology updates and training information are also posted on the district's Intranet portal web site and on the ISET Helpdesk's portal web site. Technology training is also conducted at various Management Team meetings, school site staff meetings, school site department meetings and other district committee meetings.

6. Funding and Budget

6a. List of established and potential funding sources.

Established Funding Sources:

The Tracy Unified School District uses the following existing and potential sources for funding technology.

- General Fund
- Measure S Bond
- Measure E Bond
- Microsoft Settlements funds
- District Facilities funding
- School expansion funding
- Private, Technology, State and Federal Grants
- School Site grant funds
- Block grant funds
- Parent Clubs
- Associated Student Body

On November 4, 2008, voters in Tracy Unified School District passed Measure S, a $43.1 million school bond. Bond funds will be used to address the most critical renovation and modernization needs at the District's oldest elementary and middle schools. In-addition, the Bond funds will be used to upgrade technology and provide security systems to enhance student safety in all schools where the District serves students from kindergarten through high school.

The District accepts donations that meet the District's minimum hardware and software requirements. The Director of Information Services and Educational Technology develops a technology budget each year that includes an analysis of the previous year's technology spending on hardware, software, technical support and network infrastructure. As part of the school plan process, school site administration also plans funds for computers, peripherals, software and other infrastructure.

Potential Funding Sources:

- Foundation/Donations
- Categorical funds:
    - Title I
    - Title II A
    - Title II D
    - Title III
    - Title IV
    - Title V

    - GATE
    - Economic Impact Aid (state EL)
    - Lottery
    - Perkins
    - Professional Development Block Grant
    - IDEA Staff Development
    - Program Improvement
- Instructional Materials funds
- QEIA
- One-time block grants
- Facilities Budget: State construction funds
- Deferred Maintenance
- CAHSEE Intensive Instruction

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

Item Description	Year 1	Year 2	Year 3	Funding Source Including E-Rate
2000-2999 Classified Salaries				
Classified Employees Salaries for Technology Department	$756,000	$786,240	$817,690	General Funds
3000-3999 Employee Benefits				
Classified Employees Benefits for Technology Department	$257,040	$267,322	$278,015	General Funds
4000-4999 Materials and Supplies				
Classroom, library and computer lab computers	$1,500,000	$1,950,000	$1,950,000	General Fund, IMC, Lottery, Categoricals
Subscription Services for Digital Textbooks	$0	$1,000,000	$1,000,000	IMC Funds
Upgrade/Maintenance Servers and Network Equipment	$450,000	$450,000	$450,000	General Funds
LCD projectors, document cameras, wireless tablets, and student response systems	$350,000	$350,000	$350,000	General Funds, Categoricals
Printers	$75,000	$75,000	$75,000	General Funds
5000-5999 Other Services and Operating Expenses				
Staff Development	$150,000	$150,000	$150,000	Staff Development Funds, General Funds

Renaissance Learning, Imagine Learning, BrainX, Rosetta Stone, CyberHigh and other educational software licenses	$1,200,000	$1,200,000	$1,200,000	Categorical Funds, School Site Funds
Upgrade and maintain telecommunications services for Internet and WAN	$1,056,000	$1,056,000	$1,056,000	General Funds
Aeries application systems	$50,000	$45,000	$45,000	General Funds
Upgrade cabling and electrical for new computer labs at schools	$945,000	$0	$0	General Funds, Facilities
Upgrade core network applications	$150,000	$150,000	$150,000	General Funds
Upgrade network applications-Video Distribution, Video Conferencing, Telephone Notification, Email Archiving, Security Camera	$300,000	$300,000	$300,000	General Funds, Categoricals
6000-6999 Equipment				
Cisco ISE	$150,000	$50,000	$50,000	General Fund, Bond Funds
Stoneware webNetwork system	$300,000	$100,000	$80,000	General Funds
Upgrade HVAC system	$0	$125,000	$0	Deferred Maintenance
Back-up Generator	$0	$0	$250,000	Deferred Maintenance
Totals:	$7,689,040	$8,054,562	$8,201,705	

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

The Tracy Unified School District currently utilizes a “waterfall” system for replacement of obsolete equipment. The waterfall system is a sequential process that regularly replaces the oldest technology in the District. The waterfall system replaces technology when the technology is non-usable or poses a security risk to the district network infrastructure. School sites purchase replacement computers from school site funds. Equipment purchased by the District systematically goes through updates to maintain current supported levels from the manufacturer or vendor. Obsolete technology hardware is removed from the District’s asset inventory system and classified as District e-waste. The Board of Directors approves all e-waste disposals with contracted third-party vendors per Board policies and state education codes.

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.

Information and data are regularly obtained throughout the District in all curricular, student and business areas. The intent of the monthly meetings is to obtain, analyze and provide feedback to the appropriate groups regarding updated funding and budget decisions. The District Superintendent and the Director of Information Services and Educational Technology are responsible for monitoring the budget process and updating funding.

7. Monitoring and Evaluation

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

All teachers will provide assessments to students throughout the school year that are aligned with district and the state's common core standards. Teachers will record student assessments into Aeries or DataWise. STAR, CAHSEE, and CELDT test scores will also be available to access from Aeries. Principals, teachers and educational management staff will use Aeries and/or DataWise reporting functionality throughout the year to determine the impact of technology on student learning. Administrative staff will review the results of the annual district Technology Survey to monitor increases in teacher's technology skills. Administrative staff will review the district wide staff development plan each year and modify as needed to provide appropriate technology training to teachers. Technology projects related to the District's hardware, infrastructure, software and technical support needs will be reviewed in April of each year and will be used to develop the District's technology budget for the next school year. Potential funding through federal and state programs and various grant funding opportunities will continued to be explored to supplement existing funding to meet technology needs identified in this plan.

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

The schedule for the implementation of the technology plan will occur through the report and feedback mechanism built into the district's collaborative meeting processes. Management Team meetings, Principal meetings, Continuous Improvement Team and Staff Development training meetings meet monthly and will monitor the technology plan implementation through reports, surveys and emails. Curriculum Council and Data Teams meet quarterly and will monitor using reports and surveys. The School Site Plans committee meets twice a year and will monitor through reports and surveys.

