

# Technology Plan



Tamalpais Union High

July 1, 2014 - June 30, 2017

This plan is for EETT.

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## Background and Demographic Profile

### District Profile

The Tamalpais Union High School District is located about 15 miles north of San Francisco in Marin County. The district serves the communities of southern Marin County. The following data offers a snapshot of our district during the 2011-12 school year from the Ed Data (<http://www.ed-data.k12.ca.us/welcome.asp>) and Dataquest (<http://data1.cde.ca.gov/dataquest/>) web sites.

Tamalpais Union High School District 2011-12 School Data				
	Number of Schools	Enrollment	Full-Time Equivalent Teachers	Pupil-Teacher Ratio
High School	3	3,666	208.0	17.6
Alternative	1	87	9.0	9.7
Continuation	1	71	7.7	9.2
Total	5	3,839	224.7	17.0

Tamalpais Union High School District, Students by Ethnicity 2011-12		
		District
Enrollment		Percent of Total
American Indian	6	0.15%
Asian	206	5.4%
Pacific Islander	13	0.33%
Filipino	14	0.4%
Hispanic	313	8.1%
African American	121	3.1%
White	2941	76.6%
Multiple/No Response	225	5.9%
Total	3,839	100%

Tamalpais Union High School District, Student & Teacher Data 2011-12	
English Learners	45 ( 1.2% )
Fluent-English-Proficient Students	218 (5.7% )
Students Redesignated FEP	14 ( 30.4% )
Graduates (prior year)	925
UC/CSU Elig Grads (prior year)	674
Dropouts (prior year, grade 9-12)	15
1 Yr Drop Rate (prior year, grade 9-12)	0.3%
4 Yr Drop Rate (prior year, grade 9-12)	1.5%
% Fully Credentialed Teachers	98.2%
Pupil Teacher Ratio	17:1
Avg. Class Size	20.1
Free or Reduced Price Meals	363

### Education Technology Plan Overview

The Tamalpais Union High School District is committed to appropriately integrating technology into all areas of the curriculum and dedicated to the acquisition and support of effective educational technology that provides teachers and students real-world contexts for learning, connections to larger learning communities, and opportunities to individualize and apply learning. Implementing technology-based solutions into all functions and processes of instruction, management and communication is the responsibility of district and school site curriculum and technology leaders. Specifically our role is to:

- Orchestrate the implementation of our technology plan components with stakeholders.
- Keep the technology funding flowing and manage the technology budgets.
- Keep the infrastructure, hardware, and software are up to date.
- Provide high-quality service to users on an ongoing basis.
- Implement technology solutions that will make accountable differences in instruction, assessment, and management of students as well as improve communication and collaboration.

This revised Education Technology Plan is the result of many hours of discussion, learning, and collaboration among a diverse representation of administrators, teachers, students and parents. The District Technology Committee developed a comprehensive, research-based Education Technology Plan for the 2009-2014 school years that was reviewed, revised, and adopted by the district school board and subsequently approved by the California Department of Education in 2009. We have made great strides in the accomplishment of the goals set forth in our previous tech plan and are optimistically moving forward with this updated tech plan.

Our Education Technology Plan is intended to serve as both a guide for technology related decision making and an instrument to monitor and evaluate progress toward identified goals and objectives. An updated assessment of district technology status, needs, and resources has been completed for each section of our revised tech plan and has guided the development of our new technology goals, objectives and implementation activities. Our goals and objectives were established to meet the identified needs of integrating technology to improve student learning, providing equitable technology access and support, providing secure, timely information flow among home, school, and community, and providing coordinated, ongoing high quality educational technology professional development.

## 1. Plan Duration

### **July 1, 2014 - June 30, 2017**

The Tamalpais Union High School District Educational Technology Plan covers three years, from July 1, 2014 through June 30, 2017. It will serve as the primary tool to guide the district's acquisition, sustainability, and integration of technology to support the district's strategic priorities in curriculum, assessment and instruction. This plan will be monitored by district curriculum and technology administrators, school administrators and other stakeholders during regularly scheduled education technology support meetings and reviewed and revised annually by technology stakeholders after the state releases achievement data for district school sites. Any modifications required through such review will be communicated to both the district Superintendent and the Board of Trustees. The Senior Director of Instructional Technology will then work with the Superintendent to implement any required revisions directly with site-based administrators.

## 2. Stakeholders

Stakeholders		
Name	Position	CDS
Rose Chavira	District Administrator	Marin Tamalpais Union High
Terrie Crotti	Technology Support Staff	Marin Tamalpais Union High
Katy Foster	Site Administrator	Marin Tamalpais Union High Redwood High
Samantha Gilbert	student	Marin Tamalpais Union High Sir Francis Drake High
Millie Hackworth	Classroom Teacher	Marin Tamalpais Union High Redwood High
David Lee	Parent	
Brian Lynch	Site Administrator	Marin Tamalpais Union High Tamalpais High
Nancy Melrose	Parent	
Rod Milstead	Classroom Teacher	Marin Tamalpais Union High Sir Francis Drake High
Eric Saibel	Site Administrator	Marin Tamalpais Union High Sir Francis Drake High
Reade Seiff	student	Marin Tamalpais Union High Redwood High
Ian Stoba	Parent	
Tara Taupier	District Administrator	Marin Tamalpais Union High

Our District's Technology Advisory Committee is our implementation oversight team. The group is comprised of district and site representatives who are responsible for implementing the plan, including district curriculum, data, and information technology staff; site administrators, and teachers as well as students and parents.

The technology committee worked with stakeholders in 2009 to create the previous Technology Plan. Since then, this committee has served as a review body, soliciting input from teachers, students, administrators, classified employees and the community. This committee serves to:

- Evaluate the status of the current technology plan and make adjustments if needed.
- Monitor progress on current technology projects.
- Gather and evaluate district technology data with regard to hardware, wiring, resources, professional development and projects.
- Collect and analyze survey and technology data.
- Identify and update common technology needs and issues.

This plan builds upon and incorporates the work of previous planning committees and district plans.

As stakeholders review technology plan outcome and process data, the following key questions are addressed:

- Are the district and schools' visions for student success aligned to today's knowledge-based, Digital Age? Are administrators committed to the vision?
- Is student academic achievement improving where technology is being used effectively?
- Are students demonstrating proficiency in technological literacy?
- Are educators proficient in implementing, assessing and supporting a variety of effective practices for teaching and learning?
- Do students and school staff have robust access to technology - anytime, anywhere - to support effective designs for teaching and learning?
- Is the digital divide being addressed through resources and strategies that ensure that all students are engaging in an educational program aligned to the district's vision of technology integration?

## **Stakeholder Groups**

**District Curriculum Personnel** – the Superintendent, Assistant Superintendents, and the Senior Director of Instructional Technology and Staff Development.

**Design & Implementation Roles:** Representatives promote, direct, and facilitate the technology team's development of broad and inclusive goals and objectives for curriculum, resources, and operations that include technology. Our curriculum personnel integrate 21st century skills into the overall vision for student achievement and into every aspect of learning, teaching, and administrating. Curriculum personnel define and unpack clear and specific standards-aligned

academic objectives by grade and subject; support research-based best practices and instructional programs; develop student assessment and data monitoring systems and monitor school performance and make adjustments based on school performance.

**District Technology Personnel**—the Director of Technology and technology support staff.

**Design & Implementation Roles:** Representatives on our Tech Plan team provide overall coordination of the technology implementation and oversight team, funding resources, and the implementation of the goals and objectives set forth in this updated technology plan.

**District Financial Personnel** – the Assistant Superintendent of Fiscal Services and staff

**Design & Implementation Roles:** Representatives provide coordination of technology funds and budget issues.

**Site Administration** – Site Principals and Assistant Principals

**Design & Implementation Roles:** Representatives provide site-based updates on technology plan implementation and needs; monitor teacher performance and student learning; make adjustments based on teacher and student performance; ensure the use of adopted materials, research-based best practices and instructional programs; provide input on how technology can better support the teaching of standards-aligned academic objectives.

**Site Teachers** – Teachers from Comprehensive High Schools, Alternative and Continuation Schools.

**Design & Implementation Roles:** Representatives provide input on efforts and outcomes using research-based technology programs and practices to support the district curricular goals and academic content standards and improve teaching and learning.

**Parents/ Students** –Parents of students enrolled in our Comprehensive High Schools, Alternative and Continuation Schools and students.

**Design & Implementation Roles:** Representatives provide input on the district and schools' efforts to integrate technology and 21st century skills in the standards-aligned curriculum. Parents and students advocate for equity in access to technology and the opportunity to master core subjects and 21st century skills.

**Government Agencies** – representatives from the California Technology Assistance Project (CTAP) Region 4.

**Design & Implementation Roles:** Representatives on our Tech Plan team offered technical assistance with: the data analyses and revision of our goals and objectives; professional development planning and implementation; EETT Formula Funding; E-rate; compliance issues; hardware, software, and infrastructure.

The Tamalpais Union High School District School District continues to solicit and expand our partnerships with stakeholders to enhance the infusion of educational technology into the curriculum. Our district recognizes that schools alone do not have the resources or expertise to keep pace with rapidly changing technology. We believe that these partnerships will help us serve the growing needs of an increasingly technical and global education system and society.

### 3. Curriculum

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

The following describes the technology access available in classrooms, library/media centers, or labs for all students, including special education, both during and after school hours. Access to appropriate site-based technology resources has been evaluated through district inventory records. The 2012-13 data has been summarized below.

