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Technology Plan submission for Cycle C - April 9 for Year 20012-2017

Technology Plan

July 1, 2014 – June 30, 2017

Fremont Unified School District

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About the District Described in This Plan

Forty-two schools make up the Fremont Unified School District (FUSD). There are 29 elementary schools, five junior high schools, five comprehensive high schools, a continuation high school, and an adult school. FUSD also is part of a Regional Occupational Program (ROP).

FUSD has approximately 33,000 students in grades K-12. The District has **approximately 3,000 teachers and staff. (This seems low)** The district has ~30,000 students and ~3200 employees 2000 of whom are teachers

The District is located in the City of Fremont, a thriving international community. Located on the southeast side of the San Francisco Bay, Fremont is a city of over 214,000 people with an area of 92-square miles, making it the fourth most populous city in the Bay Area and California's fifth largest city. Fremont is located within Alameda County.

District Mission Statement

The Fremont Unified School District Mission Statement is as follows:

Our mission is to provide equitable opportunities that educate, challenge and inspire students of all ages, talents and ability levels while preparing each with the skills required to adapt and succeed in an ever changing world.

The world of today and tomorrow is a world rich with technology and information. In order for students to be able face the challenges of tomorrow, technology must be a part of their education today. FUSD believes that technology is a tool to enhance and expand learning for all students and is an integral part of the learning process. Technology should be used by teachers and students to improve and enhance teaching and learning. Technology is an integrated tool that supports all learners in achieving rigorous content standards and developing problem-solving and critical thinking skills.

The District also believes that professional development is the key to technology being used within the learning process and as a tool to improve teacher productivity. The information and applications on the internet is virtually limitless. In order to manage information and resources and to use it as a powerful tool to reach higher achievement, teachers and students must acquire technological skills, information-age literacy skills, and 21st Century Skills.

The District also believes that having a safe and responsible learning environment is essential to the students' development. Ensuring students are kept safe from inappropriate content on the Internet remains an issue. Furthermore, the District believes that an education in today's high tech environment would not be complete without ensuring all students and staff understand their responsibilities for respecting intellectual property rights and ethical use of the internet and resources it has to offer.

This plan is developed to support of district curricular goals and is guided by the Technology Vision approved by the Board of Trustees on December 14, 2013.

Technology Vision

A District in which all students are empowered to realize their own unique talents

Technology Mission

- Implement Technology to create and support the best possible learning environment for students, staff, and the community

Priorities

- Student Learning
- Productivity
- Data and Assessment
- Safety, Ethics, & Security
- Support Teachers & Staff
- Infrastructure
- Equity & Access

Student Learning

- Implement learning resources that embrace and exploit the flexibility and power of technology to reach all students with differentiated needs
- Students have information access anytime and anywhere
- Use technology to enhance Science, Technology, Engineering, and Math (STEM) learning and Digital Media Arts Promote 21st Century Skills
- Engage the community both locally and globally

Support Teachers and Staff

- Educators and students have access to technology-based content, resources, and tools
- Use collaboration technologies to develop communities of practice
- Provide professional learning experiences powered by technology
- Use video resources and technology to connect

Productivity

- Provide technology tools for productivity and efficiency across the District
- Enable students to use technology to demonstrate authentic learning and 21st Century Skills
- Students use technology to demonstrate proficiency in meeting existing state adopted Standards

Data and Assessment

- Provide accurate and up-to-date assessments and reporting that give timely and actionable feedback
- Use technology for formative and summative assessments with meaningful data analysis
- Use simulations, collaboration, virtual worlds, and authentic presentations for assessments to engage and motivate students
- Data systems are online, linked, and appropriately available

Safety and Ethics

- All staff receive on-going professional development in appropriate and ethical use of information technology
- All students, staff, and parents understand the District policies for technology, communication, and data
- All students and staff have safe and appropriate access to the Internet
- District data is secure yet available

Infrastructure

- Ensure students and educators have broadband access to the Internet and wireless connectivity both in and out of school
- Every student and educator has at least one Internet access device and appropriate software to use in and out of school
- Facilities have appropriate electrical capacity, wiring, and cooling to support technology

Equity and Access

- The District adopts minimum standards for technology for each level across school sites
- The District prioritizes allocating funds for technology
- The District provides staff to support technology
- The District provides staff development for technology

Outcome

The District provides equity of opportunity to ensure consistent baseline educational results using technology and information resources

EXECUTIVE SUMMARY

This Technology Plan describes the Fremont Unified School District's plan to use technology to achieve its mission.

This technology plan covers three years: July 1, 2013 – June 30, 2017.

This document is organized around these key components:

- Curriculum
- Professional Development
- Infrastructure-Hardware-Technical Support and Software
- Funding and Budget
- Monitoring and Evaluation.

Curriculum

All schools are committed to all students attaining the academic and non-academic skills and knowledge necessary to be an educated person in the 21st century.

The District is committed to helping all students meet grade level expectations. Schools have intervention programs in place to assist students in need of extra help (and their families). Examples of interventions include after school programs, specialized assistance during the school day, summer school, grouping practices within the classroom, and many more. We count on parent support and student commitment to make sure all students meet these higher expectations.

Fremont Unified School District's Local Education Agency (LEA) Plan 2008-20013

Professional Development

Ongoing staff development in technology will support the professional growth of staff members. The success of a strong technology program correlates with teacher comfort with the available hardware and software. Training will be thorough and ongoing, with technical support available to all teachers and staff from general technology skills to specific application software. Staff development is accomplished through a variety of methods: conventional classes, online "webinars", online tutorials, conference attendance, and peer mentoring. Staff development encourages broad-based participation. Acquisition of various technologies and tools will improve staff productivity and enhance the curriculum.

Infrastructure-Hardware-Technical Support and Software

Driven by curriculum-centered objectives, FUSD specifies a core set of technical capabilities and network services to be provided. We implement an infrastructure that enables students and to easily use technology and online resources to achieve their academic goals.

Goals for this component are:

- Upgrading the network to enable all stakeholders to easily access, store, analyze, and share resources to [Enable all stakeholders to easily access, store, analyze, and share resources to an upgraded network](#)
- Enable 360 degree communication among stakeholders
- Acquisition of additional/replacement student workstations in some classrooms
- Acquisition of a base software and resources that connect all areas of the curriculum and improve productivity, teaching, and learning
- Continuous improvement of the support/escalation process

Funding and Budget

This technology plan covers three fiscal years: July 1, 2014 – June 30, 2015.

The following totals are approximate budget forecasts:

- 2014-2015 \$1,600,000
- 2014-2015 \$1,600,000
- 2015-2016 \$1,600,000
- 2016-2017 \$1,700,000

Goals for the funding and budget component include:

- Secure and allocate funding for networks that allow optimized access to learning resources
- Reduction of cost of ownership through continuing adoption of best practices.

Monitoring and Evaluation

A process of monitoring and evaluation should steer the use and acquisition of technology so that the curriculum and the educational process remain central.

Evaluation procedures include:

- Regular meetings Technology and Business Services Department
- Monthly meetings of the Technology Advisory Committee (TAC)
- Quarterly meetings with the Technology Liaison Committee (TLC)
- Biannual review and update of Technology Plan by CTO
- Evaluation of technology used by the classroom teacher to enhance curriculum
- Parent/student/staff survey.

1. PLAN DURATION

1a. Plan Duration

The plan should guide the district's use of education technology [educational technology](#) for the next three to five years

This technology plan covers three years: July 1, 2013 – June 30, 2017.

2. STAKEHOLDERS

Description of how a variety of stakeholders from within the school district and the community-at-large participated in the planning process

Fremont Unified School District's CTO has led the development of this technology plan. This current plan extends the concepts from the previously approved plan (2008-2013) and adds the focus on the recently approved Technology Vision.

Many stakeholders were involved in the development of the prior technology plan for FUSD, and many continue to be involved in an advisory role to expand and polish this extended plan through a review and comment process.

Staff spoke with board-appointed committees, sent District-wide emails as well as advertising the opportunity to serve on the Technology Plan Task Force established to create this document. Volunteers from Instructional Services, classified employees and managers, as well as local businesses volunteer to join the Technology Plan Task Force. Further, high school students from the District's Students United for Representation to the Fremont Unified School District Board of Education (SURF Board E.) joined in this development effort. In total twenty-five individuals representing several thousand stakeholders served to develop this plan.

Community stakeholders' interest in technology has a long history in the District. Schools started establishing technology committees in the late 1990's. In November 2005 the School Board established the District's Technology Task Force which was created to look at specific technology issues within the District. In February 2006 the Board established the Technology Advisory Committee (TAC) to formalize the relationship between the School Board, employees and the community relative to technology matters. The TAC is composed of an equal number of community members and District staff personnel. Community members may be parents of current students attending a District school or community members at large from local businesses and non-profit organizations. Staff personnel represent all bargaining units as well as classified and certificated managers. The TAC replaced the Technology Task Force and meets a minimum of once per month during the school year. The TAC members are an important part of the input process

Additionally, a meeting of a group of teacher stakeholder from each school provides for an exchange of suggestions and ideas based on site and grade level. This is the Technical Liaison Committee (TLC). These employees come from the schools within the District with up to two representatives from each school attending. Aside from representing the school to the District's technology leadership, these individuals are also responsible for disseminating information back

to the other employees from their respective schools. The TLC meets a minimum of once per quarter during the school year and consists of teachers and library media technicians.

3. CURRICULUM

3a. Teachers' and Students' Access to Technology

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

JOHN, CARLOS, AL

Currently, all FUSD students and teachers have access to technology at their school site. Every teacher has a computer.

All classrooms have a variety of computing devices in the classroom.

The table below provide data on the availability of devices that can be grouped for the upcoming Common Core Testing.

Table 1

School	Total Devices for Student Testing	# of Test-Takers	Device to Student Ratio
American High (01611760130062)	149	472	0.32
Ardenwood Elementary (01611766104723)	32	486	0.07
Brier Elementary (01611766000558)	126	356	0.35
Brookvale Elementary (01611766089320)	32	263	0.12
Cabrillo Elementary (01611766000566)	62	194	0.32
Centerville Junior High (01611766056873)	63	902	0.07
E. M. Grimmer Elementary (01611766000590)	72	223	0.32
Forest Park Elementary (01611766111330)	42	568	0.07
Fred E. Weibel Elementary	60	422	0.14

(01611766106983)			
G. M. Walters Junior High (01611766056881)	94	737	0.13
Glenmoor Elementary (01611766000624)	67	358	0.19
Harvey Green Elementary (01611766000640)	80	253	0.32
Irvington High (01611760134270)	320	498	0.64
J. Haley Durham Elementary (01611766000665)	98	232	0.42
James Leitch Elementary (01611766000673)	65	0	
John Blacow Elementary (01611766000541)	124	309	0.40
John F. Kennedy High (01611760134452)	150	350	0.43
John G. Mattos Elementary (01611766000723)	62	276	0.22
John Gomes Elementary (01611766066468)	30	471	0.06
John M. Horner Junior High (01611766056907)	93	963	0.10
Joseph Azevada Elementary (01611766000681)	60	249	0.24
Joshua Chadbourne Elementary (01611766090526)	32	491	0.07
Mission San Jose Elementary (01611766090534)	32	433	0.07
Mission San Jose High (01611760135244)	195	557	0.35
Mission Valley Elementary (01611766000749)	32	436	0.07

Niles Elementary (01611766000756)	63	317	0.20
O. N. Hirsch Elementary (01611766000764)	90	273	0.33
Oliveira Elementary (01611766090542)	62	295	0.21
Parkmont Elementary (01611766000798)	84	504	0.17
Patterson Elementary (01611766000806)	53	321	0.17
Robertson High (Continuation) (01611760130138)	57	80	0.71
Steven Millard Elementary (01611766090559)	32	311	0.10
Thornton Junior High (01611766056915)	57	996	0.06
Tom Maloney Elementary (01611766000715)	60	304	0.20
Vallejo Mill Elementary (01611766000830)	62	277	0.22
Warm Springs Elementary (01611766000848)	121	917	0.13
Warwick Elementary (01611766089619)	124	480	0.26
Washington High (01611760138693)	85	463	0.18
William Hopkins Junior High (01611766056923)	120	1027	0.12

Access to Technology During Instructional Time

All schools have a Library Media Center that includes a minimum of seven computers, a digital video recorder, an LCD projector, a VCR, and printer. Students and teachers have various degrees of access to the media center’s technology during instructional time, depending on the availability of the Library Media Center and teacher use.

Based upon the size of the elementary school, unscheduled time that is available for teachers to bring their classes into the Library Media Center during the instructional day is extremely limited. All 1st - 6th grade elementary students are scheduled for a minimum of 50 minutes per week in the Library Media Center. [I’m not sure about this] All junior high school libraries have a minimum of seven computers for teacher and student use. Both junior and senior high school teachers can sign-up to bring their students to the Library Media Center during instructional time to use the center’s technology and electronic resources. In addition, the technology and resources in the Library Media Center are available for student drop-in use during the instructional day. All high schools libraries include a computer lab that is available for flexible teacher scheduling and student drop-in use. Each high school also has a career center that is equipped with computers and printers.

Student access to computer lab classes varies from site to site.

Elementary: Twenty out of twenty-eight elementary schools have a computer lab in which 1st through 6th grade students have at least one computer class per week taught by a computer specialist. This does not always include every grade at the school.

Junior High: One of the five junior high schools has a computer lab in which classes are taught. Access to these classes is very limited due to scheduling and the size of the junior high population.

High School: Four of the high schools have at least one classroom with computers that are used for computer classes.

Teachers and students have access to basic non-computer [presentation] technology, such as projectors, document cameras, digital white boards, VCRs, DVD players, compact disc players, tape recorders, and televisions in their schools, but not necessarily in every classroom. For those classrooms which do not have needed technology, teachers may be able to check out these audio-visual items from the Library Media Center or from their department.

Access to Technology Outside of Instructional Time

Library Media Centers

- In addition to their regular school hours, all Library Media Centers have extended hours during non-instructional time which provides students and teachers access to technology.

- All Library Media Centers are open before school, during lunch and/or after school, which includes 180 minutes a week for elementary schools, 420 minutes a week for junior high schools, and 450 minutes a week for high schools.
- Most schools have additional computers available for teachers, in a central location. These computers are usually located in office areas, staff rooms and/or libraries.

Alameda County Library System

Alameda County Library System provides limited additional access to technology for students and teachers outside of the school day. Alameda County Main Library is located in central Fremont and has 41 computers available for students who have library cards. They also have 4 additional computers that do not have internet access. All patrons, including students, are limited to one hour per day on the internet computers, and 2 hours a day on the computers that do not have internet access. The Fremont Main Library is open from 1 p.m. until 9:00 p.m. on Mondays and Tuesdays; from 11 a.m. until 9 p.m. on Wednesdays; 11 a.m. until 6:00 p.m. on Thursdays and Fridays; and 10:00 a.m. until 5:00 p.m. on Saturday. The library is closed on Sundays. There are three small branch libraries located in Fremont. However, student access to these branches outside the school day is very limited. The Centerville Library is open Tuesdays from 1 until 8 p.m. and Thursdays from 11 a.m. until 6 p.m. The other two branches are only open one day a week from 10 a.m. until 5 p.m.: The Irvington Library on Wednesdays and the Niles Library on Tuesdays. Library cards are free in Alameda County, but do require parent signature for students under eighteen.

Access to Telecommunication Technology

As of Fall 2004, all schools and classrooms have a telecommunications system which includes voicemail for every teacher. In 2012-2013, a new voice mail system was deployed to improve the reliability of voicemail and add additional features such as voicemail to email.

As of 2007 all classrooms are wired with at least one drop (connection) to the District network and internet. The connections at the elementary schools are presently at 20 Mb/sec., Junior High Schools are at 100Mb/sec., and High Schools have a 1Gb connection. Currently they all share a redundant 2GB connection to the Internet.

Access to Appropriate Technology for Students with Special Needs

In order to assure that students with special needs have equal access to technology, the district Special Services Department, works with individual case-workers, to provide these students with appropriate assistive technologies.

3b. District's current use of Hardware and Software

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

JOHN, CARLOS, AL

Elementary Schools

Computer and tablets are available in all classrooms, with students in grades K- 3 having computers in the classroom primarily use them with content software, for reinforcement of basic skills in math, reading, and vocabulary. Content software that accompanies the Math and Reading textbooks has been purchased for all sites. Additional educational content software for

these grades varies, and is purchased by each individual school site based on student needs, availability of computers and funds.

Students in grades 4-6 use computers to reinforce basic skills, as well as learning technology skills and information literacy skills. Students at this level may use computers for word processing in reading/language arts or to research a project, such as the 6th grade project on Ancient Egypt. Some students at this level are using grade level appropriate software to create presentations. In addition, simulations to support content in social studies and science are used in some classrooms. Students in these grades may also use other technology, such as calculators in math.

At the majority of the elementary schools, students in grades 1-6 have a computer class an average of once a week, during their teacher's preparation period. In many of these classes, students learn technology and some information literacy skills based on the district Technology Course of Study and Information Literacy Standards and Frameworks [\[where is this located?\]](#). These skills can then be used to support teaching and learning in the classroom. In addition, as some schools, computer prep teachers collaborate with the classroom teacher on certain projects, to directly integrate the technology and information literacy skills while learning the core curriculum.

Junior High Schools

Stand alone technology courses are offered at two Junior High school sites. Centerville Jr. High offers a Keyboarding/Computer course to teach student technology skills which can then be used to support teaching and learning in the classroom. Walters Jr. High is teaching a Science/Technology course for 8th grade student, which integrates the technology and information literacy skills with science. Students learn technology and information literacy skills while working with computers, videodiscs, digital cameras, video microscopes and flatbed scanners. Information literacy research skills are enhanced through the use of educational websites, and an online interactive news journal. They also learn the science behind how technology works, and what to do if it doesn't.

In the Junior Highs, the range of use of hardware and software to support teaching and learning in content areas varies at each site, and varies among teachers, including teachers of special needs students. Most teachers use some traditional technology such as: the overhead projectors, DVD players, calculators and tape recorders. Some teachers successfully integrate additional technology, such as computers, video cameras, scanners, and digital cameras to integrate technology skills and information literacy skills with the teaching of content standards on a regular basis. Examples of this include:

At Hopkins Jr. High, both the Science and English departments have computer labs within their departments that are used by all teachers in those departments.

Other junior high schools are using technology for internet research, to create multimedia presentations, and to implement the Accelerated Reader program.

High Schools

At the high schools the extent to which technology and information literacy are used to support teaching and learning is greatly increased. This is due directly to the availability of drop-in computer labs within or connected to each Library Media Center and that each high school has a Library Media Teacher to collaborate with the classroom teacher, as called for in the *FUSD 2005-2009 Library Improvement Plan*. The Library Media Teacher and the content teacher plan lessons together that incorporate the technology and information literacy standards and skills to enhance the learning of the content curriculum standards. Some examples of this are the Iresearch project that all freshmen must complete, and the career project that all sophomores must complete in their English classes. In addition, the juniors create a multimedia project on the decades in U.S. History, and seniors at one of the high schools complete an extensive multimedia senior project related to a curricular area.

Additional Uses of Technology to Support Teaching and Learning

Student proficiency levels and standards in technology have been developed for grades K-6 and 9-12. This framework is in the process of being revised in order to integrate them along with the Information Literacy Standards, into the academic curriculum. The Technology Standards will also be aligned with the ISTE National Educational Technology Standards for Students. District technology proficiency levels and standards for grades 7 & 8 have not yet been developed.

The Information Literacy Standards have been developed for all grades K-12. The information literacy curriculum and framework has recently been revised to reflect the standards from the California School Library Association's publication: *Standards and Guidelines for Strong School Libraries*. These standards as well as the technology standards are successfully being implemented at all FUSD high schools, due primarily to the presence of a full-time Library Media Teacher who is available to collaborate with the content teachers.

Most teachers in the district use technology to create instructional materials and presentations, develop lesson plans, record grades, and monitor student progress. Many teachers are using the internet to find teaching resources, such as model lesson plans, related websites and student activities. Some teachers at every site use TVs or LCD projectors with computers as well as other media on a regular basis to present classroom lessons. More teachers every year are using computers as a communication tool with parents, administrators, colleagues, and students.