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

The Tracy Unified School District goes through a regular and systematic process to monitor the progress of student learning and achievement. At the beginning of each school year, each school presents a collaborate comprehensive school site plan to a review committee composed of the Superintendent, Assistant Superintendents, Board members, and Directors of Educational Services and Business Services. The purpose of the presentation is to evaluate student learning and achievement, and to present a systematic approach to curricular improvement throughout the

school year. Specific data is assessed on a year to year basis with significant benchmarks demonstrated throughout the year.

Teachers, parents and other stakeholders provide suggestions and opinions through parent club meetings, Superintendent's Advisory Committee, weekly school site staff meetings and meetings. The information obtained though the monitoring and evaluation process will be used as school and district data to improve student learning and modify curricular objectives. Information will be shared with Board members, management, staff, parents, community and businesses though information posted on the district's public web site (www.tracy.k12.ca.us), through email communication, the district's telephone communication system, management team meetings and board meetings. Technology successes will be shared in the same methods.

Annual Review of Goals Year One:

Annual Review of Goals Year Two:

Annual Review of Goals Year Three:

8. Collaborative Strategies with Adult Literacy Providers

North School partners with the San Joaquin County Migrant Office to provide "Latino Family Literacy Project" where all families of migrant children are invited to attend. The program is held on campus at North School in the evening. In addition, the program is provided through the adult English Language class located on campus during the day. The District also partners with Tracy Mental Health to provide the "Parent Project." Parents with students grades 4-12 join together to learn how to understand their pre-teens and teenagers and how to handle the challenges of growing up. The school provides a program to educate parents on the use of "ABI Parent Portal." ABI Parent Portal is a web-based application that provides student information to parents. Parents, using computers at the school, may access the ABI Parent Portal as the majority lack Internet access at home.

At South/West Park School, the following programs are offered on site:

- Adult literacy programs for English as A Second Language.
- Parenting Classes for Adults in both Spanish and English.
- Literacy Night for Parents for parents to help them with teaching/helping their children at home.
- Technology support for parents at school library and computer lab.

The Tracy Unified School District provides adult education courses to the general community at our Adult Education school site. Adult Education offers the following programs: High School Diploma, Adult Independent Study, Basic Education to adults, Business Education, English Language Civics-Citizenship, English as Second Language (ESL), General Education Development (GED), and Individualize Learning Center (ILC). Technology is used in various settings to individualize learning for students as well as to maximize educational opportunities in group settings.

Adult Education offers a multitude of courses within each of these programs such as:

- Individualized Learning Center -Algebra, Art History, Economics, GED Test Preparation, General Math: Basic/Intermediate/Advanced , Geography, Health Science, Life Science, Reading 1/2, Literature, Physical Science, Social Studies elective California Government, U.S. Government, U.S. History and World History.
- Business - Basic Computer Understanding/Windows, Microsoft Office, Financial Insights
- English 1/2/3/4, English Elective-Sports Lecture, Literature 1/2
- GED Test Preparation
- Home Economics-Financial Literacy, Clothing Construction
- Industrial-Vocational Education – Automobile Mechanic, Combination Welder, Nurse Assistant, Crime Scene Investigation, Woodworking
- Mathematics – Algebra 1A/1B
- Adult Basic Education - ABE Family Literacy, English Language Arts, Reading and Writing, Math: Beginning/Intermediate/Advanced
- English as Second Language
- ESL/EL Civics/Citizenship
- Adults with Disabilties-T.A.R.P.-Independent Living Skills

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 district needs to understand the technology needs outside the classroom walls and its use in the immensely challenging corporate world today and to prepare for tomorrow. Businesses and schools can understand and support each other's needs and help in forming a community of learning and working through technology and also expand the learning of the students. Collaboration and communication also play a key role in creating a perfect learning environment for our students. The district should invest in strengthening educators and make it an ongoing process. Educators with technology can make learning more meaningful, interesting and relevant for students.

The dramatic change in technology is now making Tracy Unified School District schools change the learning and teaching environment. Technology involves use of online facilities such as Internet, online learning, assignments, simulations & online tests. Mastery and application of new technologies in every field of life plays a vital role. Likewise technology is used in developing and expanding major elements that play most significant role in involving the innovative teaching and learning strategies. No Child Left Behind Act of 2001 has revolutionized the US education by raising expectations and producing results. There is competition and special emphasis on skills in mathematics and science. Special emphasis is given on English language needs and keen skills in mathematics and science (Rosetta Stone, Renaissance Learning, Imagine Learning, Brain-X, Datawise, etc.). Thomas, (2006) says, "Becoming a tech savvy administrator should no more be just a choice, but a necessity in the education of our students".

Educators explore, collaborate and communicate with other teachers and administrators to learn from their experiences and prepare oneself for the same. Teachers acquire and apply technology, teaching and online knowledge and skills in situations that encourage them to seek assistance from others as well as to provide help to others during and after professional development training (online projects, essay writing, online End of Course Exams).

Professional training will have a variety of techniques embedded in the training program, including digital images, animation, video, text and links to external web sites. The study of the characteristics of the virtual professional training for educators, staff and administrators suggests that it will provide an authentic context in which the online educators will acquire hands on training with a variety of online and in class projects. Multiple levels of interactivity, about content, understanding, knowledge and problem-solving, will engage and enable them to gain control of their learning.

The Internet hosts many research sites that are helpful to educators. The American Institute for Research (AIR) at http://www.learningpt.org) is a source for large scale research on technology use in schools as well as practitioner and technology planning and evaluation information. The Technology Research Exchange (TREx) is a valuable resource for research on questions of how technology has impacted student learning, curriculum and instruction, professional development,

and assessment and evaluation. TREx is located at http://caret.iste.org. These electronics resources, and others such as the Education Resources Information Center (ERIC) at http://www.eric.ed.gov, provide information on educational technology research to assist educators in planning for effective use of technology and were used when writing this plan. *Contemporary Issues in Technology and Teacher Education (CITE Journal)* - publishes articles on general technology use or discipline-specific technology use, policy and practice issues, and areas of technology and teacher education. *Educational Technology* - covers telecommunications, computer-aided instruction, information retrieval, educational television, the Internet in education, and electronic media in the classroom for educators at all levels involved with technology. *Journal of Educational Technology Systems* - deals with the nature of technological devices (i.e., hardware) useful for teaching and learning, and focuses on the techniques and approaches (i.e., software) for using technology in all types of educational systems. *Journal of Information Technology Education: Research* - aims to disseminate high quality manuscripts and monographs on rigorous or generalized research at the intersection of education and informing technology; exposes readers to a variety of epistemologies and types of articles, including primary, action, and secondary research; and acknowledges and embraces diverse teaching and learning models in use around the world. *Journal of Technology Education* - provides a forum for scholarly discussion of the theory and research related to technology education.