According to our most recent California Technology Survey and district records, our student to computer ratio for computers four years old or newer is 2:1. Teachers at all five high schools in our district have access to a minimum of one multi-media computer with Internet access in their classrooms as well as in their Library/Media Centers, and/or Computer Labs, before, during, and after school hours. All teachers will schedule before and/or after-school access to computer programs and the Internet as needed for students to complete classroom activities.

#### *Comprehensive High School*

Redwood High School	
All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas:	
Total # of computers* 4 years old or newer (*instructional use)	350
Total # of computers* 4 years old or newer with Internet access	350
# of computers* in Classrooms	179
# of computers* in Library/media centers	49

# of computers* in Computer Labs	122
# of tablets 4 years old or newer (instructional use)	450
Available times for Student access to computers before and after school	7:30 – 8am / 3:30– 5pm

***Comprehensive High School***

Sir Francis Drake High School	
All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas:	
Total # of computers* 4 years old or newer (*instructional use)	328
Total # of computers* 4 years old or newer with Internet access	328
# of computers* in Classrooms	120
# of computers* in Library/media centers	34
# of computers* in Computer Labs	196
# of tablets 4 years old or newer (instructional use)	420
Available times for Student access to computers before and after school	7:30 – 8am / 3:30 – 5pm

***Comprehensive High School***

Tamalpais High School	
All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas:	

Total # of computers* 4 years old or newer (*instructional use)	302
Total # of computers* 4 years old or newer with Internet access	302
# of computers* in Classrooms	167
# of computers* in Library/media centers	31
# of computers* in Computer Labs	152
# of tablets 4 years old or newer (instructional use)	240
# Available times for Student access to computers before and after school	7:30 – 8am / 3:30 – 5pm

***Continuation High School***

San Andreas High School	
All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas:	
Total # of computers* 4 years old or newer (*instructional use)	60
Total # of computers* 4 years old or newer with Internet access	60
# of computers* in Classrooms	60
# of computers* in Library/media centers	0
# of computers* in Computer Labs	0
# of tablets 4 years old or newer (instructional use)	20
# Available times for Student access to computers before and after school	7:30 – 8am / 2:45 – 5pm

***Independent Study High School– grades 9-12***

Tamiscal High School	
All Students, including Special Ed, ELL, and GATE students, have equal access to technology in the following areas:	
Total # of computers* 4 years old or newer (*instructional use)	17
Total # of computers* 4 years old or newer with Internet access	17
# of computers* in Classrooms	17
# of computers* in Library/media centers	10
# of computers* in Computer Labs	0
# Available times for Student access to computers before and after school	7:30 – 8am / 2:45 – 5pm

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

The following data offers a snapshot of hardware and software use along with typical frequency and technology/information literacy skills integrated in the curriculum in our district from the 2004-05 EdTechProfile assessment certificated staff survey data. Complete data is available in our district EdTechProfile assessment reports.

### ***Tamalpais Union High School District Technology Integration***

Technology is being integrated primarily in the classroom in core curriculum for word processing, reinforcement and practice, online research, and creating reports or projects. (See details in charts below)

How often do teachers use the following technology tools for classroom instruction ?	Daily	2-4 days a week	Between once a week and monthly	Less than monthly	Available, but I never use it	Not available
Computers and Peripherals (scanner, printers, etc.)	69	11	4	3	0	0
Video based presentation devices (VCR/DVD, laser disc player, LCD projector, etc.)	11	21	24	13	12	6
Video based creation tools (video camera, digital camera, etc.)	2	8	20	22	22	13
Internet	61	8	10	3	5	0
Email	65	10	6	1	5	0
Hand-held electronic devices (PDA, GPS, heart monitor, etc.)	8	3	8	0	15	53

How often and in what subject areas teachers use technology tools for instruction.	Daily	2-4 days a week	Between once a week and monthly	Less than monthly	Available, but I never use it	Not available
Reading/Language Arts	10	10	6	4	12	43
Mathematics	7	3	6	5	13	52
Science	11	5	4	3	10	53
History/Social Science	9	7	6	1	12	50
PE/Health	3	1	4	2	15	60
Fine Arts	6	0	6	3	15	55
Business/Computer Science	6	1	2	2	16	58
Foreign Language	6	2	3	2	16	56
Home Economics	0	0	0	2	18	65
Industrial Arts	2	0	1	2	17	63
Careers	0	3	4	3	15	60

In what ways and to what degree teachers use technology tools (computers, video, Internet, and hand-held devices) at their school.	Daily	2-4 days a week	Between once a week and monthly	Less than monthly	Never
Create instructional materials	37	28	19	1	2
Deliver classroom instruction	21	28	23	12	3
Manage student grades and attendance	76	6	4	0	1
Communicate with parents or students	69	15	3	0	0
Gather information for planning lessons	31	39	15	1	1
Access model lesson plans and best practices	30	29	21	6	1

To what degree do teachers use the following technology tools at your school to support and improve home/school communication?	Daily	2-4 days a week	Between once a week and monthly	Less than monthly	Never
Voice Mail	52	24	5	1	2
School web site with class related information, such as assignments, grades, upcoming events, parental information, etc.	21	28	17	7	10
Video Conferencing	0	1	0	3	78
Electronic Grading System	45	17	12	2	4
Online Student Assessments	4	6	9	8	54

Teachers have their students use technology tools (computers, video, Internet, and hand-held devices) for classroom assignments in the following locations.	Library media center	Computer Lab	Classroom or other instructional areas	My students don't use technology tools.	Total Responses
My students use technology tools in	72	79	60	3	214

How often teachers require students to use technology tools for classroom assignments.	Daily	2-4 days a week	Between once a week and monthly	Less than monthly	Available but I never use it
Computers and peripherals (scanner, printer, etc.)	15	33	25	10	3
Internet	18	19	25	19	4
Email	11	8	17	21	21
Hand-held electronic devices	0	3	6	3	19

How often teachers assign students in their typical classroom, work that involves using technology tools.	Daily	2-4 days a week	Between once a week and monthly	Less than monthly	Never
Word processing	14	27	27	16	2
Reinforcement and practice	10	19	24	17	16
Research, using the Internet and/or CD-ROMs	11	20	34	18	3
Creating reports or projects	10	14	37	21	4

How often teachers assign students in their typical classroom, work that involves using technology tools.	Daily	2-4 days a week	Between once a week and monthly	Less than monthly	Never

Demonstrations or simulations	6	7	31	32	10
Correspondence with experts, authors, students from other schools, etc., via email or Internet	2	3	12	35	34
Solving problems or analyzing data	3	15	19	25	24
Graphically presenting information	5	7	26	34	14

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

The Tamalpais Union High School District has established clear curricular goals tied to the academic content standards monitored by various district and site-based assessment systems, and referenced in comprehensive planning documents and efforts. The common underlying purpose of all our district improvement plans is to improve student achievement of the state content standards.

Our 2011-12 student achievement data indicates that our rigorous academic goals and objectives, aligned to both the content and cognition levels identified in the California Adopted Academic Content Standards and Frameworks and Common Core State Standards , are having a positive impact at our schools. (See Student Achievement data next page)

**Progress on the Academic Performance Index (API) 2011-12 Reporting Cycle**

**District:** Tamalpais Union High School District

**County:** Marin

Data

Resource: <http://ayp.cde.ca.gov/reports/page2.asp?subject=AYP&level=District&submit1=Submit>

**2012 AYP Criteria Summary**

**District:** Tamalpais Union High School District

**County:** Marin

Our district met all of the 2012 Adequate Yearly Progress (AYP) Criteria: 10 of its 10 AYP Criteria.

Data

Resource: <http://ayp.cde.ca.gov/reports/page2.asp?subject=AYP&level=District&submit1=Submit>

AYP Components	Met 2012 AYP Criteria
Participation rate	Yes
Percent proficient (AMOs)	Yes
API as additional indicator	Yes
Graduation rate	Yes

	English-Language Arts		Mathematics	
Annual Measurable Objectives (AMOs) 2011-12	Percent At or Above Proficient	Met 2012 AYP Criteria	Percent At or Above Proficient	Met 2012 AYP Criteria
DISTRICT PERCENT PROFICIENT Data Resource: <a href="http://ayp.cde.ca.gov/reports.asp">http://ayp.cde.ca.gov/reports.asp</a>				
LEA-wide	85.4	Yes	84.6	Yes

African American or Black (not of Hispanic origin)	40.9	Yes	45.5	Yes
Asian	87.5	Yes	91.7	Yes
Hispanic or Latino	74.0	Yes	64.4	Yes
White (not of Hispanic origin)	87.7	Yes	87.3	Yes
Socio-economically Disadvantaged	54.1	Yes	60.7	Yes
English Learners	40.0	Yes	55.0	Yes
Students with Disabilities	34.2	Yes	34.6	Yes

**Current California High School Exit Exam (CAHSEE) Results 2011-12 E/LA**

	Number tested	Number passed	Percent passed	Number not passed	Percent not passed
All students	985	932	95%	53	5%

**Current California High School Exit Exam (CAHSEE) Results 2011-12 Math**

	Number tested	Number passed	Percent passed	Number not passed	Percent not passed
All students	981	933	95%	48	5%

**Tamalpais Union High School District Curricular Goals**

The Tamalpais Union High School District’s adopted academic standards are aligned with the state academic content and performance standards. Curriculum is updated annually based on a five-year curriculum cycle with corresponding opportunities to select standards-based textbooks and instructional materials. The members of the Board of Trustees, District administration, and school site staff regularly review assessment results to monitor the academic progress of

students. Because the District has established graduation outcomes that are over and above the state CASHEE, local assessments are administered annually in addition to the state required assessments. Each year, a Tamalpais Union High School District *Student Performance Report* is developed and reviewed by the Board of Trustees, District administration, and site administrators and staff. In addition, each year, each school site develops a *School Accountability Report Card* (SARC) which reports academic achievement progress for their school.