Student record keeping and assessment are becoming more efficient and supportive of teachers' efforts to meet individual student academic needs. A student information system, SchoolMax, was purchased by the district and implemented during the 2003-2004 school year. Currently, all school administrators and counselors are using this program. All teachers at the secondary levels and at 11 of the elementary schools are using SchoolMax to take online attendance. SchoolMax also gives teachers access to basic student information.

Teachers teaching grades 7 through 12 in FUSD have begun using SchoolLoop in 2012, a grading program complementary to SchoolMax. SchoolLoop allows teachers to input students' individual classroom grades into the computer, which facilitates the ease of transfer of grades to

interim progress reports and report cards at the end of each semester. It has also increase Parent-Teacher-Student communication with its innovative portal and messaging system.

During the 2007–2008 academic school year, FUSD has also implemented iParent, another component of SchoolMax, which allows parents to access their student’s historic attendance and grades.

Beginning in the 2008-09 academic school year, FUSD obtained funding for a standardized template for all District schools to develop its own easily accessible web site. Schoolwires® makes it easier for teachers to create their own websites within their school websites, to communicate expectations more clearly in regards to homework assignments, class projects, and activities to the Fremont community.

Some teachers use class websites and/or email to facilitate two-way communication between school and home. All teachers now have a voicemail system available, and some are utilizing this as a communication tool with parents. Parents also have access to the automated library catalog and research data base websites through the district website.

All students and staff members are accountable appropriate us of technology as documented the Acceptable Use Policy.

3c. District’s Curricular Goals and Academic Content Standards

Summary of the district’s curricular goals that are supported by this tech plan

DAVID AND MAILE

After reviewing the districts individual school site SPPA (Single Plan for Pupil Achievement) plans and other board approved district plans, the following have been identified as the curricular goals and focus areas of the district for the next three to five years:

- All students, grades K through 11 will achieve high standards in reading and math, with a minimum of proficient or better for every student.
- All SPPA plans will include goals for the three identified components: Academic, Socio/Ethical, and Physical Environment.
- All high schools will implement a plan for standards-based learning. The WASC Action Plan, at 9-12 level, is the heart of each site’s SPAA Plan. The WASC plan includes the site’s essential learning results or ESLRS. The focus of the each site’s WACS plan is to align the curriculum with the state standards, beginning with the four core curriculum areas: Language Arts, Math, Science, and Social Science.
- All students will achieve high standards, including the special needs populations, such as ELL, GATE/High Achievers, Special Education, ethnic groups and low socio-economic status, and see improvement in proficiency levels.
- Provide additional opportunities for students, who are scoring far below basic, and below basic on standardized tests, to improve their academic level and achievement of academic content standards.
- Students will achieve proficiency levels and meet district standards in technology and information literacy at all grade levels. These standards are found in the board approved Technology Course of Study, the FUSD Information Literacy Standards, and as included in the district graduation requirements. The district’s technology curriculum and information

literacy curriculum have been written to meet or exceed the state standards for technology and information literacy.

- All students will have access to technology during non-instructional time and have access to and use technology across the curriculum at every grade level during instructional time.
- Communication across all stakeholders, ie parents, students, teachers, and community members, is a prime focus for FUSD. We have instituted the iparent function of our Student Information System to allow parents to view their student's grades and classroom assignments at their leisure.

3d. Goals and Plan for Technology to Improve Teaching and Learning

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

DAVID, TONI, MAILE

The following technology goals and implementation plans were developed to support the district curricular goals and to enhance student achievement of the academic content standards. The major focus of these goals is to use technology and information literacy to support the teaching and learning of standards-based curriculum for all students, including students with special needs and students who are less successful.

Goal 3d.1: Students will use technology and electronic resources that support all students achieving high standards in one or more standards-based content areas, support district goals, and assist in closing the achievement gap of less successful students.

Objective: By June 2015

3.d.1 100% of the students will use technology and electronic resources to enhance their achievement of academic content standards

Benchmarks:

3.d.1.a By June 2013, 50% of the students will use technology and electronic resources to enhance their achievement of academic content standards

3.d.1.b By June 2014, 75% of the students will use technology and electronic resources to enhance their achievement of academic content standards

3.d.1.c By June 2015, 100% of the students will use technology and electronic resources to enhance their achievement of academic content standards

Implementation Plan Activities	Timeline	Monitoring/ Evaluation	Responsible Party
K through 12 students will use the electronic resources that accompany the state adopted English Language Arts (ELA) and Math textbooks.	Yearly	Catalog of resources	Instruction Directors
Catalog websites and academic resources into the FUSD Library Catalog (SIRSI). Also link resources on district Library web site	Yearly	Audit catalog	Director of Assessment
Increase the number of students in grades 1 – 8 who use Accelerated Reader.	Yearly	Survey schools	Director of Elementary Ed.
Teachers will use interactive boards, projectors, document cameras, clickers to help energize presentations and lessons, and to increase motivation in learners.	Yearly	Assess usage of equipment	Principals

Goal 3d.2: Students regularly access online resources and applications that improve learning.

Objective: By June 2015

3.d.2 100% of all students will regularly access online resources and applications to improve learning.

Benchmarks:

3.d.2.a By June 2013, 75% of all students will regularly access online resources and applications to improve learning.

3.d.2.b By June 2014, 90% of all students will regularly access online resources and applications to improve learning.

3.d.2.c By June 2015, 100% of all students will regularly access online resources and applications to improve learning.

Install: <ul style="list-style-type: none"> High-speed Internet access upgrades (20 Mb/sec from each elementary school, 100 Mb/sec from each Jr. High, 500 Mb/sec from each high school to provide communication, application services, and resources 	2012-2013	Status and completion memos from CTO	CTO
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<ul style="list-style-type: none"> ● High-speed Internet access upgrades (100 Mb/sec from each elementary school, 500 Mb/sec from each Jr. High, 1000 Mb/sec from each high school to provide communication, application services, and resources ● Cabling upgrades as necessary to allow 1000 Mb/sec bandwidth ● Wireless technology to allow users to reliably work anywhere at school sites 	2013-2014		
	2012-2015		
	2012-2015		
Implement Google Apps for file storage	2013-2014	Check User lists	CTO
Implement Google Apps mail with student email filter	2013-2014	Check User lists	CTO
Implement web sign-on with enterprise-class filter	2013-2014	Check User lists	CTO
Quarterly reports on internet usage	Quarterly 2010, 2013, 2014	Reports shared at Principal Meetings	CTO
Ongoing internet resource training	Quarterly 2010, 2013, 2014	Regular communication from Technology Department to Education and teachers to students	CTO, Principals, Teachers

3e. Goals and Plan for Acquiring Technology Skills and Information Literacy Skills

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.

MAILE

It is a district curricular goal that all students will acquire technology and information literacy skills needed to succeed in the classroom and in the 21st Century. Students will acquire these skills through their integration with the core curriculum and content standards. Technology and information literacy enhance students’ ability to learn the content standards and provides additional opportunities for less successful students. The District’s technology and information literacy curriculum and standards have been written to meet or exceed the state standards for technology and information literacy. Lessons, best practices, and strategies will be developed across curriculums, and implemented by content teachers, computer/technology teachers, and library media teachers.

Fremont Unified School District seeks to adopt the International Society for Technology in Education (ISTE) Technology Foundations Standards for Students as its model for student proficiency. All students use technology in all classes so that the acquisition of a particular technology skill is embedded in the learning process. Students at all Fremont Unified School District receive support from all of their teachers and support personnel in the use of technologies available for the classroom. Advanced techniques are taught in the Digital Media course and in the various electives. Techniques are shared among the students and staff, and a culture of technology-based learning supports every student in advancing the skill sequence of the digital age.

“Technology skills” encompasses technical use proficiency, as well as information literacy. We are using this definition of information literacy from the National Forum on Information Literacy:

The ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand.¹

Goal 3e.1: Students will acquire technological and information literacy skills – as defined by ISTE NETS*S (See Appendix 1) and District Technology

Objective: By June 2015

3.e.1 100% of the students will complete activities or projects that demonstrate their mastery of the grade level appropriate District technology and information literacy standards.

Benchmarks:

3.e.1.a By June 2013, 75% of the students will complete activities or projects that demonstrate their mastery of the grade level appropriate District technology and information literacy standards.

3.e.1.b By June 2014, 90% of the students will complete activities or projects that demonstrate their mastery of the grade level appropriate District technology and information literacy standards.

3.e.1.c By June 2015, 100% of the students will complete activities or projects that demonstrate their mastery of the grade level appropriate District technology and information literacy standards.

• Update District Technology Standards	2012-2013	Standards complete	Director of Elementary Ed.

¹ <http://www.infolit.org/definitions.html>

<ul style="list-style-type: none"> • Adopt ISTE NETS*S 	2013-2014	Standards adopted	Superintendent of Instruction
<ul style="list-style-type: none"> • Students in grades K through 12 will complete assignments or activities that use grade level technology and information literacy standards integrated with core curriculum standards. 	2012- 2015	Note technology standards used during Instructional Rounds	Principals
<ul style="list-style-type: none"> • Students in grades 4 through 11 will use technology and information literacy standards to produce at least one research-based project that demonstrates 21st Century Skills 	2012- 2015	Projects used for summative evaluation	Principals
<ul style="list-style-type: none"> • Students in the 12th grade will complete a senior research-based multimedia project, which involves the community, use of technology, and that demonstrates 21st Century Skills. 	2012-2015	Projects used for summative evaluation	Principals

3f. Goals and Plan for Appropriate and Ethical Use of Technology

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

David Thornley, Rickey Jones, Debbie Amundson, Deborah, Toni, James Maxwell, Robert

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 via FUSD’s Appropriate Use Policy and related Board policies.

FUSD teachers teach about plagiarism starting in elementary school, especially in the context of library research and continuing in all content classes in junior high school. The District parent/student handbook explicitly defines refers to policies regarding the consequences of plagiarism. Respect and responsibility are part of the ubiquitous H3 Character Education Program and Leadership Program, which are an integral part of the District’s strategic goals. Teachers will refer frequently to these pillars of character in discussing plagiarism.

Some schools use tools such as www.turnitin.com to determine if students plagiarize material for their homework assignments.

Teachers ask students to put away electronic devices such as computers and cellular phones during quizzes and tests.

FUSD blocks computer network access to websites that promote unlawful behavior, such as peer-to-peer file sharing.

Goal 3f.1: All teachers and staff will receive training on the appropriate and ethical use of information technology. What is the curriculum?

Objective: By June 2015

3.f.1 100% of teachers and staff will receive training on the appropriate and ethical use of information technology.

Benchmarks:

3.f.1.a By June 2013, 80% of teachers and staff will receive training on the appropriate and ethical use of information technology.

3.f.1.b By June 2014, 90% of teachers and staff will receive training on the appropriate and ethical use of information technology

3.f.1.c By June 2015, 100% of teachers and staff will receive training on the appropriate and ethical use of information technology

<ul style="list-style-type: none"> Offer Internet Safety, Copyright, Fair Use, and FIRPA workshops to all staff 	2012	Report on workshop evaluations	CTO
<ul style="list-style-type: none"> Offer Internet Safety, Copyright and Fair Use training to parents, secondary students (?) 	2012-2013	Report on workshop evaluations	
<ul style="list-style-type: none"> Distribute appropriate and ethical use of information technology materials to secondary students 	2012-2013	Report on delivery	
<ul style="list-style-type: none"> Mandate acceptance of the Acceptable Use Policy 	2012-2013	Report	
<ul style="list-style-type: none"> Update web resource for Internet Safety, Copyright and Fair Use 	2012-2015	Report	

Goal 3f.2: Parents and secondary students will receive training on the appropriate and ethical use of information technology. What is the curriculum?

Objective: By June 2015

3.f.1 50% of parents and secondary students will receive training on the appropriate and ethical use of information technology.

Benchmarks:

3.f.1.a By June 2013, 30% of parents and secondary students will receive training on the appropriate and ethical use of information technology.

3.f.1.b By June 2014, 40% of parents and secondary students will receive training on the appropriate and ethical use of information technology

3.f.1.c By June 2015, 50% of parents and secondary students will receive training on the appropriate and ethical use of information technology

<ul style="list-style-type: none"> Offer Internet Safety, Copyright, Fair Use, and FIRPA workshops to all staff 	2012	Report on workshop evaluations	CTO
<ul style="list-style-type: none"> Offer Internet Safety, Copyright and Fair Use training to parents, secondary students (?) 	2012-2013	Report on workshop evaluations	
<ul style="list-style-type: none"> Distribute appropriate and ethical use of information technology materials to secondary students 	2012-2013	Report on delivery	
<ul style="list-style-type: none"> Mandate acceptance of the Acceptable Use Policy 	2012-2013	Report	
<ul style="list-style-type: none"> Update web resource for Internet Safety, Copyright and Fair Use 	2012-2015	Report	

Goal 3f.2: Each student will review, accept and abide by the Fremont Unified School District Appropriate Use Policy.

The District Parent/Guardian & Student Handbook refers to policies that discuss the consequences of plagiarism. Students sign an agreement to support these policies every year in order to use computer equipment.

What does the EdTechProfile cover?

Objective: By June 2015

3.f.1 100% of students will review accept and abide by the Fremont Unified School District Appropriate Use Policy

Benchmarks:

3.f.1.a By June 2013, 80% of students will review, accept and abide by the Fremont Unified School District Appropriate Use Policy

3.f.1.b By June 2014, 90% of students will review, accept and abide by the Fremont Unified School District Appropriate Use Policy

3.f.1.c By June 2015, 100% of students will review, accept and abide by the Fremont Unified School District Appropriate Use Policy

<ul style="list-style-type: none"> Update Student Acceptable Use Policy 	Spring 2013, Spring 2014	Distribute new policy with new student packets	CTO
<ul style="list-style-type: none"> Offer Internet Safety(?), Copyright and Fair Use training to students 	July 2010 – June 2015	Technology staff checks with teachers for compliance	CTO, Teachers
<ul style="list-style-type: none"> Administer the EdTechProfile 	July 2010 – June 2015	Periodic review of the EdTechProfile	CTO, Teachers

3g. Goals and Plan for Internet Safety

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

David Thornley, Rickey Jones, Debbie Amundson, Deborah, Toni, James Maxwell, Robert

Annually, Fremont Unified School District applies for E-Rate funding to support connectivity of communications using telecommunications services and/or the Internet. Applicants must enforce a policy of Internet safety and certify compliance with the purpose of the Children's Internet Protection Act (CIPA) to be eligible for discounts. E-Rate CIPA requirements² include:

Technology Protection Measure - a specific technology that blocks or filters Internet access, along with a policy for monitoring the online activities of minors.

Internet Safety Policy – that addresses:

- Access by minors to inappropriate matter on the Internet and World Wide Web
- The safety and security of minors when using electronic mail, chat rooms, and other forms of direct electronic communications
- Unauthorized access including "hacking" and other unlawful activities by minors online
- Unauthorized disclosure, use, and dissemination of personal information regarding minors
- Measures designed to restrict minors' access to materials harmful to minors

Public Notice and Hearing - at least one public hearing to address a proposed technology protection measure and Internet safety policy.

Goal 3g.1: At all times, all students and staff will have safe access to resources on the Internet that they need for instructional purposes.

FUSD has installed tools that block and filter Internet access to websites that are inappropriate for students. FUSD has provided a mechanism that staff can use to gain access to any Internet resource that staff feels is appropriate for classroom use.

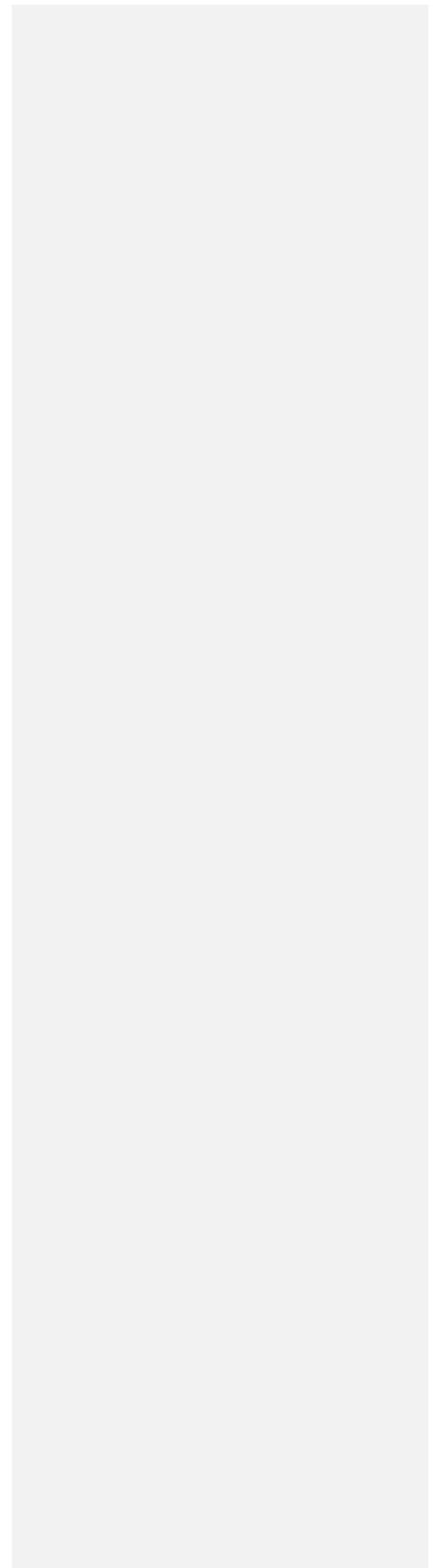
Objective: By June 2015

3.g.1 100% of teachers will receive training on Internet safety, including cyberbullying, how to protect online privacy, and avoid online predators **What is the curriculum?**

Benchmarks:

- 3.g.1.a By June 2013, 80% of teachers will receive training on Internet safety, including cyberbullying, how to protect online privacy, and avoid online predators
- 3.g.1.b By June 2014, 90% of teachers will receive training on Internet safety, including cyberbullying, how to protect online privacy, and avoid online predators
- 3.g.1.c By June 2015, 100% of teachers will receive training on Internet safety, including cyberbullying, how to protect online privacy, and avoid online predators

² <http://www.universalservice.org/sl/applicants/step10/cipa.aspx>



• Offer Internet Safety workshops to staff	July 2010 – June 2015	Periodic review of EdTechProfile	CTO
• Review with staff the Acceptable Use Policy	July 2010 – June 2015	Survey staff after presentation	CTO
• Collect comments and observations	July 2010 – June 2015	Share observations	CTO

Goal 3g.2: At all times, all students will have safe access to Internet sites they need for instruction (need to wordsmith this) What is the curriculum?

Objective: By June 2015

3.g.2 100% of students will receive training on internet safety, including cyberbullying, how to protect online privacy, and avoid online predators

Benchmarks:

3.g.2.a By June 2013, 80% of students will receive training on internet safety, including cyberbullying, how to protect online privacy, and avoid online predators

3.g.2.b By June 2014, 90% of students will receive training on internet safety, including cyberbullying, how to protect online privacy, and avoid online predators

3.d.2.c By June 2015, 100% of students will receive training on internet safety, including cyberbullying, how to protect online privacy, and avoid online predators

• Review with staff the Acceptable Use Policy	July 2010 – June 2015	Report completion of reviews to Principals and CTO	Digital Media Teachers and Technology staff
• Hold Community Meetings and conduct classroom discussions about Internet safety, including cyberbullying, how to protect online privacy, and avoiding online predators	July 2010 – June 2015	Survey staff after presentations	Principals
• Technology staff visits classrooms and monitors usage to monitor compliance	July 2010 – June 2015	Monthly reports	Technology staff
• Collect student comments and adjust instruction as necessary	July 2010 – June 2015	Share observations	Principals, Teachers

Goal 3g.3: All students will be educated on how to use Internet resources safely. What is the curriculum?

Most Internet resources are safe to use because they simply provide information. Some Internet resources, such as e-mail, however, allow students to interact with other students and the community in general. Students must be educated on what information they should and should not divulge to others. Students must also be educated to recognize hazardous situations that can result from cyber-bullying and online predators so they can avoid this situations.