"Effective eLearning comes from using information communications technology (ICT) to broaden educational opportunity and help students develop the skills they and their countries need to thrive in the 21st century. An emerging body of evidence suggests that eLearning can deliver substantial positive effects: students are more engaged and able to develop 21st century skills, teachers have a more positive attitude toward their work and are able to provide more personalized learning, family interaction and parental involvement may increase, communities benefit from bridging the digital divide. Economically disadvantaged students and children with disabilities benefit particularly. Economic progress can result from direct job creation in the technology industry as well as from developing a better educated workforce. The effects of 1:1 eLearning appear to increase as technology is more deeply integrated into the educational experience and students and teachers have technology access throughout the day. Researchers have reported that issuing laptops to teachers, or helping them purchase laptops, can empower them to teach better, increase lesson planning and preparation productivity, gain a more positive attitude about their work, and improve efficiency of management and administration tasks. Technology access enables dynamic opportunities for research, collaboration, problem solving, and communication beyond the formal school environment. Two areas that illustrate these rapid changes in skill development are from library technology use and exploration into the benefits of game-based learning." (2012) "The Positive Impact of eLearning", Intel white paper on education transformation.

"1:1 eLearning has powerful benefits, enhancing learning and skill development from critical thinking to collaboration. But in the age of "bring your own device," 1:1 often means that students are likely to access learning resources using their own individual devices inside and outside the classroom. This multi-device environment poses challenges—as educators need to ensure that all students are receiving a consistent learning experience, no matter what device they're using, and IT must meet stringent security requirements, such as protecting student data, assessment, and controlled Web access. "Client aware" means that cloud-based applications or services are able to recognize and take advantage of the capabilities of the particular end-point device. This helps create the optimal teaching and learning experience possible, based on the devices being used. Schools and districts are using Stoneware's unique private cloud technology

to create solutions tailored to the education environment. These private clouds allow applications, content, data, and services to be securely accessed by anyone, from anywhere." (2012) "Enhancing Learning with Client-Aware Cloud Solutions, Intel solution brief on client aware computing.

K-12 schools in the United States are beginning to shift their IT budgets toward cloud technologies. According to new research released today, institutions will spend more than a quarter of their IT resources on the cloud within five years. K-12 respondents also said that within two years, 17 percent of their IT budgets will be spent on cloud-based technologies. That figure will increase to 27 percent in five years. Many organizations are carefully--and selectively--moving into cloud computing, as well they should, because it represents a significant shift in how computing resources are provided and managed," said David Cottingham, senior director, managed services at CDW, in a statement released today to coincide with the report. "With thoughtful planning, organizations can realize benefits that align directly with their organizational goals: consolidated IT infrastructure, reduced IT energy and capital costs, and 'anywhere' access to documents and applications (May 2011) "K-12 Budgets Begin Shift Toward Cloud", The Journal.

Cloud computing represents a revolutionary technological paradigm shift that can dramatically improve the quality of education for all students in a given state, from K-12 to higher education. Through the Internet, it can deliver the most advanced software and educational materials, hardware resources and services to students and educators in even the most impoverished or remote school districts in the state, without the need for advanced IT expertise at those locations. At the same time, it does more for significantly less, providing needed relief for currently strained education budgets. From an IT-management perspective, it dramatically reduces resource management costs — including power, cooling and system management personnel — while driving up the utilization of servers and software licenses, which in turn reduces purchasing requirements. ...delivers many significant benefits to students, faculty and administration, enabling new means of communication and collaboration for the users that form the heart of an academic culture. (November 20100 "The Transformation of Education through State Education Clouds", white paper by IBM Global Education.

Over the past decade the belief that increased access and use of computers (and digital technology tools) would lead to improved teaching and learning, greater efficiency, and the development of critical skills in students motivated educational leaders and policy makers to make substantial investments in educational technologies. Recently, 1:1 computing has emerged as a technology-rich educational reform where access to technology is not shared—but where all teachers and students have ubiquitous access to laptop computers. Given that nearly all of the studies reported that 1:1 programs depend largely on teachers for success, it was not surprising that teacher preparation through professional development was important for successful implementation. In their study, Bebell and Kay found that teaching and learning practices changed when students and teachers were provided with laptops, wireless learning environments, and additional technology resources. In the five 1:1 schools they examined, they found that while the implementation and outcomes of the program varied across schools and across the three implementation years, access to 1:1 computing led to measurable changes in teacher practices, student achievement, student engagement, and students' research skills compared to the control condition. it seems highly likely that some form of 1:1 computing will be the norm for the majority of American classrooms at some point in the future. How long this process takes or how the technology is adapted and implemented into curriculum and school culture will largely depend on

policy makers and school leadership, as well as the costs and features of the respective technology. Research has shown that (January 2010) "Educational Outcomes and Research from 1:1 Computer Settings, The Journal of Technology, Learning, and Assessment.

Additional information on cloud computing research may be found at the following resources:

- *Cloud Computing and the K-12 Crowd* - http://www.k-12techdecisions.com/article/educators_turning_to_cloud_computing (D. Craig MacCormack, *K-12 Tech Decisions*, 1 December 2011.) Cloud Internet technology services and unified communications solutions are becoming more popular for schools because it is cost-effective to outsource IT.
- *K-12 Budgets Begin Shift Toward Cloud* - http://thejournal.com/articles/2011/05/26/k12-budgets-begin-shift-toward-cloud.aspx. **(**David Nagel, *The Journal*, 26 May 2011.) This article outlines the "CDW-G 2011 Cloud Computing Tracking Poll" results obtained from polling K-12 institutions and organizations on the benefits and challenges of cloud adoption.
- *Personal Cloud' to Replace PC by 2014, Says Gartner* - http://www.gartner.com/it/page.jsp?id=1947315 (Gartner Newsroom, 12 March 2012.) Gartner analysts have predicted that cloud services will bring a variety of mobile devices to be just as prominent tools as the personal PC because the "personal cloud" allows flexibility in which device is used to access the cloud's information.