Our school board has adopted goals and objectives for five areas (instruction, students, governance, staff, and facilities), which are tied to and support the adopted, state approved, content and performance standards in all academic areas. These District goals and objectives support the LEA plan on the district level. Each of our schools ties its site-based curricular goals directly to the District's LEA Plan and school board's key goals in a Site Plan for Student Achievement. The District goals and objectives can be found in the planning document: *Tamalpais Union High School District Strategic Priorities*.

Based on our student data, federal and state mandates, and research-based best practices, our district's current key curricular goals delineated in the LEA Plan are:

1. All students will reach high standards, at a minimum, attaining proficiency or better in reading and mathematics, by 2016-2017.
2. All students will be educated in learning environments that are safe, drug-free, and conducive to learning.
3. All students will graduate from high school.

Other district and site comprehensive planning documents and data that establish and/ or guide our standards-based curriculum include:

- The District adopted State Content and Performance Standards for K-12.
- The District LEA plan.
- No Child Left Behind compliance / implementation documentation.
- State and Federal district-wide school achievement data from annual AYP, API, STAR CST, CELDT results.
- The District's program for English Language Learners (ELL) includes identification, assessment, reclassification procedure, and reporting on students who have a primary language other than English. This includes English Language Development and instructional programs for ELL students to assist them in meeting and/or exceeding state content and performance standards and graduation requirements.
- The District's Gifted and Talented (GATE) Plan provides challenging curriculum and instruction for gifted and talented students capable of achieving significantly beyond grade level performance. The GATE plan supports the provision of services that are integrated into the regular school day as differentiated learning experiences that are based on the core curriculum along with Honors and Advanced Placement course offerings.

- The Policy and Procedures handbook which details the District’s philosophy and goals, and policy and procedures regarding students, instruction, promotion and retention, equity, administration, personnel, community relations, business, and much more.
- Site-based Single Plans for Student Achievement, SARC, and WASC self-study reviews and actions plans. Categorical programs vary from site to site.
- Our current district Educational Technology Plan.

3d. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to improve teaching and learning by supporting the district curricular goals.

**Goal 3d.1: Our schools will purposefully integrate technology into the academic curriculum as a tool to enhance and extend students' learning of district designated learning outcomes. Target Group: All students including special education, English Learner, and GATE students.**

Objective 3d.1.1: By the 2016-17 school year, 100% of all students will attain proficiency in all District Program Goals, as demonstrated by our annual District Student Performance Report.

Benchmarks:

- Year 1: Minimum of 95% in the 2014-15 school year.
- Year 2: Minimum of 98% in the 2015-16 school year.
- Year 3: Minimum of 100% in the 2016-17 school year.

<b>Implementation Plan</b>				
<b>Activity</b>	<b>Timeline</b>	<b>Person(s) Responsible</b>	<b>Monitoring &amp; Evaluation</b>	<b>Evaluation Instrument</b>
Student learning will be monitored through local assessment data	ongoing	district and site administration, classroom teachers	Classroom teachers will design and implement assessments that align to our program goals and proficiency scales. Assessment data will be used to monitor student growth and learning.	Locally created assessments, professional learning communities (PLCs) will self-monitor

Teachers will evaluate the use of various technology tools such as iPads, laptops, smart devices for effectiveness in enhancing student learning.	ongoing	classroom teachers, site and district administration.	The district will collect data via semi-annual surveys of teachers and students as well as observation and conversations with teachers and students. The SAMR model will be used a one method of measuring effectiveness of the use of technology for learning.	Survey, observation, conversation.
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**Goal 3d.2: Provide professional learning opportunities for teachers to be able to integrate technology in the classroom to help all kids learn at high levels**

- 3e. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire the technology skills and information literacy skills needed to succeed in the classroom and the workplace.

**Goal 3e.1: Develop a performance-based method for assessing student learning of information and technology proficiency. Target Group: All students.**

Objective 3e.1.1: By the 2016-17 school year, the district will have created and implemented an appropriate method of assessing students' ability to proficiently apply 21st century skills across the curriculum.

Benchmarks:

- Year 1: By June of 2015, the district will have identified clear learning goals for information technology and generated sample performance-based assessments for measuring such goals.
- Year 2: By June of 2016, teachers will have piloted the implementation of teaching the clear learning goals and performance-based methods of measuring student learning towards proficiency on those goals
- Year 3: By June of 2017, all students will have the opportunity to learn the specified information technology goals and have been assessed on their learning of those goals through valid performance-based methods

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

The district's applied technology team will draft a proposed plan for assessing students' ability to apply 21st century skills across the curriculum.	June 2014	Applied Technology Teacher Leaders and district Applied Tech liaison	The proposal will be presented to site Teacher Leader teams and to the district leadership team for feedback.	The plan will be evaluated based on it's alignment with the district's mission and strategic priorities.
Pilot of the proposed 21st century skills will be implemented and data collected on assessment and student achievement	August 2014-June 2015	Applied Technology teachers, site and district leadership team	Applied technology teachers, site and district leadership team will monitor and evaluate the progress of the pilot.	Proficiency Scales for the Applied Technology Program Goals.
Data gathering of the implementation of the Applied Technology graduation requirement.	August 2015-June 2017	Applied Technology teachers, site and district administration	Ongoing review of student achievement data	Proficiency Scales developed by the Applied Technology teachers

Objective 3e.1.2: To develop a performance-based method for assessing student learning of information technology proficiency within the context of the core curriculum.

Benchmarks:

- Year 1: By June of 2015, the district will have identified clear learning goals for information technology and generated sample performance-based assessments for measuring such goals.
- Year 2: By June of 2016, teachers will have piloted the implementation of teaching the clear learning goals and performance-based methods of measuring student learning towards proficiency on those goals
- Year 3: By June of 2017, all students will have the opportunity to learn the specified information technology goals and have been assessed on their learning of those goals through valid performance -based methods

<b>Implementation Plan</b>				
<b>Activity</b>	<b>Timeline</b>	<b>Person(s) Responsible</b>	<b>Monitoring &amp; Evaluation</b>	<b>Evaluation Instrument</b>
Implement assessment of student learning against identified program goals in Applied Technology.	ongoing	classroom teachers, site and district administration.	Student learning and growth will be measured using proficiency scales for each program goal.	Proficiency scales developed by the Applied Technology department.

3f. List of goals and an implementation plan that describe how the district will address the appropriate and ethical use of information technology in the classroom so that students can distinguish lawful from unlawful uses of copyrighted works, including the following topics: the concept and purpose of both copyright and fair use

**Goal 3f.1: All students in the Tam District will be able to distinguish lawful from unlawful uses of copyrighted materials, including the following topics: the concept and purpose of copyright, intellectual property and fair use; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; and avoiding plagiarism. Target Group: All students including special education, English Learner, and GATE students.**

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Professional development trainings focusing on ethical use of information technology including the following topics: copyright, intellectual property and fair use, downloading and file sharing, and plagiarism. Pre and Post Tests will be a component of each training.	By fall 2014	Senior Director of Instructional Technology	Team of administrators, and selected site technology committee members will review the training prior to the roll out in September, 2014.	District created proficiency scale that will measure the learning of the participants
Develop program goals upon which all students will be required to demonstrate proficiency: the goals will include information on copyright, intellectual property and fair use, downloading and file sharing, and plagiarism. Include information on internet safety from Common Sense Media	June-August 2014	Senior Director of Instructional Technology	Teacher Leaders, site administrators and Assistant Superintendent of Educational Services to vet the program goals	Proficiency scales will be uses to measure student growth and proficiency on the goals.

3g. List of goals and an implementation plan that describe how the district will address Internet safety, including how to protect online privacy and avoid online predators. (AB 307)

**Goal 3g.1: All students in the Tam District will learn to be safe, responsible digital citizens who are prepared for the 21st century; students will be proficient in the ethical and safe use of the internet including awareness and dangers of cyber bullying, protection against online predators, and how to maintain online privacy. Target Group: All students including special education, English Learner, and GATE students.**

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Review and update (if needed) District Responsible Use Policy (RUP). Ensure that administrators along with the technology committee address the RUP in staff meetings and have every employee and student sign the agreement. Verify that each student has a signed RUP on file.	Annually	Senior Director of Instructional Technology	Review of RUP will be done by District Leadership team.	
Create and implement district program goals around responsible and safe use of the internet and digital tools.	June-September 2014	Assistant Superintendent of Educational Services	Teacher Leaders and site administrators will monitor the efficacy and implementation of the program goals.	Proficiency scales that monitor student progress will be written to accompany the program goals and will be use to measure student learning.

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

### **Ensure equitable access to appropriate technological resources to facilitate student learning**

All students will have equitable access to technology to support achievement of the academic standards in the classroom, district curricular goals, and ultimately for success in the workplace. The technology goals and objectives for student sub-groups, such as Special Education and English Learners, are the same as for all other students, although the programs and methods for achieving the objective may be adapted to best meet their individual needs. Students with an active Individualized Education Program will have appropriate access to technology hardware, peripherals, and software including assistive technology as deemed appropriate and defined by the IEP site team and the students' IEP goals. English Learners will have appropriate access to technology hardware, peripherals, and software needed to support their English language acquisition as well as their achievement of the academic standards. Socioeconomic status will not be a hindrance to access to technology.

3i. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs.