Objective: By June 2015

3.g.2 100% of students will receive training on Internet safety, including cyberbullying, how to protect online privacy, and avoid online predators

Benchmarks:

- 3.g.2.a By June 2013, 80% of students will receive training on Internet safety, including cyberbullying, how to protect online privacy, and avoid online predators
- 3.g.2.b By June 2014, 90% of students will receive training on Internet safety, including cyberbullying, how to protect online privacy, and avoid online predators
- 3.d.2.c By June 2015, 100% of students will receive training on Internet safety, including cyberbullying, how to protect online privacy, and avoid online predators

<ul style="list-style-type: none"> • Review with staff the Acceptable Use Policy 	July 2010 – June 2015	Report completion of reviews to Principals and CTO	Digital Media Teachers and Technology staff
<ul style="list-style-type: none"> • Hold Community Meetings and conduct classroom discussions about Internet safety, including cyberbullying, how to protect online privacy, and avoiding online predators 	July 2010 – June 2015	Survey staff after presentations	Principals
<ul style="list-style-type: none"> • Technology staff visits classrooms and monitors usage to monitor compliance 	July 2010 – June 2015	Monthly reports	Technology staff
<ul style="list-style-type: none"> • Collect student comments and adjust instruction as necessary 	July 2010 – June 2015	Share observations	Principals, Teachers

3h. Goals to Ensure Equitable Technology Access for All Students

Description of or goals about the district policy or practices that ensure equitable technology access for all students

Beth Johnson, Maille

Fremont Unified School District uses SchoolMax as its primary data collection system. FUSD analyzes various testing data (CST, CAHSEE, SAT, PSAT, OARS - the Online Reporting and Assessment System), student/parent survey data, classroom observations, exhibitions, and major student assignments. Through SchoolMax, these assessments are linked to state, district, and FUSD standards. Teachers are expected to use planning time to keep OARS as up-to-date as possible so that all members of the community can track how students are performing. Fellow teachers can immediately look up information in disaggregated form or by individual student performance.

Specifically, Fremont Unified School District is committed to helping *all* students attain and maintain a proficient level or above in Math as well as English. For three years Fremont Unified School District has used the Online Reporting and Assessment System (OARS) formative testing in Math and English. The data from the OARS testing is available in real time, easily facilitating reflection on student strengths and weaknesses. The Instructional Coach meets with individual Math and English teachers regularly to review OARS formative data (as well as CST data and course grades) so that they can understand how students in their individual classes perform in comparison to other students with different learning styles. This helps teachers identify specific areas and gaps among target student populations. In addition, the ASSISTANT SUPERINTENDENT OF INSTRUCTION also supports standards-based assessment conversations with the principal, lead teachers, and faculty through facilitating frequent professional development workshops centered on this issue.

Faculty uses all data to evaluate areas of need and to develop specific plans of action. For example, in June of each school year, all FUSD academic departments analyze all of the comprehensive data catalogued throughout the school year. To ensure that The diverse community is represented, “case studies” of students are established by tracking the performance of an English Language Learner (ELL), a Special Education student (SPED), a low-performing student, and a high-achieving student. Teachers identify student gaps, teaching performance gaps, and school-wide professional community gaps with an emphasis on moving *all* students towards clearly delineated graduation expectations in the following school year. Additionally, teachers map instruction to and from the objectives outlined in the Graduation Portfolio for each student.

Plan for Students Who Are Academically Low Achieving

Student support staff, working with students’ advisors and teaching teams, are able to utilize these data to devise a plan for academically low-achieving students that could include individual tutoring or a group tutorial section offered by staff before and after school. Summer school and fifth-year programs for students who have not met course performance standards and/or met the school’s graduation requirements may include internships, credit recovery, and college courses.

Fremont Unified School District is currently working with Read Right Systems to address student reading challenges. Read Right Systems furnishes a complete library and all the training,

equipment and materials necessary to ensure a successful project. This includes the support systems necessary to assess each individual student's reading problem in order to place all students accurately in the program, to conduct the tutoring sessions, to manage the students on a daily basis, to manage the project, and to evaluate each student's progress with criterion-referenced, formative measures as well as with summative performance measures. Fremont Unified School District uses technology-based assessment provided by Online Reporting and Assessment System (OARS) to help identify and monitor students' reading levels. Fremont Unified School District uses its Student Information System, SchoolMax, to record and track students' progress.

We are also beginning to use adaptive hardware technologies to help low achieving students. For example, we use Apple's built-in speech synthesis technology to have the computer read text to students.

Plan For Students Who Are Academically High Achieving

Fremont Unified School District has high expectations for all students. Because the curriculum is standards based, students push to meet and exceed the standard. Traditionally, high-achieving students might find themselves greatly challenged by having to demonstrate and apply knowledge that they are accustomed to simply regurgitating. Students will have opportunities to engage in many different kinds of learning activities, calling on them to use a variety of skills and abilities. Learning venues open to students include classes at the school site, local college or community college classes, online coursework, and community service and internships. In line with the practice of differentiated instruction, high achieving students will also be encouraged to take on projects and academic work that is personalized to their achievement level. These students will also have the opportunity to participate in Teacher Assistant positions, help design projects, and co-teach elective classes.

Plan for English Learners

Fremont Unified School District is deeply committed to the success of its students learning English. Teachers work collaboratively to provide English Learners (ELs) access to rigorous curriculum as well as to academic English language development. Fremont Unified School District' vision rests on a body of research that challenges traditional ways of construing ELs as requiring a lower-level curriculum and enables raising expectations of achievement through a curriculum rich in high intellectual challenge and high support tasks. Teachers will work effectively with ELs to ensure that they acquire the English language and academic skills identified in the curriculum and meet state standards. Fremont Unified School District plans to continue to hire teachers with CLAD or BCLAD certification who have the skills and expertise to accelerate ELs' academic and linguistic development. To accomplish this mission, teachers will utilize specific instructional strategies to develop initial communicative competence in English and the development of disciplinary academic registers in their second language.

Plan for Special Education Students

Fremont Unified School District shall comply with all applicable state and federal laws in serving students with disabilities and provide appropriate assistive technology as identified. To meet all requirements, Fremont Unified School District is a member of a local SELPA

Goal 3h.1: Open labs, carts based on enrollment and class sizes. (This number will also be used to measure capacity for online Common Core testing)

Objective: By June 2015

3.h.

Benchmarks:

3.h.1.a By June 2013,

3.h.1.b By June 2014,

3.h.1.c By June 2015, 100% of students with IEPs or 504s have their technology needs met.

library hours met to increase access to internet--technology available
 continue to support LD/SD students by bringing assistive technology
 technology available to support SEIS needs of teachers; data collection for students
 SchoolMax consistent entry of IEPs/504s for staff to access, understand and implement

Implementation Plan Activities	Timeline	Monitoring/ Evaluation	Responsible Party
<ul style="list-style-type: none"> Analyze various testing data (CST, CAHSEE, SAT, PSAT, OARS) 	July 2010 – June 2015	Report to Principals	Director of Special Education
<ul style="list-style-type: none"> Teachers use technology-based assessment data to customize instructional strategies appropriate to each learner 	July 2010 – June 2015	Report by Principals	ASSISTANT SUPERINTENDENT OF INSTRUCTION
<ul style="list-style-type: none"> Plan IEP meetings with attention toward using technology to meet student goals. 	July 2010 – June 2015	Survey students	Director of Special Education
<ul style="list-style-type: none"> Analyze graduation rate data and SEIS data to adjust practices 	July 2010 – June 2015	Report to principals	Director of Special Education

Goal 3h.2: Libraries

Objective: By June 2015

3.h.1 100% of libraries provide 180 minutes of access per day.

Benchmarks:

3.h.1.a By June 2013, __%

3.h.1.b By June 2014, __%

3.h.1.c By June 2015, __%

Implementation Plan Activities	Timeline	Monitoring/ Evaluation	Responsible Party
<ul style="list-style-type: none"> Analyze various testing data (CST, CAHSEE, SAT, PSAT, OARS) 	July 2010 – June 2015	Report to Principals	Director of Special Education
<ul style="list-style-type: none"> Teachers use technology-based assessment data to customize instructional strategies appropriate to each learner 	July 2010 – June 2015	Report by Principals	ASSISTANT SUPERINTENDENT OF INSTRUCTION
<ul style="list-style-type: none"> Plan IEP meetings with attention toward using technology to meet student goals. 	July 2010 – June 2015	Survey students	Director of Special Education
<ul style="list-style-type: none"> Analyze graduation rate data and SEIS data to adjust practices 	July 2010 – June 2015	Report to principals	Director of Special Education

Goal 3h.3: Internet Access Devices are available to students to borrow (laptops, netbooks, iPads)

Objective: By June 2015

3.h.1 __%

Benchmarks:

3.h.1.a By June 2013, __%

3.h.1.b By June 2014, __%

3.h.1.c By June 2015, __%

Implementation Plan Activities	Timeline	Monitoring/ Evaluation	Responsible Party
<ul style="list-style-type: none"> Analyze various testing data (CST, CAHSEE, SAT, PSAT, OARS) 	July 2010 – June 2015	Report to Principals	Director of Special Education

<ul style="list-style-type: none"> Teachers use technology-based assessment data to customize instructional strategies appropriate to each learner 	July 2010 – June 2015	Report by Principals	ASSISTANT SUPERINTENDENT OF INSTRUCTION
<ul style="list-style-type: none"> Plan IEP meetings with attention toward using technology to meet student goals. 	July 2010 – June 2015	Survey students	Director of Special Education
<ul style="list-style-type: none"> Analyze graduation rate data and SEIS data to adjust practices 	July 2010 – June 2015	Report to principals	Director of Special Education

3i. Goals and Plan to Use Technology for Record Keeping and Assessments

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

Jan, Anne

FUSD has implemented SchoolMax as our student information system (SIS). Additionally, we use PrepHQ³ to track college applications and student testing of achievement is accomplished via OARS⁴.

FUSD uses SchoolMax to track graduation requirements and for all report cards and transcripts. FUSD keeps all attendance in SchoolMax and to date has not experienced any significant issues. Achievement and test results are also maintained in SchoolMax.

One strength of The SIS is that it provides a portal to parents and guardians. However, it is difficult for teachers to use the traditional grading portion of the system (PowerGrade) as rubrics are at the core of much of The grading. Our rubric requires teacher interpretation that cannot be replicated with the software's algorithms. FUSD needs to make this module easier to use, whether via a new web-based interface or better training and implementation. (One consultant has suggested that we compromise with a single, carefully thought out CMO-wide alternate grading scale to simulate the rubric-based approach within PowerGrade along with significantly more training.)

Goal 3.i.1: Progress reporting with rubric-based grading is easy-to-use for teachers and easily monitored by students and parents/guardians.

³ PrepHQ (<https://www.prephq.com/>) Free. Easy. Powerful. Prep Headquarters is a secure Internet program that helps high school counselors manage the college planning process. With PrepHQ, counselors can communicate with students and parents, track student progress and activities, and report school-specific data to administrators. PrepHQ is a versatile web tool that makes college planning much, much easier.

⁴ OARS (<http://www.OARS.org/>) - The Online Reporting and Assessment System (OARS) is a national non-profit organization dedicated to helping all children learn. OARS provides research-based assessments, professional training, and consulting services to improve teaching and learning.

Objective: By June 2015

3.i.1 100% of teachers will demonstrate proficiency in using online grading (SchoolLoop, secondary; TBD, elementary) to report student grades

Benchmarks:

3.i.1.a By June 2013, 80% of teachers will receive training to report student grades
 Secondary 85% uses SchoolLoop
 Elementary 60% uses online report cards

3.i.1.b By June 2014, 90% of teachers will receive training to report student grades
 Secondary 90% uses SchoolLoop
 Elementary 90% uses online report cards

3.i.1.c By June 2015, 100% of teachers will receive training to report student grades
 Secondary 95% uses SchoolLoop
 Elementary 95% use online report cards; 50% use gradebook programs

Implementation Plan Activities	Timeline	Monitoring/ Evaluation	Responsible Party
• Train the trainers in SchoolLoop	Summer 2010	Survey trainers	CTO
• Offer staff workshops in SchoolLoop and online report cards	July 2010 – June 2015	Survey participants	CTO
• Promote peer tutoring among grade levels and teams	July 2010 – June 2015	Survey participants	CTO

Goal 3i.2: Online Assessment and Reporting System and Common Core Testing improve student achievement

Objective: By June 2015, _____ % of teachers using OARS increases to _____

3.i.2.1 Benchmarks:

3.i.2.a 50%

3.i.2.b 60%

3.i.2.c 70%

Implementation Plan Activities	Timeline	Monitoring/ Evaluation	Responsible Party

•	Summer 2010		CTO
•	July 2010 – June 2015	Survey participants	CTO
•	July 2010 – June 2015	Survey students	Technology staff
•	July 2010 – June 2015	Principals report completion rates	Principals

3j. Goals and Plans to Use Technology for Two-way Communication between Home and School

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

John, Robert, Anne

Fremont Unified School District strongly encourages parents and members of the community to participate in and share responsibility for the educational process and educational results of Fremont Unified School District. As members of the School Site Council, parents become active participants in developing school policies and leading efforts to engage the support of the community, making recommendations about issues related to the school, and reviewing parental and community concerns.

Fremont Unified School District’ phone and messaging system allows direct telephone access to teachers and administration.

Currently, each school has a website that provides an overview of the school, lists current events, and showcases student work and achievements. Each teacher also has his/her own individual section of the website to list curriculum, assignments, projects, and showcase student work.

A key feature of Fremont Unified School District’ student information system, SchoolMax, is that it provides parent and student access to student data. In real time, they can see assignments and determine if anything is missing. They can also see grades and teacher comments. Parents can easily email the teacher to obtain clarification or to ask questions.

Another area of improvement is Fremont Unified School District’ use of Web Portals. They are currently used but they are inconsistent in providing information to parents and guardians. Fremont Unified School District plans to improve this in the future.

Fremont Unified School Distict has adopted a electronic gradebook, School Loop, that can also serve as a Web Portal, and to some extent, a simple learning management system. It is easier to use than SchoolMax, and more staff have adopted it. School Loop is currently being used in secondary schools. School Loop does not support the grading system used in the primary schools.

Many schools in the Fremont Unified School District have email groups that keep parents and students informed about what is happening at school. These email groups are supported by PTA and PTO (private parent / teacher organizations) groups at the schools. It is up to parents to join these email groups.

Even though email is a constant part of administrators and teachers daily work, Fremont Unified School District does not have an easy and consistent way to communicate electronically with students, parents and guardians, but have initiated steps to solve this problem by exploring use of text messaging and contracting with Gaggle.Net to provide email to students for 2007-2008. There are further plans to improve this communication.

Fremont Unified School District will continuously evaluate the effectiveness of communication with parents and how technology can improve that, and will adjust the technology plan accordingly in the years to come.

How to use technology to assist Student Study Teams (SchoolLoop, anything else)?

Goal 3j.1: All Schools, sites, and departments have a web presence to facilitate two-way communication between home and school

Objective: By June 2015

3.j.1. 100% of school sites, staff, and relevant departments will have websites that contain pertinent information for teachers, administrators, parents and students. To facilitate the two-way flow of information between school and home, school websites may include teacher-maintained interactive websites (e.g., blogs, wikis).

Benchmarks:

- 3.j.1.a By June 2013, 90% of teachers, staff, and departments have current websites
- 3.j.1.b By June 2014, 95% of teachers, staff, and departments have current websites
- 3.j.1.c By June 2015, 100% teachers, staff, and departments have current websites

Implementation Plan Activities	Timeline	Monitoring/ Evaluation	Responsible Party
<ul style="list-style-type: none"> • Train staff on website options <ul style="list-style-type: none"> • School Wires • School Loop 	Summer 2013, 2014, 2015	Survey participants	CTO
<ul style="list-style-type: none"> • Offer staff workshops in website development and blogging 	July 2013 – June 2015	Survey participants	CTO
<ul style="list-style-type: none"> • Monitor website development • Monitor website usage 	July 2013 – June 2015	Post website dashboard at each site of active websites	CTO
<ul style="list-style-type: none"> • Continue training via online screen casts 	July 2013 – June 2015	Survey participants	Technology staff

Goal 3j.2: All schools will use email for teacher, parent, and student communication

Email can be a useful tool for facilitating communications among teachers, parents and students.

Fremont Unified School District has a spam filter that teachers need to be aware of, because sometimes parent and student email are rejected by spam filter.

School Loop can be used to send email to a teacher. It is not blocked by the spam filter?

Objective: By June 2015

3.j.2. 100% of school staff communicates with parents and students via email

Benchmarks:

- 3.j.2.a By June 2013, 80 of school staff communicates with parents and students via email
- 3.j.2.b By June 2014, 95% of school staff communicates with parents and students via email
- 3.j.2.c By June 2015, 100% of school staff communicates with parents and students via email

Implementation Plan Activities	Timeline	Monitoring/ Evaluation	Responsible Party
•	Summer 2013, 2014, 2015	Survey participants	CTO
• Offer staff workshops on effective use of email in schools, including handling spam	July 2013 – June 2015	Survey participants	CTO
• Monitor email usage	July 2013 – June 2015	Report email usage	CTO
• Continue training via online screen casts	July 2013 – June 2015	Survey participants	Technology staff

Goal 3j.3: All schools will experiment with new communication models to improve two-way communication between home and schools

School Loop is a new tool that Fremont teachers can use to communicate with parents and students. It has been adopted to enable online grade sharing. It can also be a website and supporting blogging. It is being used at the secondary schools.

Fremont Unified School District has developed a prototype for online report cards for the primary schools. Primary schools use a grading system that is not supported by School Loop, so they cannot use School Loop.

Fremont Unified School District has released iFUSD, an iPhone App. This App enables parents to access the Fremont Unified School District’s website more easily from an iPhone.

Fremont Unified School District is evaluating the use of student email addresses. These email addresses would be made available for students to use for school work. For example, if a language class would like to have students communicate with students in a foreign country, they could use school email addresses instead of personal email addresses for their communications.

Objective: By June 2015

3.j.3. 100% of school staff communicates in multiple ways to improve two-way communication between home and school

Benchmarks:

3.j.3.a By June 2013, 80% of school staff communicates in multiple ways to improve two-way communication between home and school

3.j.3.b By June 2014, 95% of school staff communicates in multiple ways to improve two-way communication between home and school

3.j.3.c By June 2015, 100% of school staff communicates in multiple ways to improve two-way communication between home and school

Implementation Plan Activities	Timeline	Monitoring/ Evaluation	Responsible Party
<ul style="list-style-type: none"> • Train staff on School Loop, for grading and blogging / discussion boards • Train staff on student email • Train staff on using iFUSD • Train staff on online report cards for primary schools • Train staff on School Loop websites 	Summer 2013, 2013, 2015	Survey participants	CTO
<ul style="list-style-type: none"> • Offer staff workshops on Simple Message System and social media 	July 2013 – June 2015	Survey participants	CTO
<ul style="list-style-type: none"> • Monitor creative uses of two-way communication 	July 2013 – June 2015	Report usage	CTO
<ul style="list-style-type: none"> • Continue training via online screen casts 	July 2013 – June 2015	Survey participants	Technology staff

3k. Monitoring Process for Curriculum

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

Jan March

Individual and whole-school evaluation will be ongoing and continuous, based on performance assessments, course work, student engagement data (e.g., attendance) and student, staff and parent perceptions. Performance assessments will be used with common benchmarks and rubrics. Assessment data will be used to adjust curriculum and tailor support systems to meet student needs. Data will be kept as part of a school knowledge base that will inform school dialogue, inquiry into best practices and decision-making. A table of Accountability categories and goals is included as Appendix 3.

Specific measurements of student progress from both standardized tests and class-specific assessments will be made and reported on a regular basis. Fremont Unified School District shall input achievement and test results into SchoolMax. Fremont Unified School District will use the following specific measurements. The timeframe listed in parentheses next to the measurement indicates the minimum frequency of formal data analysis for that measurement.