In the 2010, Richard W. Riley conducted research on "Educators, Technology and 21st Century Skills: Dispelling Five Myths", a study on the connection between K-12 technology use and 21st century skills. Technology and 21st century skills are intrinsically related as well, in that learning 21st century skills requires the use of technology. Information, media and technology skills themselves are one set of 21st century skills —and technology supports the learning of other 21st century skills, including critical thinking and problem solving; communication and collaboration; and creativity and innovation. Conversely, maximizing the use of technology requires applying a good number of the skills articulated by proponents of 21st century skills.The key message of the survey findings is that teachers' technology habits make a difference in their perceptions of student outcomes.

In the 21st century, students must be fully engaged. This requires the use of technology tools and resources, involvement with interesting and relevant projects, and learning environments—including online environments—that are supportive and safe. ... In the 21st century, educators must be given and be prepared to use technology tools; they must be collaborators in learning—constantly seeking knowledge and acquiring new skills along with their students." Arne Duncan, U.S. Secretary of Education, March 2010.

Per a 2009 survey, revealed these key findings: a majority of teachers are using digital media, with applications including instruction, lesson planning, communications and professional development; teachers who do use digital media value it and believe that it helps them—and their students—be more effective; teachers continue to use video, but they increasingly access video online, rather than from broadcast, cable or videotape and teachers are becoming more strategic in their media use and savior about integrating it into their repertoire of instructional strategies and resources; teachers value many different types of digital media, with games and activities for student use in school topping the list; and increasing numbers of teachers are joining virtual professional communities—and many are comfortable using social networking tools in their personal and professional lives. The findings could herald positive

changes in pre-K and K–12 education, including: more engaging, creative and collaborative learning environments; new, different resources that support rigorous, inquiry-based learning and new tools for students to produce content and take charge of their learning; more effective instruction for students with different learning styles and abilities and more focused and flexible forums for collaboration and professional development, built around communities of interest and expertise, rather than around geography alone. Schools around the country are moving forward with allowing teachers and students to "bring their own devices or technology". “Teachers Increasingly Value Media and Technology, Digitally Inclined by PBS Education and Grunwald Associates LLC.

Over the past decade the belief that increased access and use of computers (and digital technology tools) would lead to improved teaching and learning, greater efficiency, and the development of critical skills in students motivated educational leaders and policy makers to make substantial investments in educational technologies. Recently, 1:1 computing has emerged as a technology-rich educational reform where access to technology is not shared—but where all teachers and students have ubiquitous access to laptop computers. Given that nearly all of the studies reported that 1:1 programs depend largely on teachers for success, it was not surprising that teacher preparation through professional development was important for successful implementation. In their study, Bebell and Kay found that teaching and learning practices changed when students and teachers were provided with laptops, wireless learning environments, and additional technology resources. In the five 1:1 schools they examined, they found that while the implementation and outcomes of the program varied across schools and across the three implementation years, access to 1:1 computing led to measurable changes in teacher practices, student achievement, student engagement, and students’ research skills compared to the control condition. it seems highly likely that some form of 1:1 computing will be the norm for the majority of American classrooms at some point in the future. How long this process takes or how the technology is adapted and implemented into curriculum and school culture will largely depend on policy makers and school leadership, as well as the costs and features of the respective technology. Research has shown that (January 2010) “Educational Outcomes and Research from 1:1 Computer Settings, The Journal of Technology, Learning, and Assessment.

In their meta-analysis review of research conducted between 1993 and 2000 on the effectiveness of DES (Discrete Education Software programs, Murphy et al (2001) found evidence of a positive association between use of DES products and student achievement in reading and mathematics, an association consistent with earlier reviews of the research literature on the effectiveness of computer-based instruction (e.g., Kulik & Kulik, 1991; Kulik, 1994; Fletcher-Flinn & Gravatt, 1995; Ryan, 1991). Students in the early grades, from pre-K to grade 3, and in the middle school grades appear to benefit most from DES applications for reading instruction, as do students with special reading needs.

In a 2000 study commissioned by the Software and Information Industry Association, Sivin-Kachala and Bialo (2000) reviewed 311 research studies on the effectiveness of technology on student achievement. Their findings revealed positive and consistent patterns when students were engaged in technology-rich environments, including significant gains and achievement in all subject areas, increased achievement in preschool through high school for both regular and special needs students, and improved attitudes toward learning and increased self-esteem.

Cavanaugh's synthesis (2001) of 19 experimental and quasi-experimental studies of the effectiveness of interactive distance education using videoconferencing and telecommunications

for K-12 academic achievement found a small positive effect in favor of distance education and more positive effect sizes for interactive distance education programs that combine an individualized approach with traditional classroom instruction.

Research indicates that computer technology can help support learning and is especially useful in developing the higher-order skills of critical thinking, analysis, and scientific inquiry "by engaging students in authentic, complex tasks within collaborative learning contexts" (Roschelle, Pea, Hoadley, Gordin & Means, 2000; Means, et. al., 1993).

Roschelle, Pea, Hoadley, Gordin, & Means (2000) identify four fundamental characteristics of how technology can enhance both what and how children learn in the classroom: (1) active engagement, (2) participation in groups, (3) frequent interaction and feedback, and (4) connections to real-world contexts. They also indicate that use of technology is more effective as a learning tool when embedded in a broader education reform movement that includes improvements in teacher training, curriculum, student assessment, and a school's capacity for change.