**Goal 3i.1: The District will support district and site use of technology to improve student achievement data collection, analysis, reporting, and decision making. Target Group: All district schools.**

Objective 3i.1.1: By June 2017, 100% of district teachers will have access to the District’s student information system and the necessary training to use it effectively.

Benchmarks:

- Year 1: 90% of district teachers by June 2015.
- Year 2: 95% of district teachers by June 2016.
- Year 3: 100% of district teachers by June 2017.

<b>Implementation Plan</b>				
<b>Activity</b>	<b>Timeline</b>	<b>Person(s) Responsible</b>	<b>Monitoring &amp; Evaluation</b>	<b>Evaluation Instrument</b>
The District will update the current student information system and evaluate it's usefulness in collecting student data.	annually	Sr. Director of Instructional Technology	The District will evaluate the use of the student information system for ease of use and ability to quickly and effectively collect student performance data.	District survey.
The District will provide professional development for all users of the student information system to ensure effective use of the tool.	ongoing	Sr Director of Instructional Technology	The District will audit the use of the student information system to indicate what percentage of teachers use the student information system as their primary grade book.	

Objective 3i.1.2: By June 2017, 80% of teachers will use technology to analyze student data to make data-driven decisions to meet individual student academic needs and target student intervention needs.

Benchmarks:

- Year 1: 60% of district teachers by June 2015.
- Year 2: 70% of district teachers by June 2016.
- Year 3: 80% of district teachers by June 2017.

<b>Implementation Plan</b>
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Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Provide systematic professional development and collaboration time for site administration and teachers to improve student achievement assessment, data collection, analysis, reporting, and data driven decision making, align standards-based instruction, learn and share best practices in instruction and intervention, including the use of technology and develop quarterly assessments horizontally and vertically through grade levels in the district.	Annually	Site and district administration	The District will periodically survey the staff for support needs and provide professional development based on the identified needs.	The District will use exit slips and professional development evaluations to monitor the quality and quantity of the professional development offerings.
The eSchoolPLUS student information system is currently being used by all district teachers for grade reporting and attendance. We will continue to explore methods of using the SIS to capture student data in order to provide appropriate interventions and track student progress.	ongoing	Sr Director of Instructional Technology	The District will participate in professional development offerings by SunGard in order to keep abreast of new utilities of the SIS, particularly in the area of student data collection and analysis.	

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

**Goal 3j.1: Form greater partnerships between staff and with our greater community through effective use of a variety of technological platforms Target Group: Parents of all students including special education and English Learner students.**

Objective 3j.1.1: By June 2017, the District will provide all parents secured, online access to student class information, such as attendance, assignments and grades.

Benchmarks:

- Year 1: 70% by June 2015
- Year 2: 80% by June 2016
- Year 3: 90% by June 2017

<b>Implementation Plan</b>				
<b>Activity</b>	<b>Timeline</b>	<b>Person(s) Responsible</b>	<b>Monitoring &amp; Evaluation</b>	<b>Evaluation Instrument</b>
The district data specialist and district administration will continue to explore options of ensuring all parents have access to student information regardless of internet access outside of school grounds.	ongoing	Sr. Director of Instructional Technology	The data specialists will run reports at the start of each semester to determine what percentage of parents have home access account to review student information online. Based on that information the District will provide instructions to those parents on creating accounts.	Student information system data.
Training on eSchoolPLUS student information system will be provided for all staff on an annual basis.	Annually	Senior Director of Instructional Technology	At the beginning of each semester the data specialist and teacher support cadre will provide professional development and gather survey data from teachers and staff regarding upon they would like more support.	Survey data

Objective 3j.1.2: By June of 2015, the district and site administration will create criteria against which to measure their effective use of technological platforms for building relationships with various community members through two way communication systems.

Benchmarks:

- Year 1: By June 2015, district administrators will create a communication plan rubric to include technology platforms to be used to build two way communication systems with various stakeholder groups.
- Year 2: By June 2016, district administrators will evaluate the communication plan based on stakeholder feedback and make necessary changes.
- Year 3: By June 2017, district administrators will have in place an effective system of two way communication as measured by a robust rubric and stakeholder survey data.

<b>Implementation Plan</b>
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<b>Activity</b>	<b>Timeline</b>	<b>Person(s) Responsible</b>	<b>Monitoring &amp; Evaluation</b>	<b>Evaluation Instrument</b>
District leadership team will create a communication plan and rubric against which to measure the effectiveness of communication.	ongoing	District leadership team	The district leadership team will work collaboratively to provide critical feedback to each other during the process. The team will also gather data from stakeholder groups about how well the district is providing information and opportunity for input.	Communication rubric, stakeholder survey data
District leadership team will adjust communication plan and rubric based on stakeholder feedback.	ongoing	District leadership team	The district leadership team will work collaboratively to provide critical feedback to each other during the year. The team will collect survey data from stakeholder groups around effectiveness of two way communication systems and platforms.	Communication rubric, stakeholder survey data

3k. Describe the process that will be used to monitor the Curricular Component (Section 3d-3j) goals, objectives, benchmarks and planned implementation activities including roles and responsibilities.

The Senior Director of Instructional Technology, school site administrators and site technology coordinators will track the development and implementation of all activities and accomplishments monthly and report progress at regular district/site admin meetings. Modifications to our district activities will be made as needed in order to insure that we meet or exceed this measurable objective.

The timeline for the aforementioned actions are included in the Action Steps listed above.

District and site administrators, and the Senior Director of Instructional Technology are responsible for the planning, development, implementation, and evaluation of all the aforementioned activities. Teachers are responsible for attending professional development and inputting student data. The Senior Director of Instructional Technology, school site administrators, and school site tech coordinators will analyze end of school year results annually in June.

## 4. Professional Development

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

Our Education Technology Plan provides a clear summary of our district teachers' current technology skills from the EdTechProfile survey. Our survey findings are summarized by discrete skills in order to better facilitate professional development planning that meets our identified needs and technology plan goals. Additional district technology integration data can be found in Component 3b of our Technology Plan. We have used the most recent data available to us.

Beginning in 2011-12, the district started offering an annual educational technology professional development program. The program currently has 34 teachers enrolled as a cohort who meet once a month for educational technology integration training. The program is designed to bolster teachers' curriculum delivery methodology with the inclusion of technology to improve student learning opportunities. Each participant is provided a personal device and a set of devices for their classroom.

In addition to the use of the EdTechProfile assessment survey, the District provides an annual technology staff development mini-grant program, allowing teachers to self-select the best and most productive staff development opportunities. By providing funding for a variety of teacher-initiated technology training programs, the District hopes to meet the needs of the diverse skill sets of all staff members.

### **District Teachers' and Administrators Survey Data and Current Skills**

EdTechProfile survey data of district teachers indicates that most teachers are at proficient levels with general computing, Internet, e-mail, and word processing and at the intermediate level in all other categories.

Administrators use technology in a number of different ways. It is common practice to use email for communication with staff and the community. Word processing and spreadsheet skills are used to develop documents and materials to support instructional goals. All administrators have a smart phone with access to software that provides updated student schedule and contact information, so that they can dynamically address needs around campus, even when away from a computer. They have also been trained extensively on the District's student information system, using it for basic student management needs, as well as more complicated scheduling, behavior management, and communication with parents and the community. Further training will focus on enhancing administrator use of collaborative tools, such as electronic document repositories and other server-based resources.

Administrator EdTechProfile data supporting these skill descriptions will be added to this plan as it becomes available.

**Implication:** Teachers need professional development opportunities in more advanced technologies that are connected to curriculum integration.

	1 – General Computer Knowledge and Skills 2 – Internet 3 – Email 4 – Word Processing 5 – Publishing 6 – Databases 7 – Spreadsheets 8 – Presentation Software 9 – Instructional Technology

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

All of the Professional Development Criteria 4b-d elements are included in the teachers’ and administrators’ professional development action plan charts in the Component 4 pages that follow. Our professional development action plans are based on a thorough needs analysis and include clear, specific, realistic goals, and measurable objectives that will provide our teachers

and administrators with sustained, ongoing professional development necessary to implement the Curriculum Component of our Education Technology Plan.

Our three main Education Technology professional development goals over the next three years are:

**Goal 1:** All teachers in the district will become proficient with the same general technology skills, technology integration skills, and information literacy skills required of their students as well as proficient with work specific productivity tools.

**Goal 2:** All teachers in the district will become proficient in the use of technology to improve student achievement data collection, analysis, reporting, and decision making.

**Goal 3:** District site administrators and teachers will become proficient in the use of technology to improve two-way communication between home and school.

The accomplishment of these goals will be met through the following:

Our Education Technology Professional development will encompass a three tiered professional development approach based on teachers' individual technology training needs.

1. Annually as needed, we will offer Personal proficiency training on NETs skills (pending evaluation against District technology expectations) including general computer knowledge and skills; Internet skills; Email skills; Word processing skills; Presentation software skills; and Spreadsheet /Database software skills.
2. Annually as needed, we will offer Professional proficiency training on NETs skills integration including information literacy, curriculum-based software, adopted materials software resources, online resources such as SETs, and job specific productivity and assessment tools.
3. Annually as needed, we will offer Technology Leadership / Coach proficiency training: Training interested teachers as site-based coaches offering support to teachers as they work toward proficiency in tiers one and two.