- Student attendance (quarterly)
- Student grades: A – C-, No Credit (NC) system (quarterly)
- Graduation rate (annually)
- Drop out rate (annually)
- Pre- and post- assessments of annual class performance on subject-specific measures of learning (e.g., scored essays, mathematics assessments) (tri-annually)
- CAT 6 scores (annually)
- Content Standards Assessment/Writing samples (bi-annually)
- Advanced Placement test scores, where appropriate (annually)

- PSAT and SAT scores (annually)
- API Ranking (annually)
- AYP Targets (annually)
- California High School Exit Exam scores (annually)
- Overall satisfaction among students and parents (as determined by survey and return rate each year) (annually)
- California Standards Test (annually)
- Primary Language SABE/2 (annually)
- CELDT (annually)
- CAPA as applicable and as determined by IEP team (annually)

In addition to the CAHSEE and other state tests, a culminating Assessment Tool for students at Fremont Unified School District, will be the design, creation, and exhibition of the Graduation Portfolio. The graduation portfolio is designed to be the final “right of passage” in order to graduate from Fremont Unified School District.

Staff will analyze student performance assessment and engagement data to drive decisions on a weekly basis during collaborative time. The schedule is structured to provide teachers with several hours of collaborative time each week. This time will be used to analyze student performance data as well as allow staff to plan integrated projects/curriculum.

Collaborative time spent with performance data will be focused on the analysis of the data in order to accurately measure the performance of student groups as well as individual students at the school. Specifically, these analyses of student performance will be broken down according to individual student, grade, gender, and ethnicity. Teacher teams will discuss the performance data, strategize methods for addressing any achievement gaps found, and seek guidance from Fremont Unified School District ASSISTANT SUPERINTENDENT OF INSTRUCTION if needed.

Reports will be made both at mid-year and end-of-year. The end-of-year reports will also include demographic analysis. Fremont Unified School District has a full-time Knowledge Manager that will guide and support all schools in analysis and interpretation of data.

Monitoring and evaluation for Curriculum goals takes several forms depending on the activity. Within the table for each main goal in the preceding sections, we have included a brief description of the process that will be used to monitor whether our curricular goals are being met and whether the curricular activities are being implemented in accordance with our benchmarks and timeline.

The implementation of curriculum goals for technology access, professional development, and integration will be overseen by the CTO and reported to the CEO of Fremont Unified School District. Collecting and evaluating relevant data regarding the scope, sequence, and outcomes of the above goals will be conducted annually by the CTO, site principals, and the Education Department led by the Chief Academic Officer.

Goal	Description	Monitoring Process	When	Responsible Party
1: Improving Teaching and Learning & Technology Skills (Goals 3d and 3e)	Learning and using technology	Monitoring teaching and learning practices	Monthly	Site Principals
		Evaluating the EdTechProfile results	Annually	CTO
2: Ethical Use & Internet Safety (Goals 3f and 3g)	Using technology appropriately	Observations, Surveys, and evaluating the EdTechProfile results	Ongoing	CTO
3: Special Needs and Assessments (Goal 3h and 3i)	Measuring effective use of technology with all students	Regular review of test data	Ongoing	ASSISTANT SUPERINTENDENT OF INSTRUCTION
4: Two-Way Communication (Goal 3j)	Improving home – school connection	Surveys, observations, and reporting	Ongoing	VP Technology

4. PROFESSIONAL DEVELOPMENT

Rob, Toni, David T., RS

The Fremont Unified School District' Support Office plays an essential role in structuring and guiding the development of individual schools. One of the most important contributions is instructional support; the ASSISTANT SUPERINTENDENT OF INSTRUCTION provides intensive facilitation and coaching support, spending one day per week at each school site.

The Support Office also provides regular professional development for teachers and school leaders at all Fremont Unified School District. A week-long Leadership Institute each June is organized for the network and school leaders to take stock of each school's progress toward measurable achievement goals and to define and prioritize student, teacher and community goals for the subsequent school year. During the Leadership Institute, school leaders plan professional development for their faculties to be held each August. All teachers new to an FUSD school attend three weeks of professional development during the summer, while returning teachers attend two weeks of professional development. During this time, teachers learn how to design curriculum that is aligned to state standards as well as ways to integrate technology use within the curriculum.

The ASSISTANT SUPERINTENDENT OF INSTRUCTION, Vice President of Technology and Chief Education Officer design and deliver roughly 7 of the 15 days of August professional development, focusing on high quality project design, Graduation Portfolio outcomes, literacy strategies across the content areas, assessment of student work, technology integration and other instructional best practices. Interdisciplinary teams of teachers at each school plan and present proposed projects for the school year and receive suggestions and critical feedback from colleagues at other Fremont Unified School District, leveraging case study and peer coaching benefits. Site technology leaders implement regular trainings based on established needs of that particular site.

Additionally, all teachers attend a full-day professional development in October and another in March, plus approximately five more school-specific professional development days. Ongoing professional development takes place during the 4½ hours available each week for collaborative planning and sharing of best practices.

The Vice President of Technology has developed relationships with key vendors who provide professional development. Apple, Inc. provides a systems engineer who provides periodic training to the technology staff.

Ongoing communication and training are key to the success of this technology plan. The CTO will institute quarterly meetings to review the technology plan, monitor progress, and adjust implementation as necessary. These meetings will be part of the ongoing professional development of the technology staff and stakeholders.

Fremont Unified School District believes that professional development ensures that its teachers and staff are utilizing strategies that are research-based to promote student success. Technology professional development is not independent, but is part of the overall professional development strategy at Fremont Unified School District.

4a. Teachers' and Administrators' Technology Skills and Needs

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

Teachers and administrators have an excellent baseline of technology skills, but they could use training in specific applications – particularly our portfolio system, grade book, and design applications. They all use computers with relative ease and are comfortable with productivity and presentation software. They are Internet savvy and are at ease with email and web access. Teachers use their computers for all aspects of their jobs, and are expected to utilize technology beyond the parameters of the classroom.

As discussed in 3a and 3b, teachers have extensive access to technology throughout the school day. Because they have individually assigned laptops, most teachers also take their computers home with them at night giving them 24x7 access. All teacher-available technology is used daily by 100% of the staff and an extensive set of hardware is also available: video cameras, digital still cameras, audio hardware, projectors, and miscellaneous technology to create multi-media presentations. Because of their unbridled access to their computers and the Internet, we will be offering professional development online via lynda.com⁵ to supplement direct instruction from technology staff.

To date, we have used informal observations to determine professional development needs for technology. FUSD has not leveraged the EdTechProfile technology self-assessment survey for a comprehensive summary of teacher and administrator proficiency levels. However, Fremont Unified School District plans to introduce that tool and then use it ongoing as a guide for needed programs.

Portfolios are not only part of students' requirements for graduation, but are also integral to both the Beginning Teacher Support and Assessment (BTSA) program and the performance monitoring and evaluation system for all staff. As part of our goal to improve teaching and learning with the use of technology, we will begin requiring this be addressed and demonstrated in both the BTSA portfolios and portfolios for annual evaluations of staff.

Based on our observations, we are aware of these current needs in technology professional development:

1. Technology Safety - all staff need to be trained in our Acceptable Use Policy and methods to increase Internet safety for our students. This will be addressed by the CTO through whole-group instruction during our summer training in 2007 and be reiterated each summer.
2. Use of software and hardware to enable and enhance project-based learning - we will instruct classroom teachers in using presentation software, video software, and other authoring tools. We have established a contract with lynda.com to provide self-paced

⁵ lynda.com is an award-winning provider of educational materials, including Hands-On Training™ instructional books, the Online Training Library®, CD- and DVD-based video training, and events for creative designers, instructors, students, and hobbyists. (<http://www.lynda.com/aboutus/>)

online training. Site technology coordinators will do small group trainings to assure that teachers have the required skills.

3. Enabling of customized instruction – all staff need training on the efficient use of our student information system, SchoolMax, and our formative evaluation software OARS Testtaker. The Knowledge Manager will spearhead this training by conducting summer “Boot Camps” that provide hands-on training and actual implementation.
4. Custom portfolio and project sharing software - all staff need training on these tools.
5. Demonstrating Proficiency in Technology to improving teaching and learning through portfolios.
6. Implementation of a 1:1 laptop program – we have not done this ourselves so we are seeking counsel and leadership from Apple, Inc. who has assisted schools with this initiative and The Urban School of San Francisco, a local school with a 1:1 laptop program that has achieved significant learning improvement with the program.
7. FUSD would like to embrace the use of Open Source software. As part of this goal each school will establish a hosted server account based on Linux with hosted versions of common open source tools such as Moodle, MySQL, WordPress, Joomla, TikiWiki, and others.

4b. Goals and Plan for Professional Development

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

Fremont Unified School District’ teachers and administrators will have numerous and various professional development opportunities:

- Some offerings are required (e.g., the summer program designed by the Leadership Institute, October and March professional development days, EdTechProfile technology self-assessment survey, portfolios)
- Some offerings are optional (e.g., vendor trainings, self-paced online courses, site-based group trainings, Open Source software, conferences)
- Training delivery will be via outside resources, internal resources, self-paced online study, and meeting with others further along in implementing technology, thus providing varied format for diverse learning styles.

Goal 4b.1: Each teacher and administrator uses technology to enhance his/her success, as demonstrated by the EdTechProfile self-assessment survey.

Objective: By June 2015

4.b.1 85% of teachers and administrators will reach an intermediate level of proficiency with software pertinent to their job descriptions.

Benchmarks:

4.b.1.a June 2015, 70% of teachers and administrators will reach an intermediate level of proficiency with software pertinent to their job descriptions.

4.b.1.b June 2015, 75% of teachers and administrators will reach an intermediate level of proficiency with software pertinent to their job descriptions.

4.b.1.c June 2015, 85% of teachers and administrators will reach an intermediate level of proficiency with software pertinent to their job descriptions.

• Complete EdTechProfile deployment	July 2010 – June 2015	Periodic review of EdTechProfile participation	CTO
• Offer training modules that address the needs found in the EdTechProfile results	July 2010 – June 2015	Periodic review of EdTechProfile participation	CTO
• Compare EdTechProfile results with the baseline data	July 2010 – June 2015	Periodic review of EdTechProfile participation	CTO
• Report results to all stakeholders	July 2010 – June 2015	Annual report	CTO

Goal 4b.2: All teachers will use software and technology to support the curriculum and project based learning

Objective: By June 2015

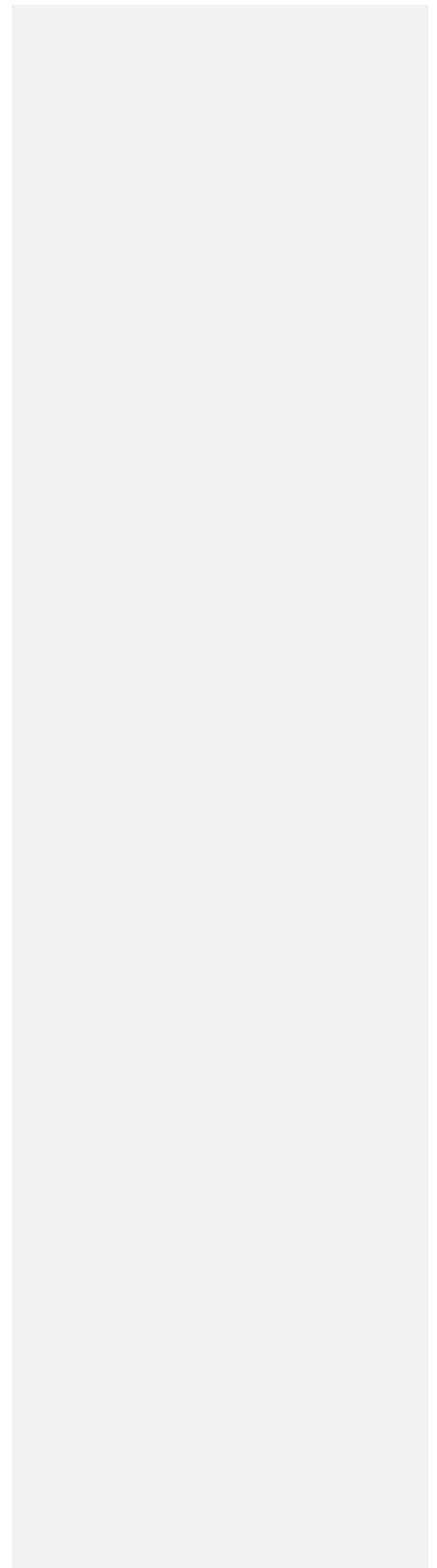
4.b.2 100% of teachers will use software and technology to support the curriculum and project based learning

Benchmarks:

4.b.2.a June 2015, 70% of teachers will use software and technology to support the curriculum and project based learning

4.b.2.b June 2015, 85% of teachers will use software and technology to support the curriculum and project based learning

4.b.2.c June 2015, 100% of teachers will use software and technology to support the curriculum and project based learning



• Complete EdTechProfile deployment	July 2010 – June 2015	Periodic review of EdTechProfile participation	CTO
• Offer training modules that address the needs found in the EdTechProfile results and specific to curriculum and project based learning	July 2010 – June 2015	Periodic review of EdTechProfile participation	CTO
• Compare EdTechProfile results with the baseline data	July 2010 – June 2015	Periodic review of EdTechProfile participation	CTO
• Survey teachers about technology use in curriculum and project based learning	July 2010 – June 2015	Review and report on survey	CTO
• Report results to all stakeholders	July 2010 – June 2015	Annual report	CTO

Goal 4b.3: All teachers will receive training on how to access and interpret student data to inform instruction

Objective: By June 2015

4.b.3 100% of teachers will receive training on how to access and interpret student data to inform instruction.

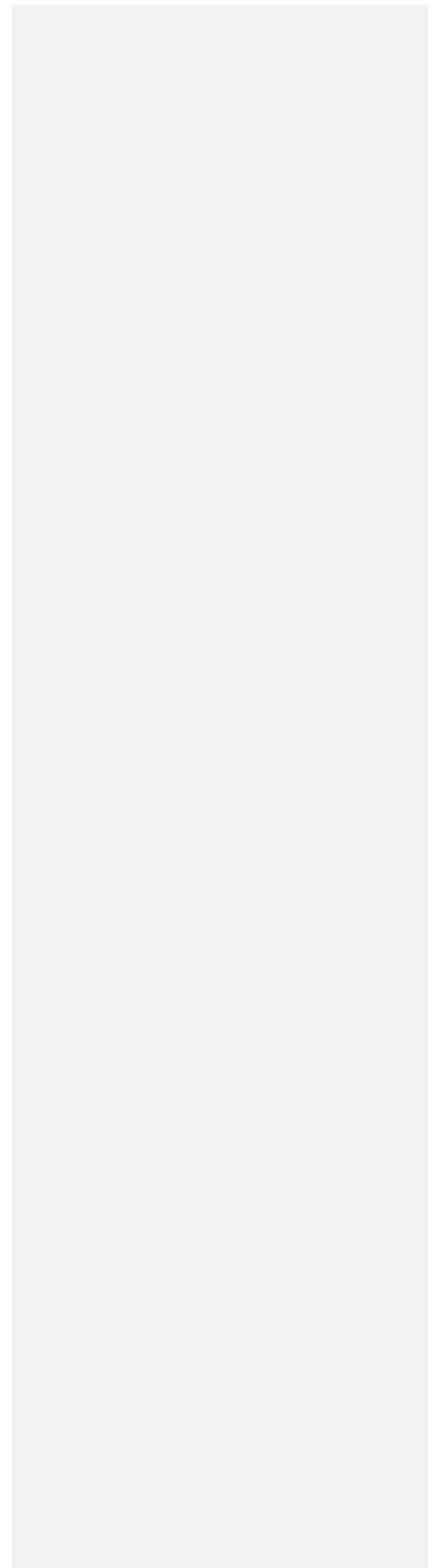
Benchmarks:

4.b.3.a June 2015, 70% of teachers will receive training on how to access and interpret student data to inform instruction.

4.b.3.b June 2015, 85% of teachers will receive training on how to access and interpret student data to inform instruction.

4.b.3.c June 2015, 100% of teachers will receive training on how to access and interpret student data to inform instruction.

• Offer workshops on data access and interpretation	July 2010 – June 2015	Survey	CTO
• Conduct 1-1 trainings	July 2010 – June 2015	Survey	Knowledge Manager
• Set up peer trainings	July 2010 – June 2015	Survey	Principal



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

Monitoring and evaluation for Professional Development goals takes several forms, depending on the activity. Within the table for each main goal, in the preceding sections, we have included a brief description of the process that will be used to monitor whether our professional development goals are being met and whether the planned professional development activities are being implemented in accordance with our benchmarks and timeline.

Primary responsibility for Professional Development goals falls to The ASSISTANT SUPERINTENDENT OF INSTRUCTION, but Technology Professional Development is the realm of the Vice President of Technology. If a task becomes delayed for any reason and a milestone cannot be met, it is incumbent upon the responsible party to notify the Vice President of Technology and other affected parties immediately, seek to understand the reasons for the projected delay, and make appropriate adjustments to the task timeline. Delays can adversely affect the success of other milestones.

Monitoring professional development includes:

- Monthly meetings of the technology staff to review the progress of the technology plan
- Annual technical skills surveys in June of each year with overall improvement year-to-year for 50% of staff not already “proficient”
- Initial training for staff on key technologies that support curricular goals (identified in 3d – 3h) prior to deployment of the specific technologies
- Initial training each August for new staff on key technologies that support curricular goals identified in 3d – 3h
- Refresher training each June for existing staff on key technologies that support curricular goals identified in 3d – 3h.

Goal	Description	Monitoring Process	When	Responsible Party
1: Trained in technology for job functions (Goal 4.b.1)	Staff is trained in using technology for job success	Observations, Surveys, and evaluating the EdTechProfile results	Ongoing	CTO
2: Trained in technology for PBL (Goal 4.b.2)	Staff is trained in using technology for Project Based Learning	Observations, Surveys, and evaluating the EdTechProfile results	Ongoing	CTO
3: Interpret Student Data (Goal 4.b.3)	Staff is trained in using data to improve instruction	Regular review of test data	Survey	ASSISTANT SUPERINTENDENT OF INSTRUCTION

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5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE **John, Shankar, Sameer, Bin**

Telecommunications and information technology provide the foundation, scaffolding, and enhancements leading to the success for students, staff, and support personnel. Fremont Unified School District’ infrastructure goals are not derived in isolation, but with the vision and goals of the entire organization in sight.

5a. Existing Infrastructure

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

In the following discussions of existing infrastructure, future needs are identified and described immediately following each topic. *Future needs are presented in italicized text.*

Physical Sites

Each school dedicates a room to be its server room. Here we have updated the electrical, cooling, and security as needed. The networking and telephone equipment terminates in this room. From the server room we presently run Category 5 OR 6 wiring through conduit to all required endpoints to provide voice and data communication to all classrooms and offices. Since we have required Digital Media courses, each school has 1-2 rooms that have the electrical upgraded to handle daily use of 25 computers. Offering wireless network access throughout the facility enables us to minimize plant modifications (*Provide more or the same level of details as server room/wired connections, Bin*). We have installed Alarm systems in all locations (*It is not very clear the alarm system is for the server room or the whole school, Bin*).

Our District Office is the center of infrastructure.

Networking and Telecommunications Infrastructure

Internet Access

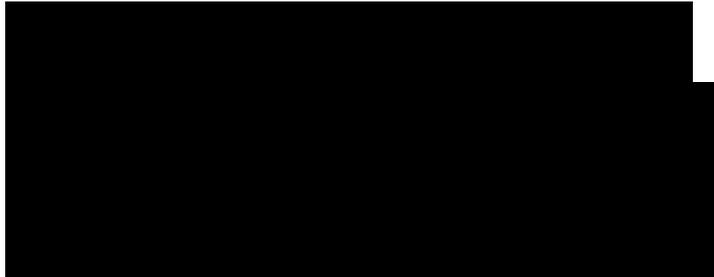
The District’s Internet Service provider is the Alameda County Office of Education (ACOE). Currently most Fremont USD staff has an email address. The District Technology department provides filtering from all school sites. Internet access is through dual 100Mb fiber optic connections provided by ACOE. All schools are networked to the District office by a WAN connection. Currently the bandwidth provided is not adequate for all the school sites and the District office.