It is interesting to learn that, twenty five years ago, the U.S Department of Education's National Commission on Excellence in Education had warned the society that students should be challenged with high quality mathematics and science curricula and many students also need to learn the basic skills. First lady Michelle Obama (May 16, 2009) in her commencement speech at UC Merced said, "Students need tools and resources to learn and to be successful. Educators provide them these tools and also teach them how to use the resources to be successful." This is what is practiced at TUSD schools which are to have successful education plans, well qualified teachers and administrators, technology training for educators and staff, technology, educational infrastructure, excellent budget, latest resources and equipment and inspire every student to come to school to learn. Communication plays another very important role in reaching, encouraging and educating more individuals in our community. Mrs. Obama also emphasized on increasing collaboration and communication between students, teachers, administrators, policy makers and government to reach and understand each other's needs and plan to make them possible. In present tough financial crisis times could not be any more difficult for many families and children to make both ends meet and also attend schools and colleges. Administrators reach students and parents and discuss the importance of education in our life. Education is very important and it should be taken as a priority.

Rod. Paige, (2005) states, "Teachers and students are bringing a big change in learning in schools by using technology." Tracy teachers, principals and administrators are working on how to expose our students to a variety of learning methods like multimedia, simulations and interactive software. The District is also continuously working to make required changes into teaching strategies to make them more effective to individual student needs like, EL students, students who are in Adult Education Programs, Special needs program, who are slow learners, and or less motivated learners.

NCLB has made all teachers accountable from top to bottom. Rod. Paige, (2005) appreciates the bipartisan effort of all educators, government and parents in making No Child Left Behind Act (2001), a success by raising expectations and producing results. This is an amazing generation of students with a lot of enthusiasm who are forcing the schools to adapt and change in many positive ways (Vasquez, 2004). Some Internet-savvy students feel computers are not yet a central part of their learning experience in schools. The District has resources, technology, determination, new standards of accountability and focused educators.

Test data is studied for more innovative ideas that can be implemented in classroom teaching. Studies show that educators should not choose who succeeds but should ensure that all students learn in schools. These ultra-communicators (students) need technology savvy teachers who can work with them towards fulfilling their educational goals. District staff therefore should be able to help all students and advocates to shape their learning future in a positive way and their technology use is more school-focused.

Collins, (2001) states that, "to complete this transformation, leaders need to prepare our schools to meet the challenge of the global marketplace and the needs of today's students." The full magnitude of this technological transformation in TUSD schools is slowly sinking in with good research, plans, funds, training, infrastructure, equipment, training and communication. The District is focused on helping students to be competently prepared for any global challenges of the techno-savvy 21st century.

- Collins. J. (2001), *Good To Great*. New York: HarperCollins. 152-153.

- Levin, Douglas and Arafeh, Sousan (2002) "The Digital Disconnect: The Widening Gap between Internet-Savvy Students and Their Schools" (Washington, DC: The Pew Internet & American Life Project).

- Vasquez, Jonathan, "Are Schools Ready for Today's Students? A Sneak Preview of the National Educational Technology Plan (NETP)." Keynote panel, annual meeting of the National Educational Computing Conference (NECC), New Orleans, LA, June 20–24, 2004.

- U.S. Department of Education, National Center for Education Statistics, "Internet Access in U.S. Public Schools and Classrooms:1994–2002" (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2003).

- CEO Forum, (2001). School technology and readiness report. "Student achievement in the 21st century & Building blocks for student achievements". Retrieved from http://www.ceoforum.org/downloads/report4.pdf .

- U.S. Department of Education (2001), National Center for Education Statistics, Fast Response Survey System. "Public School Teachers Use of Computers and the Internet."

According to ISTE, (June 2008), release of National Education Technology Standards (NETS) for Teachers, which focuses on "using technology to learn and teach."

a. Teachers must facilitate and inspire student learning and creativity

b. Teachers must design and develop digital-age learning experiences and assessment

c. Teachers must model digital-age work and learning

d. Teachers must promote and model digital citizenship and responsibility

e. Teachers must engage in professional growth and leadership

NETS Resources say that Today's teachers and students need digital age skills.' There is more detailed information and discussion available on technology standards for teachers on the following web link http://www.iste.org/AM/Template.cfm?Section=NETS .

Studies have shown that students can increase their learning when technology is utilized along with the traditional instructional structure of the classroom. This Technology Plan states that the curricular goals are to improve student academic achievement by providing a meaningful and relevant curriculum that includes systematic assessment, accountability and technology that enables students to meet high standards. (Curriculum Objective, Section 3d, p 14). This is supported in relevant research applied to our utilization of skill based objectives and project based learning objectives in all grades. The skill based objectives are the result of the following examples of research-based articles that indicate a strong relationship between technology and student achievement. (Barnett, Harvey, "Making Sure Technology Pays Off," Technology Information Center for Administrative Leadership (2001), http://www.portical.org/barnett_intro.html).

"The computer-integrated instructional program (Project Child) found that elementary school students in project classrooms from kindergarten through fifth grade consistently had higher test scores and better discipline than their counterparts." Butzin, S.M. (2000, June). "Project Child: A decade of success for young children". Technology Horizons in Education Journal, 27(11), http://www.thejournal.com).

In another longitudinal study, researchers investigated the impact of project based learning using multimedia. Data from teachers' self reports, as well as classroom observation data, suggest that project teachers were less likely to lecture than non-project colleagues, and instead took on the role of facilitator or coach. In project classrooms, students spend a greater amount of time than non-project peers in active, small-group collaborative activities or small group discussions. In short, project classrooms were much more student centered than non-project classrooms, and were "organized around the collaborative construction of complex products." Penuel, B., Golan, S., Means, B., & Korbak, C. (2000). Silicon Valley Challenge 2000: Year 4 report. Menlo Park, CA:SRI International.

The integration of technology into instruction is most effective "when students and teachers take advantage of its sophistication and versatility to support higher-order thinking and conceptualization." Ringstaff, Cathy; Kelly, Loretta; "The Learning Return of our Educational Technology Investment: A Review of Findings from Research", (San Francisco, CA: WestEd, 2002).

The dynamics of technology and learning must complement each other to provide challenging learning opportunities for staff (Professional Development, Section 4b, p.44). Research findings indicate the critical need for comprehensive professional development in order for technology to be effectively integrated into the classroom.