Our coordinated professional development plan is based on the analysis of our teachers' and administrators' technology skills and needs as well as our district's curricular goals. The district will offer a variety of training options such as online options through Atomic Learning, face-to-face training & collaboration time, and one-on-one coaching. We will maximize the use of technology and site resources to support the district's goals and objectives for curriculum, instruction, intervention, and assessment, including but not limited to the following:

- Site-based technology coaches and Atomic Learning licenses available to each district site.
- The district has two Educational Technology coaches who assess staff tech readiness and provide appropriate professional development opportunities.
- District as well as site based annual face-to-face technology skill professional development opportunities.
- Anytime, anywhere online district technology professional development opportunities using Atomic Learning, and supported by educational technology coaches.
- District content and grade-band specific technology integration face-to-face professional development supported with district professional development.
- Broad-based pre/post completions of the EdTechProfile survey and professional development data analysis to track improvements and training needs.
- Annual professional development offerings / priorities based on student, teacher, and administrator EdTechProfile survey data and district curricular goals.
- Student assessment and intervention, student information system, web publishing, e-mail, and voice-mail training opportunities for all stakeholders as needed to support student achievement and improve home / school communications and interventions.
- Identification, training, and use of low and no cost Internet, video-conferencing and face-to-face learning opportunities and resources. National, State and local online research-based strategies and resources will be leveraged and integrated during faculty meetings, collaboration time, and professional development such as :the U.S. Department of Education’s web site *What Works Clearinghouse* (<http://www.w-w-c.org/>). We will regularly examine and use relevant data from the *What Works Clearinghouse* (WWC) which was established in 2002 by the U.S. Department of Education's Institute of Education Sciences to provide educators, policymakers, researchers, and the public with a central and trusted source of scientific evidence of what works in education. We will also rely on the County Office of Education, CTAP Region 4, and the Statewide Education Technology Services (SETS) which includes: **California Learning Resource Network (CLRN)**- which identifies CDE approved supplemental electronic learning resources that both meet local instructional needs and embody the implementation of California curriculum frameworks and standards; the Technology Information Center for Administrative Leadership (TICAL) - which helps administrators find technology resources to assist in the day-to-day needs of their jobs; and the Technical Support for Education Technology in Schools (TechSETS) - which provides technical professionals in California schools improved access to training, support and other resources.

All of the Professional Development Criteria 4b-d elements are included in the teachers’ and administrators’ professional development action plan charts in the Component 4 pages that follow.

**Goal 4b.1: District administrators, site administrators, teachers, and appropriate classified staff will become proficient with the same general technology skills, technology integration skills, and information literacy skills required of students as well as proficient with work specific productivity tools. Target Group: District administrators, site administrators,**

**teachers, and appropriate classified staff. Supports Curriculum Driven Technology Goals and Objectives 1,2, 3 & 4 in Component 3 of our Ed Tech Plan**

Objective 4b.1.1: By June 2017, 100% of site administrators, teachers, and para-educators who participate in district sponsored educational technology professional development, will be proficient with general technology knowledge and skills, classroom productivity tools, and information literacy skills aligned to the NETs for teachers and NETs for students. All district ELD and Special Education teachers will become proficient in technology skills and assistive tools for their subgroup populations.

Benchmarks:

- Year 1: Minimum of 25% in the 2014-15 school year.
- Year 2: Minimum of 50% in the 2015-16 school year.
- Year 3: Minimum of 100% in the 2016-17 school year.

<b>Implementation Plan</b>				
<b>Activity</b>	<b>Timeline</b>	<b>Person(s) Responsible</b>	<b>Monitoring &amp; Evaluation</b>	<b>Evaluation Instrument</b>
Schedule and promote district sponsored technology workshops for administrators and for teachers during the school year aligned to the content standards, to the NETs, assistive technology, and to identified I-assessment professional development needs including information literacy skills.	Annually in the fall	District and site administration	The District will periodically survey the staff for educational technology professional development needs. Opportunities will then be developed from those results.	The District will use exit slips and survey results to monitor progress and refine professional development offerings.

Objective 4b.1.2: By June 2017, 100% of administrators, teachers, and classified staff who participate in district sponsored staff development on the use of technology-based tools will become proficient in using these tools to maximize work productivity.

Benchmarks:

- Year 1: Minimum of 25% in the 2014-15 school year.
- Year 2: Minimum of 50% in the 2015-16 school year.
- Year 3: Minimum of 100% in the 2016-17 school year.

<b>Implementation Plan</b>				
<b>Activity</b>	<b>Timeline</b>	<b>Person(s) Responsible</b>	<b>Monitoring &amp; Evaluation</b>	<b>Evaluation Instrument</b>

The district will train site-based educational technology mentors to support district technology participants at the site level.	Annually	District and site administration	The site-based educational technology mentors will be evaluated by site teachers, administrators, classified staff and para-professionals on their effectiveness and responsiveness to professional development needs of the staff.	District generated proficiency scale based off the ISTE standards for teachers.
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**Goal 4b.2: District site administrators and teachers will become proficient in the use of technology to improve student achievement data collection, analysis, reporting, and decision making. Target Group: Certificated teachers and administrators Supports Curriculum Driven Technology Goals and Objectives 1,2,3,5,& 6 in Component 3 of our Ed Tech Plan**

Objective 4b.2.1: June 2017, 90% of teachers will use technology to analyze assessment data make data-driven decisions to meet individual student academic needs and target student intervention needs.

Benchmarks:

- Year 1: 40% of teachers by June 2014.
- Year 2: 60% of teachers by June 2015.
- Year 3: 75% of teachers by June 2016.

<b>Implementation Plan</b>				
<b>Activity</b>	<b>Timeline</b>	<b>Person(s) Responsible</b>	<b>Monitoring &amp; Evaluation</b>	<b>Evaluation Instrument</b>
Plan professional development opportunities for the year focused on standards-aligned classroom assessments and data-driven decisions that meet individual student academic needs and target student intervention needs. Promote opportunities to teachers through all available communication conduits.	Annually in September	Sr. Director of Instructional Technology	An annual survey of teacher technology usage will be used to determine best professional development offerings	Teacher feedback

Schedule and promote district sponsored technology workshops for administrators and for teachers during the school year on all SIS components.	Annually in the fall	Sr. Director of Instructional Technology and Technology teacher coaches	Survey the teachers and visit classrooms to determine highest priority needs.	Teacher feedback and observation
Provide systematic professional development and collaboration time for site administration and teachers to analyze student achievement data, align standards-based instruction, learn and share best practices in instruction and intervention, including the use of technology and develop quarterly assessments through all subject areas in the district.	Annually	District leadership team	Ongoing assessment of teacher use of data to drive instructional decisions	Teacher feedback and observation

**Goal 4b.3: District administrators and teachers will become proficient in the use of technology to improve two-way communication between home and school.**

Objective 4b.3.1: By June 2017, 95% of site administrators and teachers, who attend professional development, will be proficient with the district’s web-based school-home communication platform.

Benchmarks:

- Year 1: 85% by June 2015
- Year 2: 90% by June 2016
- Year 3: 95% by June 2017

<b>Implementation Plan</b>				
<b>Activity</b>	<b>Timeline</b>	<b>Person(s) Responsible</b>	<b>Monitoring &amp; Evaluation</b>	<b>Evaluation Instrument</b>

Schedule and promote district sponsored technology workshops for administrators and for teachers on our web-based communication platform and communication components of our SIS during the school year.	Annually in the fall	Sr. Director of Instructional Technology and Staff Development	Ongoing check-ins with school staff on their usage of the communication components of the district SIS and web-based communication platform.	Staff feedback
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Objective 4b.3.2: By June 2017, 100% of teachers, who attend professional development, will be comfortable with the concept and execution of posting students' attendance, assignments and grades through a web-based system.

Benchmarks:

- Year 1: 85% by June 2015.
- Year 2: 90% by June 2016
- Year 3: 100% by June 2017.

<b>Implementation Plan</b>				
<b>Activity</b>	<b>Timeline</b>	<b>Person(s) Responsible</b>	<b>Monitoring &amp; Evaluation</b>	<b>Evaluation Instrument</b>
Schedule and promote district sponsored technology workshops for administrators and for teachers during the school year on the district's web-based student reporting system.	Annually in the fall	Sr. Director of Instructional Technology and Staff Development, data specialists	SIS data regarding the percentage of teachers who consistently and effectively post students' attendance and grades.	SIS data

**Goal 4b.4: Provide professional learning opportunities and access to digital resources for teachers to be able to integrate technology in the classroom to help all students learn at high levels.**

Objective 4b.4.1: To ensure a system of sustained professional learning opportunities and access to digital resources for teachers in order to be able to integrate technology in the classroom to help all students learn at high levels.

Benchmarks:

- Year 1: By June of 2015, 30% of our teachers will have or will be actively participating in an ongoing professional development with a focus on the use of educational technology to support all students learning at high levels.

- Year 2: By June of 2016, 40% of our teachers will have or will be actively participating in an ongoing professional development with a focus on the use of educational technology to support all students learning at high levels.
- Year 3: By June of 2017, 60% of our teachers will have or will be actively participating in an ongoing professional development with a focus on the use of educational technology to support all students learning at high levels.

<b>Implementation Plan</b>				
<b>Activity</b>	<b>Timeline</b>	<b>Person(s) Responsible</b>	<b>Monitoring &amp; Evaluation</b>	<b>Evaluation Instrument</b>
The District will continue to provide sustained professional development through the district run Instructional Technology Teacher Collaborative	annually	Sr. Director of Instructional Technology and Staff Development	Each cohort will provide end of year evaluations of the program and their own growth in technology implementation	Exit survey
The District will investigate outside support providers to augment the district offerings in technology integration.	ongoing	Sr. Director of Instructional Technology and Staff Development	The District will survey teachers each spring to gauge their instructional technology support needs and evaluate the best way of providing such support.	The District wide Teacher Leader team will review outside support providers for fit for the district needs.