Each of the District’s school sites is equipped with its own local area network. The hardware is typically over 10 years old and is becoming more difficult to keep up with the growing data demand. Hardware varies at each site depending upon budget allocations at the site level; however, the purpose and function of each of these local networks is the same:

- To link local classrooms labs and library media centers into a seamless (change to single, Bin) network for student and staff productivity
- To link school resources to the resources of the District Wide Area Network
- To link the school to the resources of the Internet

The table below indicates the connectivity from schools to the District Office and the District Office to the ISP.

Table 5.3. WAN Data Connectivity



Elementary	Copper	30	0	0	0		
Junior High	Fiber	0	5	0	0		
High School	Fiber	0	0	5	0		
Special Schools	Fiber	0	0	2	0		
Corp Yard	Copper	1	0	0	0		
DO to ISP	Fiber	0	0	0	1		
DO WAN	Fiber	0	0	0	0		
Total		30	5	7	1		

The District will continue E-Rate eligibility and qualify for reduced fees on Internet Access services by updating the District Technology Plan and certifying it with the CDE.

Traditional Telephony

Phone, fax, and alarm service are via POTS lines provided by AT&T. We handle call routing and message handling using Mitel 3300 switches at the sites

Cell Phones

We have 50 cell phones on a group plan.

For funding year 2010-2013, FUSD has opted to apply for E-Rate funding for cell phone service.

Local Area Network (LAN)

Our cabling is patched at the server room. We run two CAT 5 cables to each classroom when we have to do it ourselves otherwise we go with what the authorizing district provides. At some classrooms we dedicate 1 port for a Power over Ethernet (POE) wireless access point where we use Xirrus enterprise wireless arrays. The other port is either used for a printer, a computer, or small classroom switch.

In the server room we have two 24-port switches that operate at 1000 MB/sec. They have 1000 MB/sec. uplinks.

We create an 802.11a, g, and n wireless network that joins all the access points into one accessible network that all administrators, teachers, and students can access campus-wide (Probably talk a bit more about the wireless network, such as the average number of access points, what is the strategy on positioning the access points, the number of users per access point and etc., Bin).

Hardware

Hardware and the current rate of replacement are adequate to meet all phases of the District technology plan but are aging. Some schools have multi media/projection carts. All schools have at least one computer in the classroom and access to a computer lab on a weekly basis. Some schools within the District have mounted TV/VCR/Computer workstations in the classrooms. Smart boards and document cameras are a growing in popularity with teachers with some equipment already in a few classrooms (This is not clear to me, Bin).

In 2007 the District modernized the District's data center in the following ways. The District purchased of fifty new blade servers. These servers will replace the outdated servers providing more speed and connectivity. The District also purchased a 12 TB storage array to comply with the Federal Rules of Civil Procedure Rule 26 requiring the retention of email and other select data as stipulated by the U.S. Supreme Court for governmental agencies. Additionally, new antivirus and filtering equipment was purchased in order to comply with the Children's Internet Protection Act.

The District has over 6,000 computers distributed over forty-two school sites. The following data was obtained for the annual California School Technology Survey in 2008 and shows the numbers and locations of computers at our schools.

Our laptop to desktop/server ratio is as follows:

Level	Total computers	Laptops	Other
Elementary			
Jr. High			
High School			
District Office			
Total			
% Total			

The age of our computers is described in the following chart:

School/Site	< 1 year old	1-3 years old	4-6 years old	7+ years old	Total
Elementary					
Jr. High					
High School					
District Office					
Total					
% Total					

Electronic Learning Resources

Presently school sites are responsible for the purchase of their own productivity and educational software. The District’s Technology Department is responsible for the purchase and maintenance of all administrative equipment and software as well as the maintenance of the equipment and software purchased by school sites.

Table 5.4: Software and Electronic Resources

(Data as of June 2008)

Electronic Resources				
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<i>Available at All Sites</i>				
Fremont District Website	X	X	X	All grades, subjects
Sirsi OPAC (Online Library Catalog System)	X	X	X	All grades, subjects
District Library Home Page	X	X	X	All grades, subjects
Electronic Resources, teacher resources, and Internet sites related to textbooks at all levels	X	X	X	All grades, subjects
OARS Student Data and Assessment Program	X	X	X	All grades, subjects
SchoolMax	X	X	X	All grades, subjects
Alameda County Library Resources and Databases * Available to all with free library card	X	X	X	All grades, subjects
<i>Available at some sites</i>				
Video Streaming	X	X	X	All subjects
Alpha Smarts	X		X	Word Processing
Electronic Databases (i.e. netTrekker)			X	All subjects
Accelerated Reader	X	X		
Software				
<i>Educational content software for each</i>				

<i>grade varies, and is purchased by each individual school site based on their student needs, availability of computers, and availability of funds. Below is a partial list of some of the most purchased and used software.</i>				
Microsoft Word	X	X	X	All subjects
Microsoft Power Point	X	X	X	All Subjects
Microsoft Excel	X	X	X	Mostly math and science
Inspiration	X	X	X	All subjects
Kidspiration	X			,Grades K-4
KidPix	X			All subjects, K-6
iMovie	X	X	X	Presentations, teacher movies
ITunes	X	X	X	Storage and retrieval for music, podcasts, vodcasts
iPhoto	X	X	X	Web Pages, presentations
Garage Band	X	X	X	Podcasting, multiple subject areas
Keynote	X	X		Student presentations
Smart Board Tools	X	X	X	All subjects

Technical Support

FUSD has a Technology Department led by the CTO providing support for technology District-wide. The CTO is the District’s representative to the Technology Advisory Committee established by the Board of Trustees. Apart from hands on technical support the CTO plans for future technology implementation and is responsible for moving the District forward with technology. The Technology Department is broken down as per the chart below.

The Technology Department has established process and procedures provide better support to students, staff, and administrators:

- Establishment of a technology service desk providing first tier support
- A work order ticketing system monitors and manages requests for all technical support
- Network monitoring software provides real time notification of WAN conditions.
- An asset management system which provides for monitoring of all assets in the District
- Technicians use two-way radios for quick dispatch and response to trouble calls.

Table: 5.5: Current Technology Department Staffing

Director	1	0	0	0	1
Systems Engineering and Networks	1	2	1	0	0
Systems Operations	1	0	2	0	1
Operations and Projects	1	4	0	0	0
Instructional Technology	0	0	0	1	0
Totals	4	5	3	1	2

Current ratio of technicians to computers is 1:1,300. This ratio is expected to increase as the demand for new computers is requested and provided.

The FUSD Technology Department currently has staff with expertise in personal computer based applications and operating systems as well as network systems. While the District has Apple computers in some areas, support for these computers are limited and warranties and third-party support is necessary for Apple equipment.

The Technology Department also provides project management to school sites for all technology related projects the school sites wish to pursue. It also provides for technology training and in-service professional development of staff using the Webmaster/Trainer who is a teacher-on-assignment in the department.

Due to the high ratio of technician to computer currently at the District, many schools have enlisted the help of parents to provide technical assistance on an as-needed basis. These parents have provided funds and manpower in order to provide a more focused level of technical

assistance. Some high schools also have volunteer teachers designated to provide assistance to other teachers as minor issues arise.

Our replacement policy for obsolete equipment is described in section 6c.

Security and Child Safety Issues

Outlined in the following are the additionally necessary Security and Child Safety Issues, comprised of these sub-sections: Physical Security, Data Security, Appropriate Use.

Physical Security

Fremont Unified School District has a comprehensive security plan. This is outlined in the Laptop Theft Prevention Plan.

Data Security

Currently, to protect data we use RAID 5 technology to spread data across disks. In the case that one malfunctions, it can be replaced in real time with no loss of data. Our Unified Threat Management device protects data from viruses, restricts unauthorized access, and filters internet content.

Our Open Directory systems and UNIX file level security in Macintosh OS X Server provide only authorized access to data.

(Child Safety? Bin)

Appropriate Use

There is a standard Acceptable Use Policy that is required at each school.

Outside Expertise

Our CTO sometimes brings in experts to guide us on specific projects. Apple, Inc. has been instrumental in providing training and expertise in the implementation of its server and laptop computers. We have contracted with consultants in the course of developing this technology plan and E-Rate funding applications. We use outside vendors often for repair of equipment not under warranty.

Our technology staff, administration, and teachers attend conferences to stay abreast of current trends in Technology and Education. Sample conferences are the National Conference on Computers in Education (NCCE), Computer Using Educators (CUE) Conference, and MacWorld Conference.

5b. Infrastructure Needed

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 following table summarizes target quantities for various categories of infrastructure over the next few years. The 2009-2010 column documents our existing hardware assets, for comparison.

	<u>2001-2012</u>	<u>2012-2013</u>	<u>2013-2014</u>	<u>2014-2015</u>
Facilities	42			
Classrooms/Offices				
Students				
Staff				
Total Users				
Students/Staff				
Student Computers				
Staff Computers				
Total Computers				
Printers				
Servers				
Firewalls				
Switches				
Routers				
Cell phones for staff				
Tech support staff (FTE)				
Students/Computer				
Staff/Computer				
Users per Tech support FTEs				



The following infrastructure is needed to support the activities in the Curriculum and Professional Development Components of the plan.

Networking and Telecommunications Infrastructure⁶

- On-going, we

E-Rate

Y13 (2010-2013): Telecommunications and Internet Access requests complete for up to 50 POTS phone lines and 100 MB VPN circuits for each site.

Internal Connections complete for supporting hardware: firewalls, switches, wireless access points, and phone systems.

Y13 (2013-2014) and Y13 (2014-2015): Plan to continue telecom and Internet services.

Hardware

- For future years FUSD plans to add to its inventory

E-Rate

Y15 (2012-2013): Internal Connections request complete for qualifying servers.

Y16 (2013-2014) and Y17 (2014-2015): Plan to assess need for additional hardware.

Electronic Learning Resources

- For 2010-2013 we plan to

E-Rate

Y15 (2012-2013): Internet Access request complete for up to 1500 student email accounts.

Y16 (2013-2014) and Y17 (2014-2015): Plan to continue service.

Physical Plant Modifications

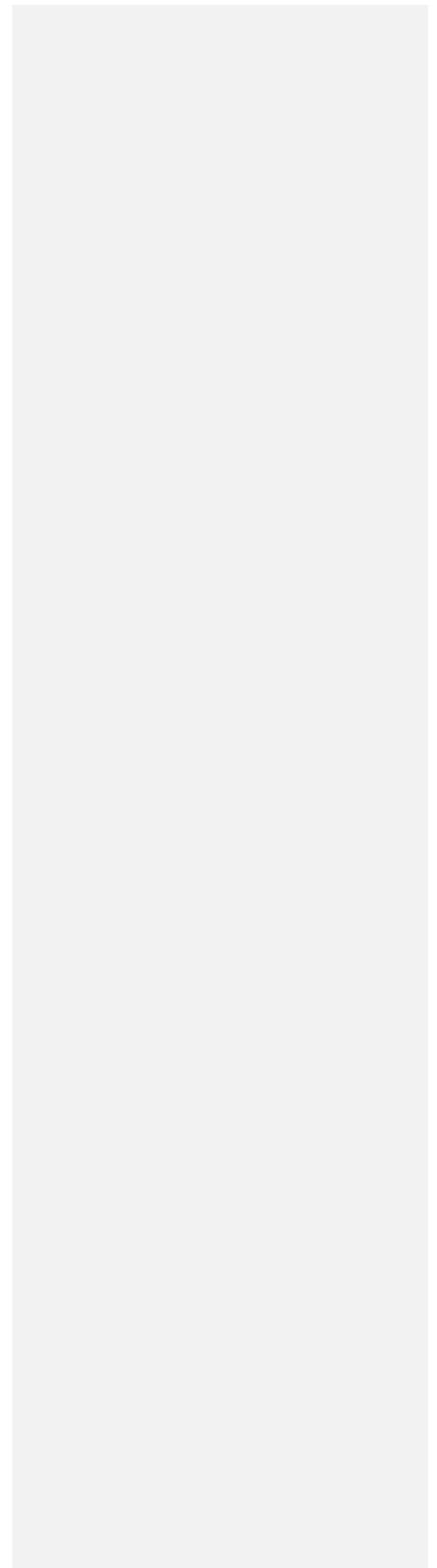
- Other plant modifications are pending.

E-Rate

Y13 (2010-2013): Internal Connections request complete for extension of DMARC from MPOE to MDF for each site and additional CAT6 wiring for Hayward Site.

Y13 (2013-2014) and Y13 (2014-2015): Plan to assess need to additional improvements.

⁶ See also Appendix K – Form 470 Worksheet for Y13



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

Goal 5c.1: Fremont Unified School District infrastructure will be upgraded to meet the needs and demands of current and future technology resources

Objective: By August 2010

5.c.1 All sites will be connected by a 100 Mb/sec. fiber Ethernet connection. All sites will then connect over a shared connection to the Internet at 500 Mb/sec.

Benchmarks:

- 5.c.1.a By August 2010, 100% of sites will be connected by a 100 Mb/sec. fiber Ethernet connection. All sites will then connect over a shared connection to the Internet at 400 Mb/sec.
- 5.c.1.b In July 2012, 100% of sites will be connected by a 100 Mb/sec. fiber Ethernet connection. All sites will then connect over a shared connection to the Internet at 400 Mb/sec.
- 5.c.1.c In July 2014, 100% of sites will be connected by a 100 Mb/sec. fiber Ethernet connection. All sites will then connect over a shared connection to the Internet at 400 Mb/sec.
- 5.c.1.d In July 2015, 100% of sites will be connected by a 100 Mb/sec. fiber Ethernet connection. All sites will then connect over a shared connection to the Internet at 400 Mb/sec.

• Work with telecom vendor to complete the install process	Summer 2012	Review plan and check milestones	CTO
• Install necessary firewalls, switches, and wireless access points	Summer 2012	Review plan and check milestones	CTO
• Install additional upgraded wiring	Summer 2013	Review plan and check milestones	CTO
• Maintain networks	July 2014 – June 2015	Quarterly reports	CTO

Goal 5c.2: Fremont Unified School District staff and students will have the technology (hardware) needed to meet its curricular needs

Objective: By June 2014

5.c.2 100% of staff and students will have the technology needed to meet its curricular needs

Benchmarks:

- 5.c.2.a In June 2013, 90% of staff and 50% of students will have the technology needed (computers and peripherals) to meet their needs
- 5.c.2.b In June 2014, 95% of staff and 75% of students will have the technology needed (computers and peripherals) to meet their needs

5.c.2.c In June 2015, 100% of staff and 100% of students will have the technology needed (computers and peripherals) to meet their needs

• Evaluate need and set technology ratios	January 2012 – June 2015	Report to Principals	CTO
• Purchase necessary equipment	July 2012 – June 2015	Report to Principals	CTO
• Set replacement policy of obsolete equipment	July 2012 - June 2013	Report to Principals	CTO
• Create and maintain purchasing model	July 2012 – June 2015	Report to Principals	CTO

Goal 5c.3: Fremont Unified School District staff and students will have the electronic learning resources needed to meet its curricular needs

Objective: By June 2015

5.c.3 100% of staff and students will have the curricular resources needed to meet its curricular needs

Benchmarks:

5.c.3.a In June 2013, 90% of staff and 50% of students will have the technology needed (computers and peripherals) to meet their needs

5.c.3.b In June 2014, 95% of staff and 75% of students will have the technology needed (computers and peripherals) to meet their needs

5.c.3.c In June 2015, 100% of staff and 100% of students will have the technology needed (computers and peripherals) to meet their needs

• Roll out staff and student Office 2010 and Google Apps	July 2010 – December 2012	Report to Principals	CTO
• Purchase software necessary for standards	July 2012 – June 2015	Report to Principals	Principals
• Track software through the Service Desk system	July 2010 – June 2015	Report to Principals	CTO

Goal 5c.4: Fremont Unified School District staff and students will have facilities that support the technology needed to meet its curricular needs

Objective: By June 2015

5.c.4 100% of sites will have facilities that support the technology needed to meet its curricular needs

Benchmarks:

5.c.4.a In June 2013, 50% of sites will have facilities that support the technology needed to meet its curricular needs

5.c.4.b In June 2014, 75% of sites will have facilities that support the technology needed to meet its curricular needs

5.c.4.c In June 2015, 100% of sites will have facilities that support the technology needed to meet its curricular needs

•	July-August 2012	Report to Principal	CTO
•	July-August 2012	Report to Principals	CTO
• Maintain infrastructure at all sites	July 2012 – June 2015	Report to Principals	CTO

5d. Monitoring Process for Infrastructure

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

The implementation of curriculum goals for technology access, professional development, and integration will be overseen by the CTO and reported to the CEO of Fremont Unified School District. Collecting and evaluating relevant data regarding the scope, sequence, and outcomes of the above goals will be conducted annually by the CTO, site principals, and the Education Department led by the Chief Academic Officer.

Goal	Description	Monitoring Process	When	Responsible Party
1: Infrastructure (Goal 5.c.1)	The connectivity within and among the sites and the Internet	We will continue monitoring of usage.	Monthly	VP Technology
		We will do a staff survey each June.	Each June	Site Principals
2: Hardware (Goal 5.c.2)	Technology necessary to meet the curricular needs of Fremont Unified School District	We will do a staff survey each June.	Each June	ASSISTANT SUPERINTENDENT OF INSTRUCTION
3: Electronic Resources (Goal 5.c.3)	Software and services to meet the curricular needs of Fremont Unified School District	We will do a staff survey each June.	Each June	ASSISTANT SUPERINTENDENT OF INSTRUCTION
4: Facilities (Goal 5.c.4)	Adequate building upgrades to enable infrastructure, hardware, and electronic resources to meet the curricular needs of Fremont Unified School District	Technology team will do yearly evaluations.	Each July	CTO

6. FUNDING AND BUDGET

John

6a. Established and Potential Funding

List established and potential funding sources

Fremont Unified School District

National foundation partnerships

FUSD invests heavily in honest and frequent communication with its major foundation supporters, including the Bill & Melinda Gates Foundation, the Stuart Foundation, and James Irvine Foundation. Fremont Unified School District is actively cultivating relationships with other national education funders, such as the New Schools Venture Fund, the Charter Growth Fund (CGF), the Michael and Susan Dell Foundation, and the Pisces Foundation.

State and federal grants

FUSD will continue to take advantage of federal funds that support charter school start-ups, available through the California Department of Education (CDE) and other state education agencies. To date, Fremont Unified School District has received CDE start up grants ranging from \$400,000 to \$500,000.

Local foundation and corporate partnerships

FEF

Individual giving

Fremont Unified School District has a systematic program for the raising of funds from individuals. Intensive board development is ongoing, with a heavy emphasis on the recruitment of members with the capacity to both give and get substantial contributions.

Other revenue sources to support technology include funding from the following sources:

- E-Rate funding – we will apply for approximately \$125,000 of funding for 2010-2013: all for Priority 1 (Telecommunications and Internet Access)
- California Teleconnect Fund
- Leasing computers (vs. purchasing) will help cash flow.
-

6b. Estimated Costs

Estimate annual implementation costs for the term of the plan

Budget Approval Process

Fremont Unified School District has the following budget approval process.

- Budget Creation - In early spring of each year, our finance department projects the following year's revenue based on student enrollment and potential grants and other funding. Enrollment drives faculty requirements, facilities needs, and other operational expenses. Using experiential data and our approved technology plan as guides, the CTO allocates funding to support technology expenses in the areas of hardware, software, networking equipment, infrastructure services, and systems maintenance, as well as facility retrofitting and professional development.

- Budget Approval - The CEO presents a draft budget for the next fiscal year to the Board of Directors in April/May of each year. The Board carefully reviews the budget and approves it with the understanding that the budget generally will be submitted for re-approval in June, after State budget revisions in May/June. **The minutes of this meeting are retained as part of our technology plan and E-Rate application documentation.**

The Board generally does not make recommendations about specific line items, but rather approves an entire budget. Every year our Board has successfully approved a budget that supports a quality education program that includes technology expenses and infrastructure upgrades no later than June.

- Budget Revision - In June of each year, the school administration presents to the Board of Directors a school report that includes the most current information about projected enrollment, anticipated grant funding, and anticipated public revenue for the fiscal year beginning July 1. Based on this information, the Board recommends adjustments to the previously approved budget and approves a revised budget that the school submits to the State Department of Education and its charter authorizer.