"...the greatest gains in student achievement occurred when teachers were trained in the use of technology....when teachers are learning to integrate technology into their classrooms, the most important staff-development features include opportunities to explore, reflect, collaborate with peers, work on authentic learning tasks, and engage in hands-on, active learning." Schacter, J, (1999). "The impact of education technology on student achievement: What the most current research has to say. http://www.mff.org .

"...the results of over 300 studies of technology use, authors concluded that teacher training was the most significant factor influencing the effective use of educational technology to improve student achievement. Specifically, the report states that students of teachers with more than ten hours of training significantly outperformed students of teachers with five or fewer training hours." Sivin-Kachala, J., & Bialo, E**.** (2000). "2000 research report on the effectiveness of

technology in schools" (7th edition). Washington, DC: Software and Information Industry Association.

"Teachers need training, assistance and support in making the transition from traditional methods of teaching (lecture, recitation, seat work) to technology-based instruction (supporting student collaboration, inquiry, problem solving, and interactive learning)." Ringstaff, Cathy, & Kelly, Loretta, "The Learning Return on our Educational Technology Investment: A Review of Findings from Research", (San Francisco, CA: WestEd, 2002).

"Preservice elementary teachers learn technology integration strategies by working with and observing practicing teachers and students while they use technology. For their practice teaching assignments, preservice teachers should be placed with teachers who are exemplary users of technology." Abbott, J.A., & Faris, S.E. (2002). "Integrating technology into preservice literacy instruction: A survey of elementary education students' attitudes towards computers". Journal of Research on Computing in Education, 33(2), 149 – 161.

"Mentors who can help teachers adapt technology applications to their classroom needs are important to the success of innovative uses of technology." Khao, Y., Sheldon, S., & Byers, J.L. (2002). "Conditions for classroom technology innovations". Teachers College Record, 104(3), 482 – 515.

"Considerable time for collaborative learning and practice is required for teachers to gain confidence in using technology." Coley, R.J., Cradler, J., & Engel, P.K. (1997). "Computers and classrooms: The status of technology in U.S. schools (Policy Information Report)". Princeton, NJ: Educational Testing Service.

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.

The district has initiated wireless access in the District Office at all schools. The students' classrooms will eventually and conceptually occur indoors, outdoors, in multiple locations and at different times.

All district approved workbooks are online and can be accessed, reviewed and printed at school sites electronically, eliminating the need for any staff to physically drop off copies.

Research in the utilization of Distance Learning indicates it as an effective tool in education students. The district currently provides distance learning opportunities using CyberHigh2 sponsored by the Fresno County Office of Education.

The district's plans to implement a unified cloud network to expand the district's network to a virtual desktop infrastructure that delivers educational resources through a web browser interface. This system would provide all district staff and students with a consistent user interface (UI) with access from any technology device with Wi-Fi or Internet access. This system would allow the district to continue to provide staff and students a secure, remote access to files, applications and reports. In addition, it would provide an improved classroom management application that would

allow all teachers to mange both BYOD and 1:1 computer devices with access to educational curriculum and copies of the district's standard digital textbooks from anywhere and at anytime.

Other new innovative distance learning projects will be explored to enhance the curriculum to maximize its utilization across the district.

Expansion of the District's video distribution system (VBrick) will be expanded to support Distance Learning and other video conferencing functionality between District schools.

"Extensive use of laptop computers, in conjunction with teacher development in technology integration, results in increased time working away from the school, enhanced competency and confidence in computer use, and improved performance on measures of writing ability. In 1996, Microsoft Corporation initiated the Anytime, Anywhere Learning Program. Participants in this program were provided laptop computers (loaded with Microsoft Office software), and teachers were given appropriate training in technology integration. Student changes included improved writing assessments, increased time doing homework, and increased (in terms of time and variability) use of computers and the Internet (both at home and school). Teacher changes included increasing use of constructivist teaching practices, increased computer use, and an increased commitment towards a constructivist teaching pedagogy." **Walker, L., Rockman, S., & Chessler, M.** (2000). "A more complex picture: Laptop use and impact in the context of changing home and school access. The third in a series of research studies on Microsoft's Anytime Anywhere Learning Program". San Francisco, CA: Rockman, et al.

"Distance learning does not replace the existing classroom; rather it has proven to be an effective and useful tool in expanding the elementary school curriculum. Computer-based courses transform the teaching experiences from lecturing to working with students one-on-one or in small groups, leaving only routine aspects of instruction to the computer. Distance learning provides a student-centered, active learning approach that actively engages students in the learning process and which benefits all learning styles. Providing students with individualized distance learning classes allows interactive stimulation, and immediate human feedback, that enables them to progress at their own pace." Tricia Ryan, Instructor Using Information Effectively in Education (ISTC 201) December 3, 2001.

"With few exceptions, students using technology in distance education have similar learning outcomes to students in the traditional classroom setting (Beare 1989; McCleary & Egan 1989; Sonner 1999). Souder (1993) conducted a natural experiment that compared traditional students and distance education students in management of technology master's degree programs. Results indicate that distance learners should not be viewed as disadvantaged in their learning experiences. Further, distance learners can perform as well as or better than traditional learners as measured by homework assignments, exams, and term papers. Equally important, as noted by researchers, is the fact that students in distance learning courses earned higher grades than those in the traditional classroom setting (Bartlett 1997; Bothun 1998; Heines & Hulse 1996; Kabat & Friedel 1990; Schutte 1996; Souder 1993). Gubernick and Ebeling (1997) stated that distance education students scored from five to ten percent higher on standardized achievement tests than did students in the traditional classroom setting. Conversely, as reported by other researchers, there are no significant differences in grades for distance education students versus traditional students (Freeman 1995; Mortensen 1995; McKissack 1997)." Sheila Tucker, "Distance Education: Better, Worse, or As Good as Traditional Education?", Online Journal of Distance Learning Administration, Volume IV, Number IV, Winter 2001.