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

District curriculum, data, and technology administrators and school site administrators track the development and implementation of all activities and accomplishments regularly and report progress at our regular district/ site admin meetings. Modifications to our district activities will be made as needed in order to insure that we meet or exceed this measurable objective.

The timeline for the aforementioned actions are included in the Implementation Action Steps listed above.

District administrators, the Senior Director of Instructional Technology, school site administrators, and educational technology coaches are responsible for the planning, development, implementation, and evaluation of all the aforementioned activities. Site administrators and teachers are responsible for completing all necessary professional development and ensuring student instruction is based on standards-aligned objectives and research based programs, practices and arrangements.

District curriculum, data, and technology administrators and school administrators will analyze benchmark data annually in late August and make any necessary modifications in order to meet our objectives.

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

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

**Existing Hardware:** Existing hardware and electronic resources at each of our sites is included in *Component 3a: Current Technology Access* in our tech plan. This data comes from both our CBEDS data and our annual California School Technology Surveys.

### District Equipment Replacement Chart

School Name	2011-2012 Enrollment (Unofficial CBEDS)	# of current Instructional Multimedia computers / thin clients 4 years or newer in 2011-2012 CA Tech Survey	# of new computers needed to reach 2:1 or better by June 2015	# of new computers needed to reach / maintain goal of 2:1 in three years as per District objective
Redwood High School	1456	500	228	228
Sir Francis Drake High School	979	300	189	189
Tamalpais High School	1231	760	0	0
San Andreas High School	71	28	7.5	7.5
Tamiscal High School	87	23	20.5	20.5
Total = 3.8:1 student to computer ratio	3839	1611	309	309

**Existing Internet Access:** Total Number of district schools = 5

Total Number of district schools connected to the Internet by a permanent (non-dial-up) connection = **5**

Total Number of district schools connected to the Internet by:

1Gb/s Fiber: **5**

3Mb/s Dual T1: **0**

Total number of schools in the district that are NOT connected to the District's LAN: **0**

Average # of drops per classroom: **6**

What percentage of schools is served by the following Internet service provider?

Marin County Office of Education **0%**

A T&T: **100% as of July 1, 2014**

What percentage of classrooms in the district do not have a phone service in the classroom? **0%**

What percentage of classrooms in the district do not have voicemail service? **0%**

**Existing Electronic Learning Resources:** The District currently has a variety of software programs implemented at all school sites. Standard software includes office productivity suites such as Microsoft Office and OpenOffice, as well as security products such as Sophos Antivirus and DeepFreeze. Internet resources are also available, including Atomic Learning and CLRN for staff development, EBSCO databases, and other non-subscription sites. Atomic Learning, PLATO and other curricular software programs are utilized in programs as diverse as special education, our continuation school, math programs and our Adult Education program.

**Existing Technical Support:** Technical support in the District is delivered through a combination of on-site technical expertise, District-based support and, when needed, third-party support. Each comprehensive high school has an Educational Technology Specialist (Ed Tech),

who serves as the primary technical support contact for staff at the site. The continuation and independent study high school share a part-time Ed Tech.

The district has 3.5 FTE computer technicians offering tech support to schools, one FTE for every 700 computers in the district. The district also has 2.0 FTE Network Specialists. In addition to the District Technical Support information in Component 5 (a,b,c,d) of our tech plan, the district offers stipends to site-based Teacher Cadre members (peer coaches) to assist teachers with our current student information system and related gradebook and parent communication components.

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

**Hardware Needed:** Improving student to up-to-date multi-media device ratios is a moving target. As the district annually purchases new devices for its school sites, others are retired, making it difficult to obtain a student to computer homeostasis.

We will replace old computers and devices and add to the numbers at each site to improve our student to device ratios through new purchases that meet the CDE minimum recommended standards for new desktops, laptops, and thin client servers. We will also improve our student to devices ratios through our partnership with our local school foundations and other fund raising organizations. Our goal is that every child will have access to technology during every academic class during the school day. We are currently compliant with Smarter Balanced testing requirements. We will continue to expand our student's exposure to using educational technology embedded into core curriculum classes.

**Electronic Learning Resources Needed:** The district is consistently researching and testing electronic learning resources and will continue to do so in order to find well suited resources for our students and staff. Currently, the district has licenses for Plato, FastForward, and RevolutionK12 for student learning support. For professional development, the district has licenses for Lynda.com.

**Networking and Telecommunications Infrastructure Needed:** Infrastructure stability and capability has been expanded significantly in the past three years. The district replaced its entire network in 2011. New switches, circuits, access points, cabling and servers have been installed that allow reliable and fast access to resources both on the district network and on the Internet. Our Modernization bond has provided resources so that every classroom in the District is now outfitted with multiple data outlets, as well as audio/visual connections for projectors and other equipment.

Over the next three years, the District will continue to expand its ability to support wireless internet traffic. Currently, all campuses have wide-spread wireless access. We will continue to monitor the needs of all classrooms and learning spaces on campuses to ensure that equitable access to resources exists across the District.

**Physical Plant Modifications Needed:**

**Technical Support Needed:** The district will offer WAN/LAN troubleshooting and Network standards training for site staff.

The district will also hire additional technicians as needed and as funding is available. To support teachers participating in the district's education technology professional development opportunities, the district will train and offer stipends to site-based technology integration mentors (cadre leaders), and will investigate the feasibility of adding site-based instructional technology support personnel.

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

<b>Year 1 Benchmark:</b> 100% implementation: The Tam District will increase bandwidth and install updated servers and replace aging switches at each school; replace or purchase one third of the devices necessary to support a 2:1 student to device ratio; and replace one third of the necessary software and technology resources essential to the implementation of the technology plan.		
<b>Recommended Actions/Activities</b>	<b>Timeline</b>	<b>Person(s) Responsible</b>
Increase network bandwidth and replace aging switches and network access points	By June 2014	Director of Information Technology
The district will conduct an internal audit and implement a systemized device replacement/reallocation schedule	By June 2015	Director of Information Technology

<b>Year 2 Benchmark:</b> 100% implementation: The Tam District will monitor internet traffic for high usage times and increase the number of access points in high volume areas; replace or purchase one third of the devices necessary to support a 2:1 student to device ratio; and replace one third of the necessary software and technology resources essential to the implementation of the technology plan.		
<b>Recommended Actions/Activities</b>	<b>Timeline</b>	<b>Person(s) Responsible</b>
The district will conduct a network audit to ensure there is equal access to the network across the district.	By June 2015	Director of Information Technology

<b>Year 3 Benchmark:</b> 100% implementation: The Tam District will increase bandwidth as necessary based on usage monitoring; we will continue to and install updated servers and replace aging switches at each school; replace or purchase one third of the devices necessary to support a 2:1 student to device ratio; and replace one third of the necessary software and technology resources essential to the implementation of the technology plan.		
<b>Recommended Actions/Activities</b>	<b>Timeline</b>	<b>Person(s) Responsible</b>
The district will continuously monitor bandwidth usage to ensure appropriate levels of access for all users.	ongoing	Director of Information Technology

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

The Senior Director of Instructional Technology, the Director of Information Technology, school site administrators, and site technology coordinators will track the development and implementation of all appropriate access activities, inventories and accomplishments regularly, and report progress at regular district/site admin meetings. Modifications to our district activities will be made as needed in order to insure that we meet or exceed this measurable objective. The Senior Director of Instructional Technology, the Director of Technology, school site

administrators, and school site tech coordinators will analyze end of school year results annually in June.

## 6. Funding and Budget

6a. List of established and potential funding sources.

### **Established Funding Sources:** District General Fund

Site Budgets

DAS - Cal Teleconnect Fund

E-Rate

Title I district

Title I site

EETT-Formula

Local Funding (parent fund, foundations)

### **Potential Funding Sources:** Regional and National educational foundations

Other Grants

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

Item Description	Year 1	Year 2	Year 3	Funding Source Including E-Rate
<b>1000-1999 Certificated Salaries</b>				
Substitutes and stipends for staff development	\$50,000	\$50,000	\$50,000	
<b>2000-2999 Classified Salaries</b>				
Tech support	\$529,842	\$529,842	\$529,842	
<b>3000-3999 Employee Benefits</b>				

Benefits for certificated and classified	\$249,163	\$249,163	\$249,163	
<b>4000-4999 Materials and Supplies</b>				
Misc. Infrastructure	\$20,000	\$20,000	\$20,000	
Computers	\$200,000	\$200,000	\$200,000	
Printers	\$10,000	\$10,000	\$10,000	
Software	\$50,000	\$50,000	\$50,000	
<b>5000-5999 Other Services and Operating Expenses</b>				
Staff Development Training	\$30,000	\$30,000	\$30,000	
<b>6000-6999 Equipment</b>				
Capitol Outlay (if over \$10,000 purchased at one time)	\$20,000	\$20,000	\$20,000	
Totals:	\$1,159,005	\$1,159,005	\$1,159,005	

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

The district replacement policy for obsolete equipment is every five years. Our district computer replacement budget is approximately 20% per year of our technology budget. This site "Technology Repair and Replacement" funding is expended based on input from the site IT Specialist, the site Technology Committee, the Principal and the Director of Information Technology. An annual estimate of the amount required to fully replace obsolete computers will be made available each year of this Educational Technology Plan by the Director of Technology.

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

Our district is committed to a dependable and sustainable technology plan that ensures funding for reliable infrastructure, hardware, technical support, professional development, and software for all district sites.