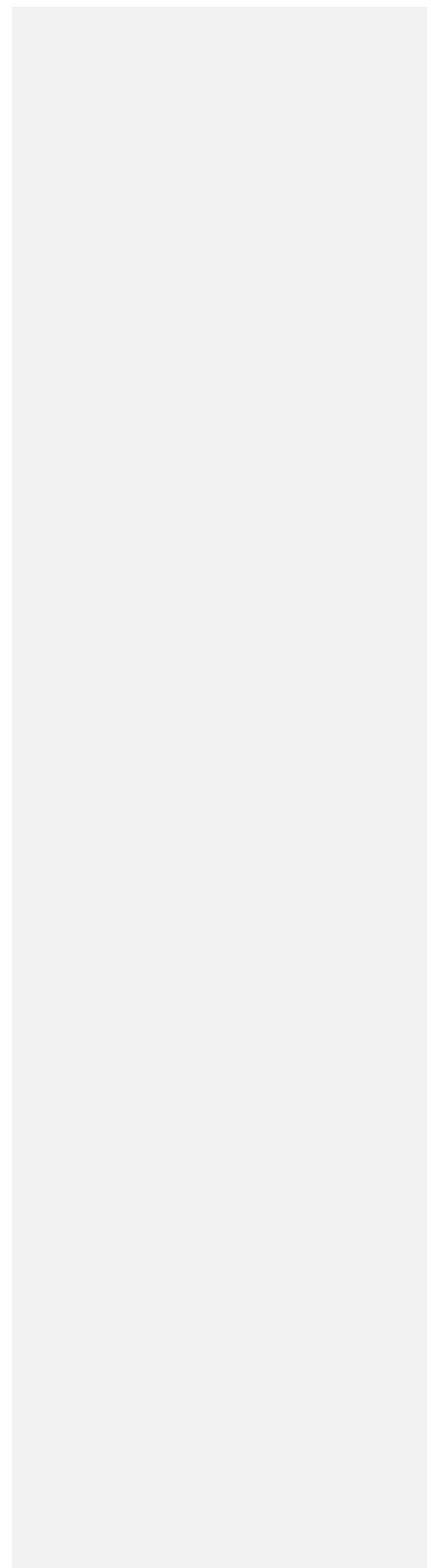
Budget Assumptions

Enrollment is the primary driver of growth, and projected based on incremental additions of schools and grade levels per school, as described in the table in section 5a (and approximates about 35% per year).

E-Rate projects are shown with two line items, at both 100% debit expense and with expected discount percent credit. Additional schools are assumed to be eligible for 90% E-Rate discount.

Budget Projections for technology are presented in the following table.

Budget Projections



6c. Replacement Policy for Obsolete Equipment

Describe the district's replacement policy for obsolete equipment

The life expectancy of a computer is typically about three years in industry, but likely closer to five years in education. Generally, we plan to find new uses for older equipment until it ceases to function. The computer purchasing assumptions for this plan are based on 4-5 years of useful life.

6d. Monitoring Process for Funding and Budget

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

Fremont Unified School District has extensive successful experience in developing grant funding with significant foundations, all of whom require ongoing monitoring of progress on their investments. Various strategies that have facilitated these partnerships will continue to be employed, including contingency plans, should events not play out as anticipated.

The Board of Directors is responsible for the operation and fiscal affairs of the organization including approval of the annual budget, major fundraising events, and grant writing; monitoring the fiscal solvency of the schools and assisting in fundraising for the schools; participation in independent fiscal audits.⁷

The Chief Executive Officer is responsible for overseeing all finances and accounting for Fremont Unified School District. The Vice President of Technology has primary responsibility for budget management and oversight of the technology program. Responsibility for instructional aspects including integration of technology with the curriculum falls to site administrators. Day-to-day technical issues are handled by the technology coordinators, including the responsibility to identify unmet needs and to bring them to the attention of the CTO.

E-Rate applications are prepared with assistance from The Miller Institute for Learning with Technology under the direction of the CTO and with close cooperation with the site technology stakeholders. Miller Institute may also assist with some aspects of implementation, monitoring, and revision of this document, to the extent deemed appropriate by the CTO.

Ideas for technology use are suggested by all technology users (e.g., teachers, students, school leaders and administrators) to the Technology Coordinator, who proposes enhancements consistent with the Technology Plan to the CTO. The CTO presents appropriate items that affect funding and budget decisions (e.g., based on dollars, budget impact, strategic impact), to the CEO, who approve purchases/decisions. The Technology Coordinator implements approved enhancements, providing the CTO with periodic reports of progress and results. The CEO is responsible to the Board for evaluation and continued development of the Technology Plan.

Comparison of actual revenues and spending to the budgets forecast in this document will occur annually in April. If revenues have fallen behind, some technology programs may be postponed

⁷ From GOVERNANCE STRUCTURE, Charter Petition

or reduced in funding level, or—if feasible—an increased percentage of ADA funding may be applied to technology needs. If purchases are not being made in a timely manner, appropriate corrective actions will be taken to help ensure that the acquisition and installation of resources gets back on track. During November – February, adjustments will also be made, in light of information developed in the process of preparing E-Rate applications. To address a potential funding shortfall, it will be necessary to aggressively pursue grant proposal preparation activities, or scale back technology acquisition and delay accomplishment of the planned student-computer ratios, or increase the percentage of general fund revenue allocated to the technology program. Most likely, a combination of these strategies will be needed, but Fremont Unified School District has excellent ties to philanthropic organizations and plans to seek adequate funding to meet our needs.

The Board of Directors is responsible for final approval of the annual budget, including technology, based on the recommendations of the Chief Executive Officer, and for approval of material deviations from the approved budget over time. If significant revisions to the technology budget presented in this plan are deemed necessary, the plan will be resubmitted to the CDE for re-certification.

7. MONITORING AND EVALUATION COMPONENT CRITERIA

Sameer, Jan M., John

7a. Evaluation of Technology Impact on Teaching and Learning

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

Fremont Unified School District' evaluation of the effectiveness of its Technology Plan is an ongoing process. We will use both informal and formal components to measure the effectiveness of our plan.

Throughout each phase we will conduct several informal conversations with students, parents, and district personnel, to address their perceptions of the implementation of additional technologies into the district's learning environment.

A formal evaluation of the technology plan and its implementation will be completed each year, including preparation of the E-rate Supplemental Analysis Addendum. The Fremont Unified School District Technology Plan will be formally reviewed on an annual basis by the technology planning committees in each building. It will also be reviewed by the district technology planning committee and the CTO. The efficacy of the existing plan will be evaluated, and the plan will be modified to correct shortcomings and to reflect changes recommended and agreed upon by the various reviewers. Every third year, a major revision and re-submission for CDE approval will completed, thus supporting our ongoing intention to leverage E-Rate funding.

Successful implementation of technology will be determined by student achievement (as discussed in 3c), particularly:

- Over 90% of FUSD graduates will be accepted and attend college and over 70% will attend a 4 year college or university (Transformation)
- All students will complete at least two well aligned College Success performance tasks in each course (Success)
- All Fremont Unified School District will exceed their API growth target and be ranked a 5 or high for similar schools (Survival)
- All Fremont Unified School District will meet their growth benchmarks on our accountability framework for Reading and Math proficiency based on OARS Map, CST and CAHSEE. (Survival)
- Schools and classrooms will consistently demonstrate a culture that is conducive to a high level of learning (Survival)
- Portfolio completion per student.

Overall responsibility for curricular goals belongs to the Principals. Primary responsibility for Professional Development goals falls to our ASSISTANT SUPERINTENDENT OF INSTRUCTION. Our CTO is responsible for monitoring technology progress on a day-to-day basis. The Chief Executive Officer will review progress of the goals stated in this plan and report results to the Board of Directors.

Schedule for evaluating the effect of plan implementation

Evaluation schedules include:

- Semi-annually - meetings of Technology Plan stakeholders
- Annually - parent/student/staff surveys
- Annually - review and update of Technology Plan.

Additionally, progress versus the benchmarks established in this technology plan will be summarized in a semi-annual technology program audit report created under the supervision of the CTO, including recommendations for the upcoming period. These six-month reports may be informal, taking the form of a brief email summary.

Findings on the impact of technology on the curriculum and student learning will be compiled yearly into a technology section for the Annual Report, which will be made available to all stakeholder groups.

7c. Process and Frequency of Communications Evaluation Results

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

Information gathered will be used for internal decision-making, including the following: appropriate interventions for students; professional development recommendations for staff; and improvements in technology acquisition, deployment and support strategies. In the event progress lags behind the stated milestones, or achieved milestones do not meet the desired goals, the CTO will take appropriate corrective action.

The semi-annual technology program audit will feature:

- Evidence of how technology is impacting student learning and attainment of the district’s curricular goals, as well as classroom and school management
- Activities, projects, and practices having a noticeably positive effect on teaching and learning
- Recommendations for the following period, both for improvements for areas not meeting the desired goals and for expanded efforts for areas exceeding the desired goals.

The report will be shared with stakeholders in the school community, including the following: our staff; our students and their parents; the governing board of the school; the CDE; and other agencies as required. If major plan revisions are required, a revised plan will be prepared and submitted to the California Department of Education for recertification.

8. EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS TO MAXIMIZE THE USE OF TECHNOLOGY
CRITERION Steve, Maile, Kathy A.

If the district has identified adult literacy providers, describe how the program will be developed in collaboration with them. (If no adult literacy providers are indicated, describe the process used to identify adult literacy providers or potential future outreach efforts.)

Comment [1]: sayriss:
http://www.nmusd.us/district/tech_plan_2006-2009/effective_collaborative_strategies.pdf

This is a link to another district's similar online plan. What is appropriate about their plan is it's centered on things that we do to support and collaborate on projects that are geared for adults. All the items in this section are primarily projects that are for the student. Some of the items mention School Max and various training days on how to use technology. But the term Adult Literacy is more in the realm of this type of thing:
http://wiki.literacytent.org/index.php/Main_Page

In its work to build and sustain excellent schools, Fremont Unified School District partners with certain Adult Literacy Providers who have outstanding national reputations.

Fremont Unified School District has established a strong relationship with Stanford University College of Education. Fremont Unified School District works with leaders from the College in developing its strategies of Project Based Learning (PBL) and Graduation Portfolios. Both of these initiatives maximize Fremont Unified School District' use of Technology because the development, storage, and presentation of projects for PBL and portfolios inherently necessitate extensive use of technology. Students use just about all of our hardware and software in development of projects that showcase their learning.

The PBL in-service program includes summer and quarterly training and is developed by the ASSISTANT SUPERINTENDENT OF INSTRUCTION, who works closely with professors and staff from Stanford. FUSD plans for this to continue over the duration of the Technology Plan as FUSD adds more staff and works to strengthen its pedagogical practices.

For July 2010 through June 2015, Fremont Unified School District wants to work with Stanford to bring the PBL skills we've had the students embrace to their parents. We will open up the Digital Media labs on select evenings and invite parent to come learn with the students.

Fremont Unified School District is currently working with Read Right Systems⁸ to address student reading challenges. Read Right Systems furnishes a complete library and all the training, equipment and materials necessary to ensure a successful project. This includes the support systems necessary to assess each individual student's reading problem in order to place all students accurately in the program, to conduct the tutoring sessions, to manage the students on a daily basis, to manage the project, and to evaluate each student's progress with criterion-referenced, formative measures as well as with summative performance measures. Like our plan for with Stanford for extending PBL to parents, we want to make the Read Right system available to the community as another way of outreach to extend literacy adults. Again, we plan to have the existing students share the program with adults on designated evenings.

FUSD expects parents to be an active part of the school community and to be engaged in students' learning, through volunteer work and attendance at community and parent exhibitions around student projects and portfolios. Fremont Unified School District directly offers parents several activities:

- We are bringing parents in to learn SchoolMax and use the portal for student reporting.
- We are doing study halls where parents can come in as well and work on their own projects, getting help as needed.
- We are teaching technology classes to students and parents at night.
- We do a yearly Technology Night where we review the Acceptable Use Policy and technology at the school.

⁸ The Read Right[®] system of instruction was developed by integrating knowledge of brain research, an interactive constructivist model of learning, and psycholinguistic reading theory. Read Right Systems, Inc. offers reading programs for children and adults. <http://www.readright.com/>

Comment [2]: sayriss:
Check this sentence structure. It might need an edit.

Comment [3]: sayriss:
If possible, note the date or planned semester (fall or spring) of what year. Also, note the location of these media labs. At schools or at district office? If the district has a Naviance Parent info night at each school and does it in the evening, then you can add this to the list of items.

Comment [4]: sayriss:
If this is something that every student has access to and each student is individually assessed and placed in the program based upon their personal reading challenges, then I would mention it that way. It shows that this technology is available to all students.

Comment [5]: sayriss:
I am not sold on this based upon what is written. It's a hard sell to match up these student-centric programs to adult literacy support that has any level of "effective" adult literacy providers. Looking at another one of these same reports online, I see that the other district hilted their adult school program. That is an adult literacy provider and we have the same program here. Shoud that not be the first thing mentioned in this area?

Comment [6]: sayriss:
We don't do that at American. What we did have and may still continue with it is an adult class for English Language Learners held after school or at night once a week. I'm just not sure if we are still doing this. I'll see if I can find out.

We are looking for partners for these activities, as well as continuously seeking new ideas for adult literacy.

9. EFFECTIVE, RESEARCH-BASED METHODS, STRATEGIES, AND CRITERIA Rob, Maile, Toni, Suzanne

9a. Relevant Research

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

Supporting Research for the Fremont Unified School District Model

Many groups and studies support The educational model as a successful one, including the following:

- California Department of Education, Educational Demographics Unit
- Haycock, Kati. "Helping All Students Achieve Closing the Achievement Gap," *Educational Leadership*, Volume 58, Number 6, March 2001
- Noguera, Pedro. "Beyond Size: The Challenge of High School Reform," *Educational Leadership*, Volume 59, Number 5, February 2002
- U.S. Bureau of Census. "Current Population Reports: Educational Attainment in the United States," U.S. Bureau of Census; Washington DC, March 1998
- Vander Ark, Tom. "The Case for Small High Schools," *Educational Leadership*, Volume 59, Number 5, February 2002.

Technology is a tool for learning, not an isolated skill

"There is clear and widespread agreement among the public and educators that all students need to be proficient computer users or "computer literate." ... Recent publications by educational associations are advocating for a more meaningful use of technology in schools (ISTE, 2000). Educational technologists are clearly describing what students should know and be able to do with technology. ... There is increasing recognition that the end result of computer literacy is not knowing how to operate computers, but to use technology as a tool for organization, communication, research, and problem solving. This is an important shift in approach and emphasis."⁹

Similarly, the increasing complexity of the NETS standards from 1 to 6 (and associated NETS Performance Indicators per grade level) shifts the emphasis from technology skills *per se* toward information literacy skills, with #5 and #6 most closely aligning with the "Big6™ information literacy" skills.¹⁰

How Learning Best Occurs

"Research shows that small schools allow students and teachers to develop intensive, long-term relationships that enable better conditions for teaching and learning."¹¹

Project-based Learning

Project-based learning is an inquiry method of teaching and learning. For the students, the process starts with a driving question that will guide their learning inside and outside of the

⁹ Learning and Teaching Information Technology--Computer Skills in Context. ERIC Digest. By Eisenberg, Michael B.; Johnson, Doug (2002) [http://www.big6.com/showarticle.php?id=82]

¹⁰ http://www.big6.com/showarticle.php?id=16

¹¹ From Charter Petition, EDUCATIONAL PHILOSOPHY AND PROGRAM

Comment [7]: sayriss: This area needs all caps?

Comment [8]: Same here.

Comment [9]: sayriss: Maybe use "institutions" instead of "groups"

classroom. Working individually and in groups, they conduct original research, write papers, create models, give presentations, and engage in other activities to demonstrate what they have learned. They present their projects in the form of exhibitions to an audience of peers, teachers, family, and friends.

At Fremont Unified School District, projects create opportunities to apply learning to complex problems as well as to develop products that require written and oral expression, extended research, analysis and synthesis of information, planning, perseverance, and organization – all skills that are needed for success in college and the world beyond. Projects also link the curriculum content with students' real world experiences, making learning relevant and valuable to their lives outside of school. Research on authentic instruction indicates the importance of connections between classroom curriculum and the world beyond the classroom to deepen student learning and motivation. Many FUSD School projects will be related directly to community-oriented research and action efforts.

From the Conclusions section of Thomas' A Review of Research on Project-Based Learning¹²:

- PBL seems to be equivalent or slightly better than other models of instruction for producing gains in general academic achievement and for developing lower-level cognitive skills in traditional subject matter areas.
- More important, there is some evidence that PBL, in comparison to other instructional methods, has value for enhancing the quality of students' learning in subject matter areas, leading to the tentative claim that learning higher-level cognitive skills via PBL is associated with increased capability on the part of students for applying those learnings in novel, problem solving contexts.
- There is ample evidence that PBL is an effective method for teaching students complex processes and procedures such as planning, communicating, problem solving, and decision making, although the studies that demonstrate these findings do not include comparison groups taught by competing methods.

Many citations are available through the Center for Applied Research in Educational Technology¹³ [CARET] about how technology supports learning.

Questions and Answers on Research-Based Methods and Strategies

Q: How can technology influence student academic performance?¹⁴

A: Technology improves performance when the application provides opportunities for students to design and implement projects that extend the curriculum content being assessed by a particular standardized test.

RESEARCH EVIDENCE

Multimedia tends to have long term effects on understanding and retention. In a study of eighth graders using a hypertext/multimedia tool to design their own lessons about the

¹² A REVIEW OF RESEARCH ON PROJECT-BASED LEARNING, John W. Thomas, Ph. D, March, 2000
<http://www.bie.org/pdf/researchreviewPBL.pdf>

¹³ CARET is a project of the International Society for Technology in Education in partnership with Educational Support Systems. CARET was founded in 2000 with a grant from the Bill & Melinda Gates Foundation.

¹⁴ <http://caret.iste.org/index.cfm?fuseaction=evidence&answerID=5TOPIC:%20Student%20Learning>

American Civil War, the scores of students using the multimedia tool did not differ from the scores of the control group on a test given at the completion of the lesson. However, when tested one year later by an independent interviewer, the multimedia group displayed elaborate concepts and ideas that they had extended to other areas of history. In contrast, the control group of students remembered almost nothing about the historical content of the Civil War lesson ([Lehrer, 1993](#))

REFERENCES

Lehrer, R. (1993). Authors of knowledge: Patterns of hypermedia design. In S. P. Lajoie & S. J. Derry (Eds.), *Computers as cognitive tools*. Hillsdale, NJ: Lawrence Erlbaum.

Q: How can technology influence student academic performance?¹⁵

A: Technology improves performance when the application provides opportunities for student collaboration.

RESEARCH EVIDENCE

Technology applications that enable student collaboration tend to result in improved achievement. In one study, upper-grade elementary students used a software collaboration tool called Computer Supported Intentional Learning Environment (CSILE) that enables students and teachers to create and post text and graphics to ask questions, search for other students' answers, give feedback on student responses and work and then reformulate their initial answers and questions. These students performed better on standardized tests in reading, language and vocabulary and on measures of depth of understanding, multiple perspectives and independent thought than students who did not use the software ([Scardamalia & Bereiter, 1996](#)).

Case studies conducted at nine school sites (urban, suburban, rural) suggest that technology can support student learning through collaborative inquiry. Technology provides realistic, complex environments by furnishing investigative tools and data resources and by linking classrooms for joint investigations ([Means & Olson, 1997](#)).

In studies of classroom integration of technology with the National Geographic Kids Network ([Newman, 1994](#)), Apple Classroom of Tomorrow ([Sandholz et al., 1997](#)), Lego Logo ([Lafer & Markert, 1994](#)), and Sky Travel ([McLellan, 1994](#)) student collaboration:

- Increased the amount of information available because students shared during class time with other teams as well as with their partners.
- Enhanced critical thinking because students had to deal with conflicting information and ideas from multiple software programs and online sources in order to solve their problems present through computer simulations.