"It's hard to imagine a world without email. Yet, Elliot Gold, president of TeleSpan Publishing, recalls a time when interoffice mail came in twice a day in a tan envelope. The speed of business then relied on the pace of a cart pushed from office to office. Email revolutionized business correspondence and brought significant gains in productivity. Fast-forward 30 years and there is another fundamental shift occurring in the way we share information. Today, increased bandwidth and affordable cloud-based services give even the smallest businesses and educational facilities the ability to offer on-demand content, real-time collaboration, and streaming media. Cloud-based services are another area experiencing rapid growth. From customer relationship management to content management, more and more organizations are turning to the cloud. Limited budgets make it difficult for many schools to take their students on field trips to national parks, museums, and other places of interest. Fortunately experts like Dr. John Ittelson, professor emeritus in Instructional Technology at CSU Monterey Bay, are helping educators find new ways to provide these experiences to their students." Vaddio (2012) "How the PC Delivers Better Audio Visual Solutions".

"The landscape of K–12 public education is changing substantially. Recent trends in United States policy (Hassel & Terrell, 2004; U.S. Department of Education, 2004) support the continued expansion of distance learning opportunities aimed at elementary- and secondary-school students. As pressure on decision-makers to implement distance learning opportunities for K–12 students continues to grow, so do questions concerning the effectiveness and scalability of existing programs, and the costs, needs, and barriers in creating new programs (Freedman, Darrow, & Watson, 2002). The decisions made today have lasting impact not only on our educational system but also on the individual students served. Therefore, it is imperative that development and growth occur in a thoughtful and systematic way (Blomeyer, 2002). Long-term strategic thinking about how best to adapt, adopt, and implement distance education into existing educational structures is necessary to ensure the most effective use of institutional resources and optimal outcomes for student success (Sarason, 1990; Verduin & Clark, 1991)." Kerry Rice (2009), "Priorities in K–12 Distance Education: A Delphi Study Examining Multiple Perspectives on Policy, Practice, and Research".

"There were an estimated 1,816,400 enrollments in distance-education courses in K-12 school districts in 2009 – 2010, almost all of which were online courses. 74% of these enrollments were in high schools. These figures represent phenomenal growth as a decade ago, it was estimated there were 40,000-50,000 enrollments in K-12 online education. The top reasons why school districts make online learning opportunities available to their students is to provide course not otherwise available at their schools, and providing opportunities for students to recover course credits from classes missed or failed. Credit recovery is especially important for urban schools with 81% of such schools indicating this is a very important reason. The types of online courses with the highest enrollments in school districts are credit recovery and dual-credit. The most common location for students accessing their online course is their school, with 92% of students accessing courses from school and only 78% of students accessing courses from home." February 2012, "Fast Facts About Online Learning", International Association for K-12 Online Learning (iNACOL).

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

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

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

1. PLAN DURATION CRITERION	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
The plan should guide the district's use of education technology for the next three to five years. (For a new plan, can include technology plan development in the first year)		The technology plan describes the districts use of education technology for the next three to five years. (For new plan, description of technology plan development in the first year is acceptable). Specific start and end dates are recorded (7/1/xx to 6/30/xx).	The plan is less than three years or more than five years in length. Plan duration is 2008-11.
2. STAKEHOLDERS CRITERION Corresponding EETT Requirement(s): 7 and 11 (Appendix D).	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
Description of how a variety of stakeholders from within the school district and the community-at-large participated in the planning process.		The planning team consisted of representatives who will implement the plan. If a variety of stakeholders did not assist with the development of the plan, a description of why they were not involved is included.	Little evidence is included that shows that the district actively sought participation from a variety of stakeholders.

3. CURRICULUM COMPONENT CRITERIA Corresponding EETT Requirement(s): 1, 2, 3, 8, 10, and 12 (Appendix D).	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
a. Description of teachers' and students' current access to technology tools both during the school day and outside of school hours.		The plan describes the technology access available in the classrooms, library/media centers, or labs for all students and teachers.	The plan explains technology access in terms of a student-to-computer ratio, but does not explain where access is available, who has access, and when various students and teachers can use the technology.
b. Description of the district's current use of hardware and software to support teaching and learning.		The plan describes the typical frequency and type of use (technology skills/information and literacy integrated into the curriculum).	The plan cites district policy regarding use of technology, but provides no information about its actual use.
c. Summary of the district's curricular goals that are supported by this tech plan.		The plan summarizes the district's curricular goals that are supported by the plan and referenced in district document(s).	The plan does not summarize district curricular goals.
d. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to improve teaching and learning by supporting the district curricular goals.		The plan delineates clear goals, measurable objectives, annual benchmarks, and a clear implementation plan for using technology to support the district's curriculum goals and academic content standards to improve learning.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.

e. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire the technology skills and information literacy skills needed to succeed in the classroom and the workplace.		The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire technology skills and information literacy skills.	The plan suggests how students will acquire technology skills, but is not specific enough to determine what action needs to be taken to accomplish the goals.
f. List of goals and an implementation plan that describe how the district will address the appropriate and ethical use of information technology in the classroom so that students and teachers can distinguish lawful from unlawful uses of copyrighted works, including the following topics: the concept and purpose of both copyright and fair use; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; and avoiding plagiarism		The plan describes or delineates clear goals outlining how students and teachers will learn about the concept, purpose, and significance of the ethical use of information technology including copyright, fair use, plagiarism and the implications of illegal file sharing and/or downloading.	The plan suggests that students and teachers will be educated in the ethical use of the Internet, but is not specific enough to determine what actions will be taken to accomplish the goals.
g. List of goals and an implementation plan that describe how the district will address Internet safety, including how students and teachers will be trained to protect online privacy and avoid online predators.		The plan describes or delineates clear goals outlining how students and teachers will be educated about Internet safety.	The plan suggests Internet safety education but is not specific enough to determine what actions will be taken to accomplish the goals of educating students and teachers about internet safety.