The district Senior Director of Instructional Technology and the Director of Information Technology share the primary responsibility and access to appropriate budgets to meet goals and objectives specified in this plan. District budget and funding monitoring is the responsibility of

the Senior Director of Instructional Technology along with the Director of Information Technology who take budget recommendations and revision requests to Cabinet-level meetings and the School Board as needed. Routine district budget analysis and funding opportunities are tracked to ensure optimal leveraging of funds. Site technology budgets are the domain of site principals and school site councils, with guidance from site IT Specialists and technology committees.

District technology support and site-based technology staff provides the district Senior Director of Instructional Technology and the Director of Information Technology ongoing data on technology replacement, upgrade, maintenance, and technical support needs including the annual California School Survey data provided by all sites in the district.

## 7. Monitoring and Evaluation

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

In order to maintain the accuracy and relevance of our Education Technology Plan, it is essential to monitor and, if necessary, revise each component of this plan on an ongoing basis. Ongoing collection of data and the use of that data to inform decision-making is embedded into each objective in our tech plan components under the monitoring and evaluation sections in our plan Criteria components 3, 4, & 5.

Our evaluation instruments include standardized testing results, such as Smarter Balance and CAHSEE, software and proficiency surveys, classroom observations, and District Graduation requirement results. We will use these instruments, reviewed in regular technology, instructional or administrative meetings, to evaluate progress towards each of our established benchmarks. Already a part of District process, we will expand the scope of the reviews to ensure that we have provided appropriate technology resources as outlined in the action plans associated with each goal. Further information can be found in the charts associated with each goal (pages 24, 26, 28, 30, 32, 34, 36, 42, 44, 46, 50, 51, 52, 57)

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

Each identified objective in our Technology Plan will be reviewed and evaluated monthly by the district Senior Director of Instructional Technology, who has the overarching responsibility for ensuring that our goals and objectives are monitored, adjusted as necessary, and accomplished and by our Technology Advisory Committee.

The following chart specifies who is responsible for the monitoring and evaluation activities *and an approximate amount of monthly work contract time to be spent on the activities.*

Job Title(s) of Responsible Individual(s)	Responsibilities
Senior Director of Instructional Technology	Provide overall Tech Plan management and coordination
Assistant Superintendent of Educational Services	Manage, coordinate, and assess curriculum-based technology staff development
Senior Director of Instructional Technology	Assess, plan, implement, monitor, and evaluate technology integration staff development aligned to curriculum. Provide support to site-based technology coaches.

Director of Information Technology	Standardize, develop, manage, monitor, and revise as necessary network, hardware, infrastructure, software, and technical support specifications, policies, and procedures.
Senior Director of Instructional Technology	Collect staff development data on technology proficiencies through the completion of the EdTechProfile.(i-assessment)
Senior Director of Instructional Technology	Coordinate ongoing partner involvement with community and private schools.
Assistant Superintendent of Educational Services	Collect and analyze data regarding students' computer skills and students' academic achievement
Senior Director of Instructional Technology	Provide and / or facilitate necessary Ed Tech professional development for the district based on data.
Senior Director of Instructional Technology	Collect data regarding staff development focused on teaching students computer and information literacy skills
Assistant Superintendent of Educational Services / Senior Director of Instructional Technology	Collect data regarding staff development focused on integration of technology into the curriculum to improve academic achievement
Assistant Superintendent of Educational Services	Use collected data to monitor and evaluate progress toward benchmarks and the timeline and to plan and make modifications.
Senior Director of Instructional Technology / Site Ed Tech Specialist	Collect annual California School Technology Survey data and assist with pre and post I-assessment completion.

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

The district's core Technology Advisory Committee is comprised of the district Senior Director of Instructional Technology, Director of Information Technology, technology staff, District and site level classified employees, as well as teachers, administrators, parents and students. The Technology Advisory Committee will track the development and implementation of all activities and accomplishments on a regular basis. Technology planning issues, successes and setbacks will be communicated between the Technology Advisory Committee via e-mail and the learning management system, Edmodo, on an ongoing basis. As appropriate, this information will also be disseminated to the entire district staff through a monthly technology newsletter. Data, progress, and any needed revisions to the plan will be reviewed during six Technology Advisory Committee meetings during the school year (one every other month). In addition, progress reports on the District Technology Plan objectives will continue to be a standing agenda item at District meetings.

## 8. Collaborative Strategies with Adult Literacy Providers

The Tamalpais Union High School District has always provided facilities for the district's adult literacy program. In the evenings, Tamalpais Adult & Community Education services have utilized all five of the district's high schools for academic, continuing education and personal enrichment classes. For the most part, the Adult & Community Education population has benefited from the district's technology plan in terms of facilities and hardware (computer labs) and instructional applications (pre-bundled software and other academic and professional applications like Rosetta Stone English Language Acquisition software, PLATO adult basic skills software, and keyboarding programs), as well as professional programs (Photoshop, Dreamweaver, Flash, Premier and more).

One example of a collaborative strategy with the adult literacy program to help TUHSD students has been the Adult School's ASE (adult secondary education) program, which serves concurrent high school students as well as adults. The Adult & Community Education program, which includes literacy, has the advantage of working with the district and being able to provide current and relevant technology with its collaboration that serves literally thousands of Marin County residents.

The adult literacy program is required to annually revise its own technology plan. In the last two years, the adult literacy program has consulted with the district technology team for input and to gain support and backing on their tech plan. Additionally, a representative of the Adult & Community Education programs has participated with the district's Technology Committee.

TUHSD's Adult Education program offers classes in the following state mandated areas;

- English as a Second Language
- Adult Literacy (basic education, GED and HS Diploma)
- Career and Technical Education
- Adults with Disabilities

Current Adult Literacy Partnership Providers (other than our district) in our county include:

- Even Start at San Pedro Elementary School (San Rafael City Schools District) Community Based English Tutoring (CBET). Because the San Rafael City School District cannot fund a family literacy program within their Even Start program, we have a Memo of Understanding to use our CBET grant money to fund a family literacy class at one of their elementary school sites. Parent and children participate in interactive literacy activities.

- Marin Conservation Corps, located in the Canal neighborhood of San Rafael also has an MOU with our school to offer literacy programs at their site. Currently, we run ESL and GED preparation classes at the Conservation Corps.
- College of Marin has entered several partnerships with our school including the classes offered at the Conservation Corps and as conveners of the County ESL Task force. We are an official addendum GED test sites for the College of Marin.
- The Marin County ESL Task Force is a consortium of literacy providers in Marin County and includes our agency, San Rafael City Schools, Marin Literacy Project, Novato Unified School District, College of Marin, and the Marin Conservation Corps. Meetings have been convened by the College of Marin and have been very useful in establishing a grid of options for adult literacy students to understand their options for study.

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

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

Our technology plan lists clear goals and strategies for integrating technology into the curriculum to improve student learning in all content areas. The learning objectives are based on the California State Academic Content Standards and Common Core State Standards. The following relevant research was examined and integrated into our plan. The research we selected emphasizes best practices for technology integration in the curriculum, Total Cost of Ownership, and important factors that contribute to successful staff development.

The Tamalpais Union High School District's philosophy is that the use of technology should be integrated into the curriculum at all levels in order to improve student achievement. Technology should not be a separate content taught for its own sake. Technology improves student performances when the application directly supports the curriculum objectives being assessed. Alignment of project or lesson content with state content standards is an important first step in infusing technology into the curricula. A survey of 465 teachers in California resulted in 92% affirming that the starting point in infusing technology into the curriculum is having information about the specific content of a program or use of an application that aligns with state-adopted curriculum standards. A number of respondents indicated that an online resource that profiles electronic learning resources with the specific skills and knowledge in areas that align with the content standards would facilitate the selection of programs enabling the integration of technology with the curriculum (Cradler & Beuthel, 2001)

In an ACOT study student engagement remained highest when technology use was integrated into the larger curricular framework, rather than being an "add-on" to an already full curriculum (Sandholz et al, 1997). Research suggests that when technology is integrated into the larger instructional framework, students will gain both technical expertise and content knowledge (Silverstain et al, 2000). Moreover, using technology within the curricular framework can enhance important skills valued in the workplace, such as locating and accessing information, organizing and displaying data, and creating persuasive arguments (Sandholtz et al, 1997; "Critical Issue," 1999).

While our district does offer technology courses, technology integration will not be taught in isolation. Staff development has, and will continue to emphasize the use of technology as a powerful teaching and learning tool that engages students while addressing content standards within the curricular, instructional framework and adopted curriculum.

*The Learning Return On Our Educational Technology Investment: A Review of Findings from Research*, WestED (Ringstaff and Kelley, June 2002) is an extensive report that examines many studies related to educational technology and school reform. Several key factors are identified a crucial elements for successfully using technology:

- Technology is best used as one component in a broad-based reform effort

- Teachers must be adequately trained to use technology
- Teachers may need to change their beliefs about teaching and learning
- Technological resources must be sufficient and accessible
- Effective technology use requires long-term planning and support
- Technology should be integrated into the instructional framework

These key elements are addressed in several places in our Technology Plan. They are best found in the areas aligning technology with curricular and professional development goals emphasizing technology-enhanced, standards-based curricular lessons and units.

Our revised Education Technology Plan 2014-2017 includes all the research-based best practices integrated in:

- **The *EETT Technology Plan*** research-based requirements for formula and competitive grant applications for Title II, Part D in *No Child Left Behind*.  
<http://www.ed.gov/policy/elsec/leg/esea02/pg35.html#sec2414>
- ***Education Technology Planning: A Guide for School Districts***. California's research-based guidelines for district-level educational technology planning.  
<http://www.cde.ca.gov/ls/et/rd/edtechguide.asp>
- ***COSN, Total Cost of Ownership (TCO)***

TCO Tool offers schools a formalized process for assessing the costs of managing their technology investments. Costs for wireless communications, voice/data integration and e-learning.