In another study of student collaboration, when two students worked together on one computer, the student at the keyboard provided more answers during discussion while the other student asked more questions. The social interaction skills acquired through teamwork were found to be important to mastery of certain intellectual skills ([Bracewell](#)

¹⁵ <http://caret.iste.org/index.cfm?fuseaction=evidence&answerID=2>

[& Laferriere, 1996](#)).

In a [meta-analysis](#) of 16 controlled studies on *Integrated Learning Systems* (ILS), Kulik (2003) concluded that “ILS appear to be more effective when students work in pairs on ILS lessons” (p. 25).

REFERENCES (* = Reviewed in CARET)

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* Kulik, J. (2003). Effects of using instructional technology in elementary and secondary schools: What controlled evaluation studies say. Arlington, Virginia: SRI International. Retrieved October 3, 2003 from http://www.sri.com/policy/csted/reports/sandt/it/Kulik_ITinK-12_Main_Report.pdf

Lafer, S. & Markert, A. (1994). Authentic learning situations and the potential of Lego TC Logo. *Computers in Schools*, 11(1), 79-94.

McLellan, H. (1994). Interactions of student partners in a high school astronomy computer lab. *Computers in Schools*, 11(1), 29-41.

Means, B., & Olson, K. (1997). Technology and education reform. *Office of Educational Research and Improvement, Contract No. RP91-172010*. Washington, DC: U.S. Department of Education. Retrieved February 3, 2003, from <http://www.ed.gov/pubs/SER/Technology/title.html>.

Newman, D. (1994). Computer networks: Opportunities or obstacles? In B. Means (Ed.), *Technology and education reform: The reality behind the promise*, (p.232) San Francisco: Jossey Bass.

* Sandholtz, J. H., Ringstaff, C., & Dwyer, D. C. (1997). *Teaching with technology: Creating student-centered classrooms*. New York: Teachers College Press.

Scardamalia, M. & Bereiter, C. (1996). Computer support for knowledge-building communities. In T. Kotchmann (Ed.), *CSCL: Theory and practice of an emerging paradigm*. Mahwah, NJ: Lawrence Erlbaum Associates.

Q: How can technology develop higher order thinking and problem solving?¹⁶

A: Technology can enable the development of critical thinking skills when students use technology presentation and communication tools to present, publish, and share results of projects.

RESEARCH EVIDENCE

¹⁶ <http://caret.iste.org/index.cfm?fuseaction=evidence&answerID=9>

Hypermedia presentations promote retention and higher order thinking over time. In a study of ninth graders who developed hypermedia presentations on topics such as World War I, Lifestyles between 1870 and 1920, and Immigration and Imperialism, students' on-task behavior increased over time. As students perceived the benefits of planning with the hypermedia, students also developed generalizable skills such as taking notes, finding information, coordinating their work with other team members, writing interpretations, and designing presentations ([Lehrer et al., 1994](#)).

The process of integrating relevant words and images is a key step in meaningful learning and is facilitated by presenting an explanation using words and pictures in close proximity to one another. According to ([Mayer, 2001](#), p.189), "When both words and pictures are presented, learners can engage in selecting images, organizing images, and integrating words and images."

Online tools and resources allow students to gather and evaluate information efficiently, then communicate their thoughts and findings. Technology creates opportunities for students to do meaningful work that has value outside school, receive feedback on their work, and experience the rewards of publication or exhibition. Technology provides a widespread audience for students' work. Computers link students to the world, provide new reasons to write, and offer new sources of feedback on ideas ([Peck & Dorricott, 1994](#)).

In a study of twenty-two fourth and sixth grade classes in seven urban school districts, half of the students participated in a civil rights curriculum using online communication and the Internet and half did not use the online resources with the curriculum. Fourth grade students scored higher on measures of presentation of a full picture or overview of an issue and of 'bringing together' different points of view. Sixth grade students scored higher on measures of effective presentation, accuracy of information, presentation of full picture, completeness of the assignment, and they scored higher overall ([Center for Applied Special Technology, 1996](#)).

The CAST study also found that when students used the Internet to research topics, share information and complete a final project within the context of a semi-structured lesson they became independent, critical thinkers ([Coley et. al, 1997](#)).

REFERENCES

Center for Applied Special Technology (CAST) (1996). *The role of online communications in schools: A national study*. Peabody, MA. Retrieved October 23, 2001 from <http://www.tcet.unt.edu/research/rlonline.htm>.

Coley, R., Cradler, J. & Engel, P. (1997). *Computers and classrooms: The status of technology in U.S. schools*. Princeton, NJ: Educational Testing Service, Policy Information Center, 37.

Lehrer, R., Erickson, J., & Connell, T. (1994). Learning by designing hypermedia documents. *Computers in Schools*, 10(1-2), 227-254.

Mayer, R. E. (2001). *Multimedia learning*. New York: Cambridge University Press.

Peck, K. L., & Dorricott, D. (1994). Why use technology? *Educational Leadership*, 51(7), 11-15. Retrieved February 5, 2003, from <http://www.ascd.org/readingroom/edlead/9404/peck.html>.

OTHER RESOURCES

Hmelo, C. E., Holton, D. L., & Kolodner, J. L. (2000). Designing to learn about complex systems. *The Journal of the Learning Sciences*, 9(3), 247-298. Abstract retrieved January 24, 2003, from <http://www.cc.gatech.edu/ist/jls/vol9no3.html#Article1>.

Penuel, W. R., & Means, B. (1999). *Observing classroom processes in project-based learning using multimedia: A tool for evaluators*. Retrieved October 26, 2001, from <http://www.ed.gov/Technology/TechConf/1999/whitepapers/paper3.html>.

Spoehr, K. T. (1994). Enhancing the acquisition of conceptual structures through hypermedia. In K. McGilly (Ed.), *Classroom lessons: Integrating cognitive theory and classroom practice*. Cambridge, MA: MIT Press.

A RAND project based on a review of the effectiveness literature and focus groups with practitioners in educational technology reported that through the use of technology, students gain a greater sense of responsibility for their work. They produce higher-quality assignments that reflect the increased depth and breadth of their knowledge and talent.¹⁷

REFERENCES

Glennan, T. K., & Melmed, A. (1996). *Fostering the use of educational technology: Elements of a national strategy* (MR-682-OSTP/ED). Santa Monica, CA: RAND. Retrieved April 8, 2002, from <http://www.rand.org/publications/MR/MR682/>.

Q: How can technology improve student motivation, attitude, and interest in learning?¹⁸

A: Technology improves motivation, attitude, and interest when students use technology applications to produce, demonstrate, and share their work with peers, teachers, and parents.

RESEARCH EVIDENCE

Student motivation is enhanced in projects that require online collaboration. Student motivation is enhanced through online collaborative research that includes online communication with peers and experts in other states and countries, evaluation of evidence and sharing of information, and the use of standards based curricula that are integrated with scientific visualization tools. Project GLOBE has engaged K-12 students from schools in 34 countries in gathering data about their local environments. Students in

¹⁷ <http://caret.iste.org/index.cfm?fuseaction=evidence&answerID=7>

¹⁸ <http://caret.iste.org/index.cfm?fuseaction=evidence&answerID=11>

the GLOBE classrooms demonstrate higher knowledge and skill levels on assessments of environmental science methods and interpretation of data than do their peers who have not participated in the program (Means et al., 1997). Cooperative learning with computers is effective for students with intellectual disabilities. Cooperative learning is based on the concept of interdependence -- students' learning from and depending on one another in a positive way. In one project, for example, a group of students with intellectual disabilities taught university students how to use computer software (word processing and LOGO turtle graphics). The university students developed some new materials using the software, and asked their former teachers to help them test the programs (Ryba & Anderson, 1990).

Cooperative learning environments aid in many aspects of problem solving. (Johnson & Johnson, 1996), as cited by (Bracewell et al., 1998), examined the use of computer technology in support of cooperative learning environments. Relative to traditional individualistic learning approaches, the use of computer technology to facilitate cooperative learning environments resulted in "(a) higher quantity of daily achievement, (b) higher quality of daily achievement, (c) greater mastery of factual information, (d) greater ability to apply one's factual knowledge in test questions requiring application of facts, (e) greater ability to use factual information to answer problem-solving questions, and (f) greater success in problem-solving."

REFERENCES (* = Reviewed in CARET)

* Bracewell, R., Breuleux, A., Laferriere, T., Beniot, J., & Abdous, M. (1998). *The emerging contribution of online resources and tools to classroom learning and teaching*. Montreal: Universite Laval. Retrieved March 19, 2002 from <http://www.tact.fse.ulaval.ca/ang/html/review98.html>

Johnson, D. W., & Johnson, R. T. (1996). Cooperation and the use of technology. In D. H. Jonassen (Ed.), *Handbook of research for educational communications and technology*. New York: Macmillan, pp. 1017-1044. Retrieved January 30, 2003, from <http://www.aect.org/Intranet/Publications/edtech/35/35-08.html>.

Means, B., Coleman, E., Klewis, A., Quellamlz, E., Marder, C., & Valdes, K. (1997). *GLOBE Year 2 Evaluation*. Menlo Park, CA: SRI International. Retrieved February 5, 2003, from http://www.sri.com/policy/ctl/assets/images/y2_full.pdf.

Ryba, K., & Anderson, B. (1990). *Learning with computers: Effective teaching strategies*. Eugene, OR: International Society for Technology in Education.

OTHER RESOURCES

Cox, M. (1997). *The effects of information technology on students' motivation*. London: NCET and King's College.

Stevenson, K. (1999). *Laptop computers and their impact on sixth-grade learning*. The Technology Source, March 1999. Retrieved on March 7, 2002, from <http://ts.mivu.org/default.asp?show=article&id=39>

Taggart, L. (1994). Student autobiographies with a twist of technology. *Educational Leadership*, 51(7), 34-36.

Q: Are there research-based methods, strategies, and criteria for professional development?

A: Yes, evidence demonstrates that professional development improves teacher practice.

RESEARCH EVIDENCE

"21st Century Professional Development." (2007). Partnership for 21st Century Skills. 4 Sep 2008

This white paper explains the elements that are the critical systems necessary to ensure student mastery of 21st century skills, with a focus on professional development methodologies to improve instruction.

McKenzie, J. (1999). How teachers learn technology best. Bellingham, WA: FNO Press
Jamie McKenzie explains how educators learn technology effectively, outlining the myths and realities of professional learning and clearly explaining the steps to engage teachers with technology through professional development. He discusses issues of adult learning and explains that adult learning should involve the learners in activities that match their individual interests, needs, and developmental readiness.

"Teacher Professional Development." (2004). Public Education Network
This monograph describes research-based quality professional development.

9b. Plans to Extend Curriculum

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.

A growing body of research supports the notion that technology integration with project-based learning leads to higher student learning outcomes. For example, the *National Educational Technology Standards for Students* has described traditional technology use as “isolated and artificial...a reactive response to a teacher-centered, single sense stimulating environment” (ISTE, 2000). In contrast, a project-based learning model that integrates educational technology to support learning presents a more authentic means of teaching and learning science process skills and content (Bednarz, 2000).

At Fremont Unified School District, providing students with opportunities to integrate technology with project-based learning facilitates student mastery of fundamental technological tools and develops technological proficiency in the areas of word processing, graphic design, spreadsheets, slide presentation, film making, web site design, and internet research within students' core academic subjects and elective courses. The integration of arts and technology provides relevance and tools for engaging students who are often disengaged. Artistic background and visual design skills are now central to many careers, including technology and electronic arts; thus, students of Fremont Unified School District are expected to utilize technology in artful ways that will prepare them for post-secondary work and college life. Furthermore, public exhibition of work drives the stakes for all work that students do, as there is an authentic audience for their learning. Fremont Unified School District' curriculum requires students to take three years of Graphic Design, Computer Programming, and Visual Design. Fremont Unified School District believes that technology becomes a tool to access information, solve problems, demonstrate knowledge, manage projects, and create artistic work within core academic subjects and elective courses.

Additionally, extensive partnerships have been formed between each school site and technology firms in the Bay Area. During their junior and senior years, students from Fremont Unified School District intern at many of these companies and experience all aspects of the technology industry. Fremont Unified School District has also entered into partnerships with local city colleges in regards to designing and developing a number of career educational technology courses. These partnerships provide additional access points for students to acquire the essential technological tools for post-secondary education and work within the framework of a project-based learning environment.

Graduation Portfolio

The completion of the FUSD graduation portfolio is required for all graduating students. Development of each student's individual Graduation Portfolios is in itself a rigorous academic exercise. Each multi-media portfolio is its own long-term project with the ultimate result being the demonstration and synthesis of all 4 years of learning and personal growth. It must be defended by the student to a graduation panel, similar to a thesis defense. Students can use their graduation portfolio for college admission and job search. For a comprehensive discussion of portfolio requirements, see Appendix 4.

Project Exchange

Project Exchange is primarily an online workspace for FUSD teachers to share projects and collaborate with one another through sharing best practice in project design and implementation. The Project Exchange venue shares background and final presentation materials from student “Exhibitions.” It is also important to us that Project Exchange is open to the public so that other educators can utilize the resources the site provides to inform the work in their own schools and in their own practice.

As discussed in section 3d:

Our teaching and learning methods require an infusion of technology that enables students to actively engage in online learning and to use online resources. Technology is critical to producing projects that are requisite to our Project-Based Learning (PBL) pedagogy.

Project-based Learning is best appreciated through “Exhibitions,” opportunities for stakeholders to experience student projects. Throughout the school year, interdisciplinary teams of teachers design themed projects, on which up to 125 students, divided into small groups, then work for 8 to 10 weeks. Students are expected to complete a minimum of three large-scale interdisciplinary projects every school year, in addition to many smaller projects throughout the year in all their courses. Technology is integrated into the projects, as a tool for both learning and for expressing and documenting what students have learned. For a comprehensive discussion of Fremont Unified School District’ Project-based Learning approach and culminating Exhibitions, see www.FUSDprojects.org.

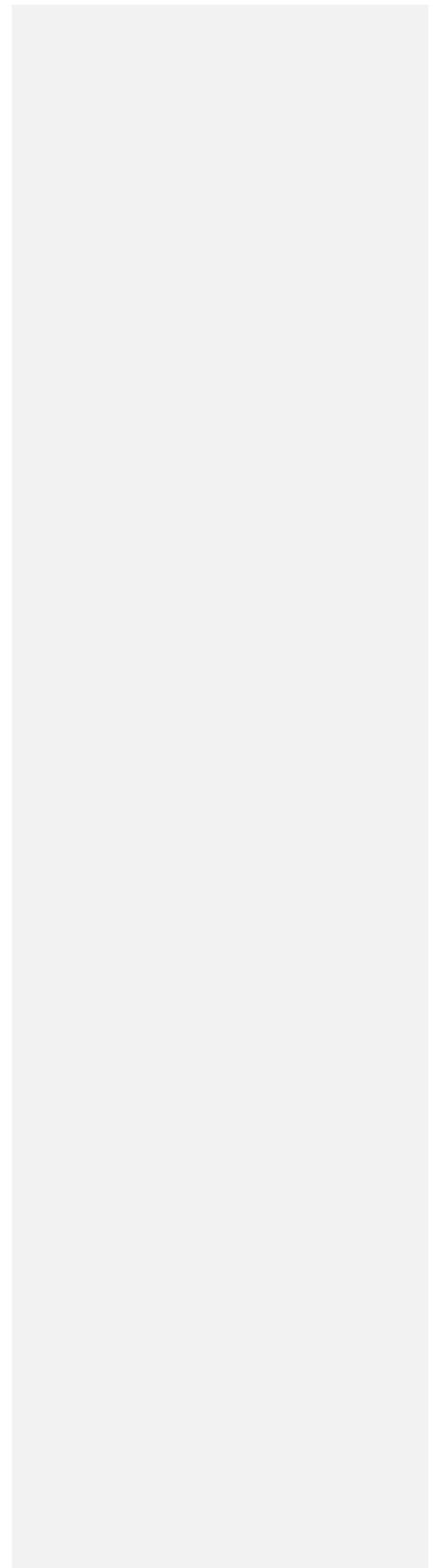
To accomplish their interdisciplinary projects, students use a wide variety of technology tools including:

- Internet research
- Basic tools such as word processing and spreadsheets software
- Advanced tools such a video editing software
- The Project Exchange as a resource.

All technology tools are used within a framework of “safe” computing (i.e., content filtered access, file preservation, shared resource library).

Wireless Networking

All Fremont Unified School District have complete wireless access. All students and teachers have wireless access from anywhere in the school.



Appendix 1: Profile FOR TECHNOLOGY (ICT) LITERATE STUDENTS, GRADES 9-12 (ages 14-18)

The following experiences with technology and digital resources are examples of learning activities in which students might engage during Grades 9–12 (ages 14–18):

1. Design, develop, and test a digital learning game to demonstrate knowledge and skills related to curriculum content. (1, 4)
2. Create and publish an online art gallery with examples and commentary that demonstrate an understanding of different historical periods, cultures, and countries. (1, 2)
3. Select digital tools or resources to use for a real-world task and justify the selection based on their efficiency and effectiveness. (3, 6)
4. Employ curriculum-specific simulations to practice critical-thinking processes. (1, 4)
5. Identify a complex global issue, develop a systematic plan of investigation, and present innovative sustainable solutions. (1, 2, 3, 4)
6. Analyze the capabilities and limitations of current and emerging technology resources and assess their potential to address personal, social, lifelong learning, and career needs. (4, 5, 6)
7. Design a Web site that meets accessibility requirements. (1, 5)
8. Model legal and ethical behaviors when using information and technology by properly selecting, acquiring, and citing resources. (3, 5)
9. Create media-rich presentations for other students on the appropriate and ethical use of digital tools and resources. (1, 5)
10. Configure and troubleshoot hardware, software, and network systems to optimize their use for learning and productivity. (4, 6)

Appendix 2: ACCOUNTABILITY

Category	Goal	Data Source	Timeline
Basics			
Student attendance	93% or better	Attendance System	January & June
Student grades: A-F	30% or less on D, F, I list 30% at 3.0 GPA		
Drop-out rate	50% lower than District		
Graduation rate	80% of students complete their freshman year 90% re-enroll as sophomores		
Outcomes			
Communicating with clarity and precision	80% of students meet the Fremont Unified School District/CA High School Language arts and math standards	CAHSEE	Spring
Critical thinking			
Read critically and write effectively in the English language			
Recognize and describe relationships and patterns mathematically to solve concrete and abstract problems			
Standardized Tests			
SAT 9/STAR test scores	Collect data to show growth between 8th and 9th grade		Spring/ Summer
API Ranking	6th deciles or better on API for similar schools and a 1 decile growth until the 8th decile is reached	API	
High School Exit Exam	80% of students meet the CAHSEE benchmarks in Math and Language Arts	CAHSEE	

Advanced Placement			
PSAT and SAT scores			
Overall Satisfaction			
Students and parents	Create a culture of respect and trust, and knowledge of the academic and behavioral standards	Fremont Unified School District survey	Spring/ Summer

APPENDIX 3: GRADUATION PORTFOLIO

Rationale

The completion of the FUSD graduation portfolio is required for all graduating students. The Fremont Unified School District Portfolio serves several important purposes for students and staff:

- Requires each graduating student to demonstrate what he or she knows and is able to do in an individualized format
- Emphasizes the importance of reflecting on one's learning (metacognition)
- Enables a committee (of a student's peer(s), advisor, and other community members) to holistically assess his or her readiness for college and work
- Produces meaningful indicators of student learning that inform curriculum and teaching practice throughout Fremont Unified School District
- Promotes a shared understanding between students, teachers, parents, and community of the quality of work and what graduates are expected to know and be able to do.