h. Description of or goals about the district policy or practices that ensure equitable technology access for all students.		The plan describes the policy or delineates clear goals and measurable objectives about the policy or practices that ensure equitable technology access for all students. The policy or practices clearly support accomplishing the plan's goals.	The plan does not describe policies or goals that result in equitable technology access for all students. Suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
i. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs.		The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to support the district's student record-keeping and assessment efforts.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
j. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to improve two-way communication between home and school.		The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to improve two-way communication between home and school.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
k. Describe the process that will be used to monitor the Curricular Component (Section 3d-3j) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.		The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding procedures, roles, and responsibilities.
4. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA Corresponding EETT Requirement(s): 5 and 12 (Appendix D).	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**

a. Summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development.		The plan provides a clear summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development. The findings are summarized in the plan by discrete skills that include Commission on Teacher Credentialing (CTC) Standard 9 and 16 proficiencies.	Description of current level of staff expertise is too general or relates only to a limited segment of the district's teachers and administrators in the focus areas or does not relate to the focus areas, i.e., only the fourth grade teachers when grades four to eight are the focus grade levels.
b. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing professional development opportunities based on your district needs assessment data (4a) and the Curriculum Component objectives (Sections 3d - 3j) of the plan.		The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing teachers and administrators with sustained, ongoing professional development necessary to reach the Curriculum Component objectives (sections 3d - 3j) of the plan.	The plan speaks only generally of professional development and is not specific enough to ensure that teachers and administrators will have the necessary training to implement the Curriculum Component.
c. Describe the process that will be used to monitor the Professional Development (Section 4b) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.		The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.
5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT CRITERIA Corresponding EETT Requirement(s): 6 and 12 (Appendix D).	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**

a. Describe the existing hardware, Internet access, electronic learning resources, and technical support already in the district that will be used to support the Curriculum and Professional Development Components (Sections 3 & 4) of the plan.		The plan clearly summarizes the existing technology hardware, electronic learning resources, networking and telecommunication infrastructure, and technical support to support the implementation of the Curriculum and Professional Development Components.	The inventory of equipment is so general that it is difficult to determine what must be acquired to implement the Curriculum and Professional Development Components. The summary of current technical support is missing or lacks sufficient detail.
b. Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed by the district's teachers, students, and administrators to support the activities in the Curriculum and Professional Development components of the plan.		The plan provides a clear summary and list of the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support the district will need to support the implementation of the district's Curriculum and Professional Development components.	The plan includes a description or list of hardware, infrastructure, and other technology necessary to implement the plan, but there doesn't seem to be any real relationship between the activities in the Curriculum and Professional Development Components and the listed equipment. Future technical support needs have not been addressed or do not relate to the needs of the Curriculum and Professional Development Components.
c. List of clear annual benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components identified in Section 5b.		The annual benchmarks and timeline are specific and realistic. Teachers and administrators implementing the plan can easily discern what needs to be acquired or repurposed, by whom, and when.	The annual benchmarks and timeline are either absent or so vague that it would be difficult to determine what needs to be acquired or repurposed, by whom, and when.
d. Describe the process that will be used to monitor Section 5b & the annual benchmarks and timeline of activities including roles and responsibilities.		The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.

6. FUNDING AND BUDGET COMPONENT CRITERIA Corresponding EETT Requirement(s): 7 & 13, (Appendix D)	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
a. List established and potential funding sources.		The plan clearly describes resources that are available or could be obtained to implement the plan.	Resources to implement the plan are not clearly identified or are so general as to be useless.
b. Estimate annual implementation costs for the term of the plan.		Cost estimates are reasonable and address the total cost of ownership, including the costs to implement the curricular, professional development, infrastructure, hardware, technical support, and electronic learning resource needs identified in the plan.	Cost estimates are unrealistic, lacking, or are not sufficiently detailed to determine if the total cost of ownership is addressed.
c. Describe the district's replacement policy for obsolete equipment.		Plan recognizes that equipment will need to be replaced and outlines a realistic replacement plan that will support the Curriculum and Professional Development Components.	Replacement policy is either missing or vague. It is not clear that the replacement policy could be implemented.
d. Describe the process that will be used to monitor Ed Tech funding, implementation costs and new funding opportunities and to adjust budgets as necessary.		The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.
7. MONITORING AND EVALUATION COMPONENT CRITERIA Corresponding EETT Requirement(s): 11 (Appendix D).	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**

a. Describe the process for evaluating the plan's overall progress and impact on teaching and learning.		The plan describes the process for evaluation using the goals and benchmarks of each component as the indicators of success.	No provision for an evaluation is included in the plan. How success is determined is not defined. The evaluation is defined, but the process to conduct the evaluation is missing.
b. Schedule for evaluating the effect of plan implementation.		Evaluation timeline is specific and realistic.	The evaluation timeline is not included or indicates an expectation of unrealistic results that does not support the continued implementation of the plan.
c. Describe the process and frequency of communicating evaluation results to tech plan stakeholders.		The plan describes the process and frequency of communicating evaluation results to tech plan stakeholders.	The plan does not provide a process for using the monitoring and evaluation results to improve the plan and/or disseminate the findings.
8. EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS TO MAXIMIZE THE USE OF TECHNOLOGY CRITERION Corresponding EETT Requirement(s): 11 (Appendix D).	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
If the district has identified adult literacy providers, describe how the program will be developed in collaboration with them. (If no adult literacy providers are indicated, describe the process used to identify adult literacy providers or potential future outreach efforts.)		The plan explains how the program will be developed in collaboration with adult literacy providers. Planning included or will include consideration of collaborative strategies and other funding resources to maximize the use of technology. If no adult literacy providers are indicated, the plan describes the process used to identify adult literacy providers or potential future outreach efforts.	There is no evidence that the plan has been, or will be developed in collaboration with adult literacy service providers, to maximize the use of technology.

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

Appendix J - Technology Plan Contact Information (Required)

Education Technology Plan Review System (ETPRS)
Contact Information

County & District Code: 39 - 75499
School Code (Direct-funded charters only):
LEA Name: Tracy Joint Unified
*Salutation: Ms.
*First Name: Cindy
*Last Name: Minter
*Job Title: Director, Information Services and Educational Tec
*Address: 1875 W. Lowell Ave.
*City: Tracy
*Zip Code: 95376
*Telephone: 209-830-3282
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Please provide backup contact information.
1st Backup Name: Dr. James Franco
E-mail: jfranco@tusd.net
2nd Backup Name: Dr. Sheila Harrison
E-mail: sjharrison@tusd.net

* Required information in the ETPRS