[http://classroomtco.cosn.org/gartner\\_intro.html](http://classroomtco.cosn.org/gartner_intro.html)

In our district technology plan, professional development is a primary focus and CTAP Online ([www.ctaponline.org](http://www.ctaponline.org)) is at the heart of our technology skill and integration professional development program. In September of 2002, the California Department of Education released the document: **Learning...Teaching...Leading...Report of the Professional Development Task Force**(<http://www.cde.ca.gov/re/pn/fd/documents/learnteachlead.pdf>) which contained 10 recommendations for developing a comprehensive, aligned, and integrated statewide system of professional development that will sustain the continued growth of a highly-qualified teacher and administrator workforce. Among the recommendations, CTAP Online web-based professional development portal was specifically identified as the primary example of a, “... **Web-based support system for teachers and administrators that is available at all times and includes standards-based curriculum resources, professional development resources, and facilitated online training.**” (pp 37-38, *Learning...Teaching...Leading.*)

In addition CTAP Online matches up against the design elements for high quality professional development as outlined in the *Designs for Learning*. *Designs for Learning* was developed by the California Professional Development Reform Initiative, which was sponsored by the California Department of Education with support from the California Professional Development

Consortia, the Center for the Future of Teaching and Learning, the California Staff Development Council, and the New Teacher Center. <http://www.cde.ca.gov/pd/ps/te/designs4lrng.asp>

Becker, J.H., and Riel, M.M. (2000). Teacher professional engagement and constructivist-compatible computer use, Center for Research on Information Technology and Organizations. Retrieved September 23, 2002, online [http://www.crito.uci.edu/tlc/findings/report\\_7/startpage.html](http://www.crito.uci.edu/tlc/findings/report_7/startpage.html)

This report describes a number of aspects of the professional engagement of American teachers. It also examines relationships between professional engagement and teaching practice, including instruction involving computer use. We defined professional engagement as a teacher taking effort to affect the teaching that occurs in classrooms other than his or her own. We measured professional engagement by (1) the frequency that a teacher had informal substantive communications with other teachers at their school, (2) the frequency and breadth of professional interactions with teachers at *other* schools, and (3) the breadth of involvement in specific peer leadership activities-mentoring, workshop and conference presentations, and teaching courses and writing in publications for educators.

Our Education Technology Plan is consistent with the Becker research in the following ways: (1) Teachers collaborate with various staff to produce and practice technology integrated technology activities. (2) Teachers are provided with the opportunity to attend sessions every semester both online and face-to-face that cover basic-to-advance use of technology; and (3) Our key (technology proficient) teachers are involved in leadership activities such as coaching, facilitating, and modeling the effective use of instructional technology.

Marzano, R, and Magana, S. (2014). *Enhancing the art & science of teaching with technology*. Indiana: Marzano Research Labs.

This book is a follow up to an earlier work, *The Art and Science of Teaching*, and includes a summary of the research supporting a variety of instructional strategies with proven successes in improving student achievement and how these practices are augmented with instructional technology. The research-based strategies include 1) identifying similarities and differences; 2) summarizing and note-taking; 3) reinforcing effort and providing recognition; 4) homework and practice; 5) nonlinguistic representations; 6) cooperative learning; 7) setting objectives and providing feedback; 8) generating and testing hypotheses; and 9) cues, questions, and advance organizers.

Mishra, Koehler and Kereluik (2009) express an philosophy of instructional technology that is aligned with our district's. "If technology is truly to be beneficial to education, the power and potential of educational technology must be acknowledged to reside within educators and not within objects" (Marzano and Magana, 2014, p. 19)

A variety of instructional strategies and technologies will be used to assist teachers and students in acquiring Information and technology literacy skills and all content areas. As described in the research, the used of nonlinguistic representations such as graphic organizers are effective tools for supporting understanding of key concepts, and graphic representations are highly effective tools for supporting new concepts and vocabulary. Simulation software allows students to

generate and test hypotheses quickly and efficiently. Using presentation software to organize information, coupled with using a printed copy of the presentation to assist in note-taking skills, helps students to better identify key concepts and summarize critical information. Consistent with the research, our curricular and staff development goals include the use of concept-mapping tools, the use of simulation software and probeware, and PowerPoint handouts to guide students in note-taking.

- 9b. Describe the district's plans to use technology to extend or supplement the district's curriculum with rigorous academic courses and curricula, including distance-learning technologies.

The Tamalpais Union High School District is examining ways to deliver curriculum and professional development using new, innovative, technology-based tools. Our technology plan integrates the development of innovative strategies for using technology including the use of data analysis tools to increase curricular effectiveness, easy to use school and teacher web publishing software, and implementing wireless networking throughout the District.

Our district is committed to increasing course offerings through the use of technology. The district is investigating novel approaches to advanced level courses for our students. The district is also investigating video conferencing capabilities at school sites in order to enhance instruction through collaborative learning projects, to deliver courses from different sites, to allow for students and teachers to collaborate with peers and experts.

In the past two years our district has launched two separate instructional technology initiatives. The first is the Instructional Technology Teacher Collaborative, which is a two year program aimed at permanent status teachers looking to enrich their practice. The program focuses on improving instructional delivery methodologies while integrating technology to enrich learning. Our core belief is that instructional technology must be utilized in service of attaining a specific content area learning goal. The second initiative included two small learning communities at one of our comprehensive high schools. Seven teachers worked closely to develop a program for 9th and 10th grade students that focused on project based learning and technology integration. The teachers involved in the pilot received ongoing instructional technology coaching through the New Tech Network. Next year this program will grow to include ten teachers.

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

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

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

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

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

<p><b>e. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire the technology skills and information literacy skills needed to succeed in the classroom and the workplace.</b></p>		<p>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.</p>	<p>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.</p>
<p><b>f. List of goals and an implementation plan that describe how the district will address the appropriate and ethical use of information technology in the classroom so that students and teachers can distinguish lawful from unlawful uses of copyrighted works, including the following topics: the concept and purpose of both copyright and fair use; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; and avoiding plagiarism</b></p>		<p>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.</p>	<p>The plan suggests that students and teachers will be educated in the ethical use of the Internet, but is not specific enough to determine what actions will be taken to accomplish the goals.</p>
<p><b>g. List of goals and an implementation plan that describe how the district will address Internet safety, including how students and teachers will be trained to protect online privacy and avoid online predators.</b></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><b>h. Description of or goals about the district policy or practices that ensure equitable technology access for all students.</b></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><b>i. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs.</b></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><b>j. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to improve two-way communication between home and school.</b></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><b>k. Describe the process that will be used to monitor the Curricular Component (Section 3d-3j) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.</b></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><b>4. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 5 and 12 (Appendix D).</p>	<p><b>Page in District Plan</b></p>	<p><b>Example of Adequately Addressed</b></p>	<p><b>Example of Not Adequately Addressed</b></p>

<p><b>a. Summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development.</b></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>b. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing professional development opportunities based on your district needs assessment data (4a) and the Curriculum Component objectives (Sections 3d - 3j) of the plan.</b></p>		<p>The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing teachers and administrators with sustained, ongoing professional development necessary to reach the Curriculum Component objectives (sections 3d - 3j) of the plan.</p>	<p>The plan speaks only generally of professional development and is not specific enough to ensure that teachers and administrators will have the necessary training to implement the Curriculum Component.</p>
<p><b>c. Describe the process that will be used to monitor the Professional Development (Section 4b) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.</b></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><b>5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 6 and 12 (Appendix D).</p>	<p><b>Page in District Plan</b></p>	<p><b>Example of Adequately Addressed</b></p>	<p><b>Example of Not Adequately Addressed</b></p>

<p><b>a. Describe the existing hardware, Internet access, electronic learning resources, and technical support already in the district that will be used to support the Curriculum and Professional Development Components (Sections 3 &amp; 4) of the plan.</b></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>b. Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed by the district's teachers, students, and administrators to support the activities in the Curriculum and Professional Development components of the plan.</b></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 implementation of the district's Curriculum and Professional Development components.</p>	<p>The plan includes a description or list of hardware, infrastructure, and other technology necessary to implement the plan, but there doesn't seem to be any real relationship between the activities in the Curriculum and Professional Development Components and the listed equipment. Future technical support needs have not been addressed or do not relate to the needs of the Curriculum and Professional Development Components.</p>
<p><b>c. List of clear annual benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components identified in Section 5b.</b></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><b>d. Describe the process that will be used to monitor Section 5b &amp; the annual benchmarks and timeline of activities including roles and responsibilities.</b></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>

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

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

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

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

Education Technology Plan Review System (ETPRS)  
Contact Information

County & District Code: 21 - 65482

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

LEA Name: Tamalpais Union High

\*Salutation: Dr.

\*First Name: Tara

\*Last Name: Taupier

\*Job Title: Senior Director of Instructional Technology

\*Address: 395 Doherty Dr

\*City: Larkspur

\*Zip Code: 94939

\*Telephone: 415-945-1055

Fax: (415) 945-1055

\*E-mail: ttaupier@tamdistrict.org

Please provide backup contact information.

1st Backup Name: Michael McDowell

E-mail: mmcdowell@tamdistrict.org

2nd Backup Name: Rose Chavira

E-mail: rchavira@tamdistrict.org

\* Required information in the ETPRS