The Portfolio Components – The Specific Parts

The graduation portfolio has the following components:

1. A student introduction and explanation of the portfolio. This helps anyone reviewing the portfolio orient themselves to the individual student and the content of the portfolio.
2. A digital arrangement of 2 artifacts of student work produced in each of the five content areas (mathematics, science, history/social studies, English/language arts, and visual/performing arts), that is certified by a Subject Area Teacher, as having met standards of proficiency for that content area and scored by a graduation "certification" panel. In addition, students have other requirements to ensure that the Graduation Committee can assess their leadership skills.
3. Reflective summaries in the five content areas, written by the student that attests to the rigor and relevance of the work to:
 - Explain the work selected and context of assignment
 - Discuss the essential concepts, subject-specific understandings, and task-specific skills related to the work entered in that content area
 - Describe the relevance of the concepts learned and application of the skills used to complete the work to the real world
 - Provide evidence of the student's leadership skills.
4. Internship Artifact & Reflection, written by the student. All students are required to participate in an internship their junior and senior years. Students must include an artifact documenting their internship project and a reflection of the student's internship experience must describe the knowledge and skills they acquired and applied in the work they did, as well as how they grew personally and academically from the experience.
5. Leadership Skills Assessment, written by the student's advisor. The student's advisor will assess the student mastery level on all leadership skills on a rubric and write a narrative highlighting the student's development and mastery of them.

Appendix C – Criteria for EETT-Funded Education Technology Plans

CRITERION	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
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)	15	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 (7/1/2010 to 6/30/2014).	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	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.	15	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.	16	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.	17	The plan describes the typical frequency and type of use (technology skills/information and literacy integrated into the curriculum).	The plan cites district policy regarding use of technology, but provides no information about its actual use.
c. Summary of the district's curricular goals that are supported by this tech plan.	18	The plan summarizes the district's curricular goals that are supported by the plan and referenced in district document(s).	The plan does not summarize district curricular goals.
d. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to improve teaching and learning by supporting the district curricular goals.	21	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.	23	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,	24	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

<p>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</p>			<p>taken to accomplish the goals.</p>
<p>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.</p>	<p>26</p>	<p>The plan describes or delineates clear goals outlining how students and teachers will be educated about Internet safety.</p>	<p>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.</p>
<p>h. Description of or goals about the district policy or practices that ensure equitable technology access for all students.</p>	<p>28</p>	<p>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.</p>	<p>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.</p>
<p>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.</p>	<p>30</p>	<p>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.</p>	<p>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.</p>

<p>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.</p>	<p>32</p>	<p>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.</p>	<p>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.</p>
<p>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.</p>	<p>35</p>	<p>The monitoring process, roles, and responsibilities are described in sufficient detail.</p>	<p>The monitoring process either is absent, or lacks detail regarding procedures, roles, and responsibilities.</p>
<p>4. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA Corresponding EETT Requirement(s): 5 and 12 (Appendix D).</p>	<p>Page in District Plan</p>	<p>Example of Adequately Addressed</p>	<p>Example of Not Adequately Addressed</p>
<p>a. Summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development.</p>	<p>39</p>	<p>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.</p>	<p>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.</p>
<p>b. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing professional development opportunities</p>	<p>40</p>	<p>The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing teachers and administrators with sustained, ongoing professional</p>	<p>The plan speaks only generally of professional development and is not specific enough</p>

<p>based on your district needs assessment data (4a) and the Curriculum Component objectives (Sections 3d - 3j) of the plan.</p>		<p>development necessary to reach the Curriculum Component objectives (sections 3d - 3j) of the plan.</p>	<p>to ensure that teachers and administrators will have the necessary training to implement the Curriculum Component.</p>
<p>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.</p>	<p>43</p>	<p>The monitoring process, roles, and responsibilities are described in sufficient detail.</p>	<p>The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.</p>
<p>5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT CRITERIA Corresponding EETT Requirement(s): 6 and 12 (Appendix D).</p>	<p>Page in District Plan</p>	<p>Example of Adequately Addressed</p>	<p>Example of Not Adequately Addressed</p>
<p>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.</p>	<p>44</p>	<p>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.</p>	<p>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.</p>
<p>b. Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed</p>	<p>48</p>	<p>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</p>	<p>The plan includes a description or list of hardware, infrastructure, and other technology necessary to</p>

<p>by the district's teachers, students, and administrators to support the activities in the Curriculum and Professional Development components of the plan.</p>		<p>implementation of the district's Curriculum and Professional Development components.</p>	<p>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.</p>
<p>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.</p>	<p>51</p>	<p>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.</p>	<p>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.</p>
<p>d. Describe the process that will be used to monitor Section 5b & the annual benchmarks and timeline of activities including roles and responsibilities.</p>	<p>54</p>	<p>The monitoring process, roles, and responsibilities are described in sufficient detail.</p>	<p>The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.</p>
<p>6. FUNDING AND BUDGET COMPONENT CRITERIA Corresponding EETT Requirement(s): 7 & 13, (Appendix D)</p>	<p>Page in District Plan</p>	<p>Example of Adequately Addressed</p>	<p>Example of Not Adequately Addressed</p>
<p>a. List established and potential funding sources.</p>	<p>55</p>	<p>The plan clearly describes resources that are available or could be obtained to implement</p>	<p>Resources to implement the plan are not</p>

		the plan.	clearly identified or are so general as to be useless.
b. Estimate annual implementation costs for the term of the plan.	56	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.	60	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.	60	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.	62	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	63	Evaluation timeline is specific and realistic.	The evaluation timeline is not

implementation.			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.	63	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.)	64	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	Not Adequately Addressed

<p>a. Summarize the relevant research and describe how it supports the plan's curricular and professional development goals.</p>	<p>66</p>	<p>The plan describes the relevant research behind the plan's design for strategies and/or methods selected.</p>	<p>The description of the research behind the plan's design for strategies and/or methods selected is unclear or missing.</p>
<p>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.</p>	<p>74</p>	<p>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).</p>	<p>There is no plan to use technology to extend or supplement the district's curriculum offerings.</p>

Appendix J – Technology Plan Contact Information - City Arts and Technology High School

Education Technology Plan Review System (ETPRS)
Contact Information

<p>County & District Code:</p>	<p>38-68478</p>
<p>School Code: (Direct funded charters only):</p>	<p>0107300</p>
<p>LEA Name:</p>	<p>City Arts and Technology High School</p>
<p>*Salutation:</p>	<p>Mr.</p>
<p>*First Name:</p>	<p>John</p>
<p>*Last Name:</p>	<p>Krull</p>
<p>*Job Title:</p>	<p>Vice President, Technology</p>
<p>*Address:</p>	<p>185 Berry Street, Suite 220</p>
<p>*City:</p>	<p>San Francisco</p>

*Zip Code:	94107
*Telephone:	(415) 348-9955
Fax:	(415) 348-9855
*E-Mail:	johnkrull@FUSDschools.org

*Required information in the ETPRS

Please provide backup contact information.

1 st Backup Name:	Eileen Miller
1 st Backup E-Mail:	emiller@learningtech.org
2 nd Backup Name:	Mark Miller
2 nd Backup E-Mail:	miller@learningtech.org

Appendix J – Technology Plan Contact Information - Metropolitan Arts and Technology High School

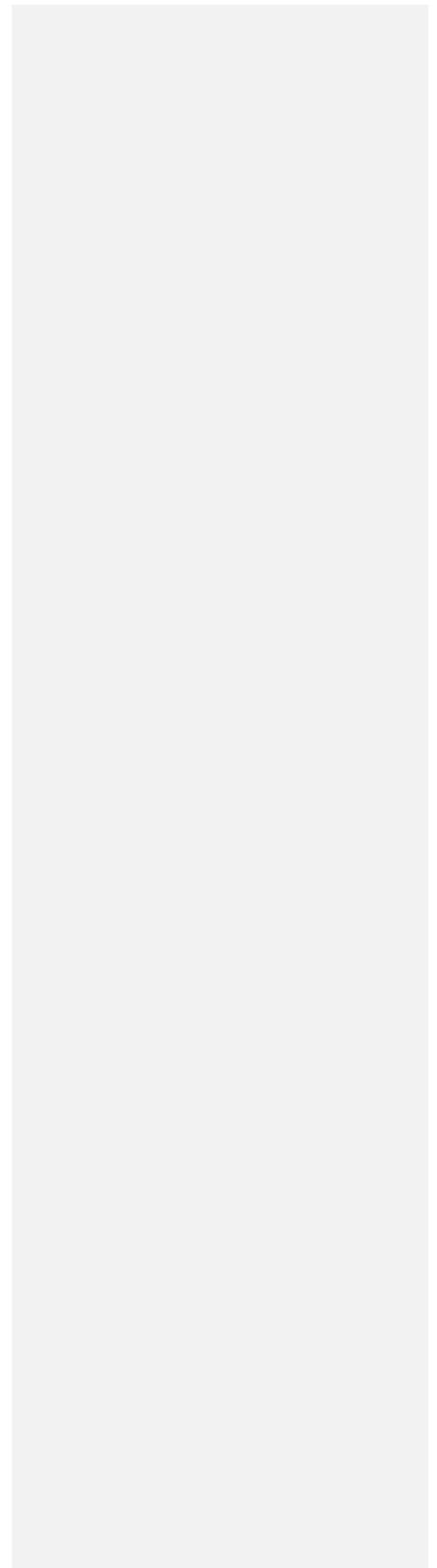
Education Technology Plan Review System (ETPRS)
Contact Information

County & District Code:	38-68478
School Code: (Direct funded charters only):	0109769
LEA Name:	Metropolitan Arts and Technology High School
*Salutation:	Mr.
*First Name:	John
*Last Name:	Krull
*Job Title:	Vice President, Technology
*Address:	185 Berry Street, Suite 220
*City:	San Francisco
*Zip Code:	94107
*Telephone:	(415) 348-9955
Fax:	(415) 348-9855
*E-Mail:	johnkrull@FUSDschools.org

*Required information in the ETPRS

Please provide backup contact information.

1 st Backup Name:	Eileen Miller
1 st Backup E-Mail:	emiller@learningtech.org
2 nd Backup Name:	Mark Miller
2 nd Backup E-Mail:	mllmiller@learningtech.org



Appendix J – Technology Plan Contact Information - Arts & Tech High School of Oakland (AKA: FUSD Academy of Arts and Technology)

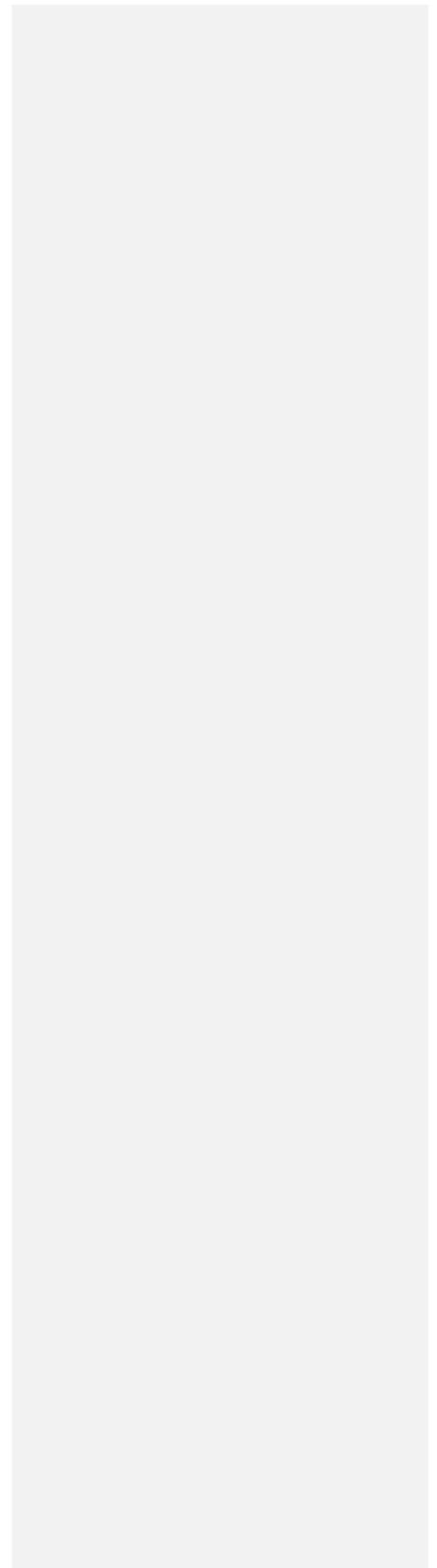
Education Technology Plan Review System (ETPRS) Contact Information

County & District Code:	01-10017
School Code: (Direct funded charters only):	0112607
LEA Name:	FUSD Academy of Arts and Technology (Previously known as: Arts & Tech High School of Oakland)
*Salutation:	Mr.
*First Name:	John
*Last Name:	Krull
*Job Title:	Vice President, Technology
*Address:	185 Berry Street, Suite 220
*City:	San Francisco
*Zip Code:	94107
*Telephone:	(415) 348-9955
Fax:	(415) 348-9855
*E-Mail:	johnkrull@FUSDschools.org

*Required information in the ETPRS

Please provide backup contact information.

1 st Backup Name:	Eileen Miller
1 st Backup E-Mail:	emiller@learningtech.org
2 nd Backup Name:	Mark Miller
2 nd Backup E-Mail:	mllmiller@learningtech.org



Appendix J – Technology Plan Contact Information - Impact Academy of Arts & Technology

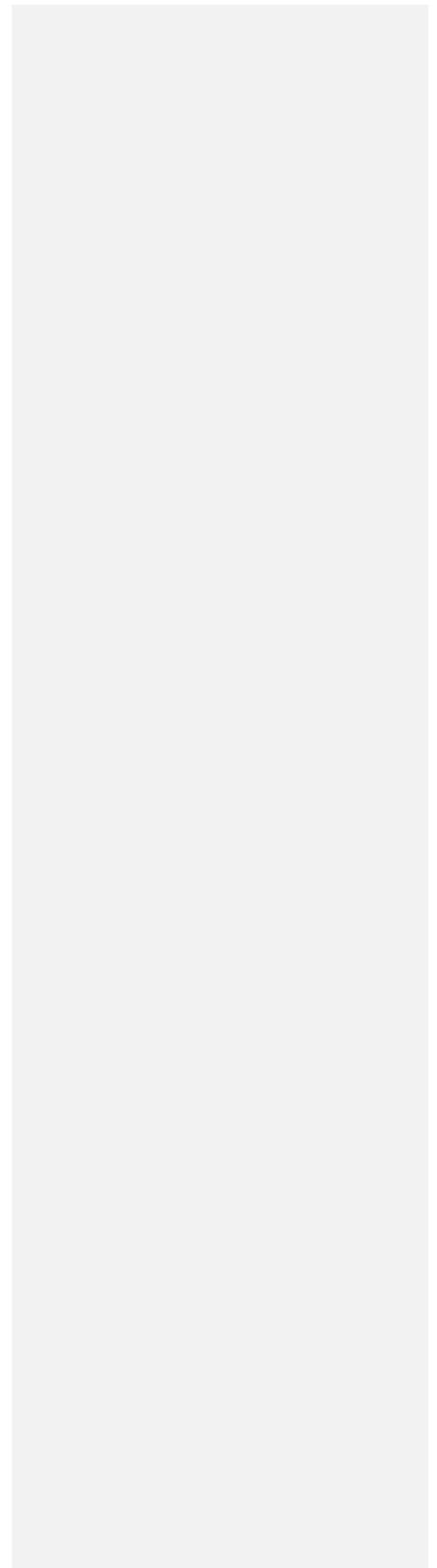
Education Technology Plan Review System (ETPRS)
Contact Information

County & District Code:	01-61192
School Code: (Direct funded charters only):	0113902
LEA Name:	Impact Academy of Arts & Technology (Previously known as: Arts & Technology High of Hayward)
*Salutation:	Mr.
*First Name:	John
*Last Name:	Krull
*Job Title:	Vice President, Technology
*Address:	185 Berry Street, Suite 220
*City:	San Francisco
*Zip Code:	94107
*Telephone:	(415) 348-9955
Fax:	(415) 348-9855
*E-Mail:	johnkrull@FUSDschools.org

*Required information in the ETPRS

Please provide backup contact information.

1 st Backup Name:	Eileen Miller
1 st Backup E-Mail:	emiller@learningtech.org
2 nd Backup Name:	Mark Miller
2 nd Backup E-Mail:	mlmiller@learningtech.org



Appendix K – ENV Form 470 worksheet for Y13 (2010-2013)

8. Telecommunications Services - RFP: no

Service or Function:¹⁹	Quantity and/or Capacity:	Estimated Budget Total/E-rate/ES
Local & long distance telephone service, compatible with existing Panasonic KXTDA100 & KXTD1232 PBX's Addresses at http://www.FUSDschools.org	Up to 5 sites, up to 50 analog POTS lines, up to 10 lines per site (to include fax & alarm lines)	18,000/14,000/4,000
Extension of DMARC from MPOE to MDF needed at planned new location for Hayward. Walk through not possible.	Installation of phone/data service may require up to 4 CAT6 runs and extension of all POTS/PRI lines (possibly including 50 pair) from MPOE to MDF	500/400/100
IP connections directly to internet or, for satellite sites, a private network to headquarters. Prefer Ethernet handoff. Open to end-to-end solution with managed router. Goal: private star topology through headquarters to internet managed or self-managed	Tiered pricing from 3 Mbps scalable to 100 Mbps, initial target 20 Mbps from satellite sites and 100Mbps at headquarters, prefer 99.9% SLA, links capable of VoIP (ISP-based soln OK)	120,000/96,000/24,000

NOTE: Facility relocations will occur before the initial installations.

NOTE: Goal is for extensions from support office to work at schools via VoIP.

9. Internet Access - RFP: no

Service or Function:	Quantity and/or Capacity:	Estimated Budget Total/E-rate/ES
Internet access for headquarters and 4 remote sites. Prefer Ethernet handoff. Open to end-to-end solution with managed router. Goal: private star topology through	5 sites: Tiered pricing from 3 Mbps scalable to 100 Mbps, initial target 20 Mbps from satellite sites and 100Mbps at headquarters, prefer 99.9% SLA, links capable of VoIP	132,000/106,000/26,000

¹⁹ 244 character limit per cell – use word count to check size of text string

headquarters to internet-managed or self-managed	(Telecom-based soln OK)	
Public IPs, DNS (fwd+rev)	Block of 8 (5 usable) per site x 5 sites	NC
Extension of DMARC from MPOE to MDF needed at planned new location for Hayward. Walk through not possible.	Installation of phone/data service may require up to 4 CAT6 runs and extension of all data lines to MDF	500/400/100
Outsourced student email, prefer ability to integrate with Google Apps.	Up to 1500 users	2000/1600/400

10. Internal Connections - RFP: no

Service or Function:	Quantity and/or Capacity:	Estimated Budget Total/E-rate/ES
Additional CAT 6 copper wiring. Per drop pricing for both plenum & non-plenum, installed, clean surface mount	Up to 50 additional drops, average length 50 meters. For planned new location for Hayward school, walk thru not possible.	8000/6400/1600
Extension of DMARC from MPOE to MDF needed at planned new location for Hayward.	Up to 4 CAT6 runs, unless included as part of Priority 1 installation. Extension of all POTS/PRI lines (possibly including 50 pair)	1000/800/200
Mac X-Serve compatible servers to provide internal DNS, Web, and DHCP	1 for each of up to 3 sites	10000/8000/2000
Wireless 802.11N access points with PoE, gigabit Ethernet (4 radios, Xirrus-compatible)	Up to 12 units (3 CAT, 3 Metro, 6 Impact)	36000/28000/8000
Fortinet Fortigate 60A (equivalent or better), compatible with existing Fortinet Fortigate 110C at hdqtrs	3 firewalls capable of 100Mb/s and 250 simultaneous users	10000/8000/2000

PBX: capability to work with analog POTS, PRI, and VoIP, compatible with Panasonic KXTDE100 and 64 voice mail boxes and 8 hours of memory	2 PBX systems with 64 voice mail boxes and 8 hours of memory compatible with POTS, PRI, and VOIP, for CAT and Metro,	10000/8000/2000
48-port L2 Gigabit Switch w/Single IP Management	Up to 4 compatible with existing Amer.com switches for Hayward location	8000/6400/1600

NOTE: EA is not eligible to receive Internal Connections for 2010-2013, however all other locations except hdqtrs are, and funding cap is expected to get as low as 80% in 2010-2013, so perhaps servers, switches, etc. that need to be replaced should be on the list?
Support office wiring not covered.

11. Basic Maintenance of Internal Connections - RFP: no

Service or Function:	Quantity and/or Capacity:
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NONE