THERMALITO UNION SCHOOL DISTRICT EDUCATION TECHNOLOGY PLAN

July 1, 2010 - June 30, 2015
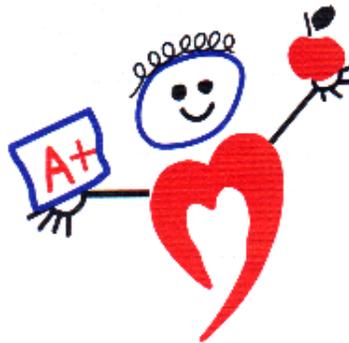
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District Name:	Thermalito Union School District
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Acknowledgments

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Parents / Students
School Site Councils

Government Agencies
CTAP Region 2, Ed Tech Coordinator – Nancy Silva

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District Profile

Current Mission Statement

The Thermalito Union School District Technology Committee believes that technology presents students, staff and the community with a powerful means to accomplish the aspirations we hold in common. Furthermore, we believe technology must be used to accomplish the following:

- Enhance instruction to improve student achievement
- Empower students to meet the Academic Content Standards
- Enhance communication among home, school and community
- Support staff and students in their use of technology

We also believe that it is our responsibility to:

- Maintain and establish a district-wide infrastructure standard
- Secure/allocate funding to implement the Technology Plan
- Monitor, evaluate and update the Technology Plan.

Thermalito Union School District School Data				
	Number of Schools	**Total Enrollment**	**# Full-Time Equivalent Teachers**	**Pupil-Teacher Ratio**
Elementary	3	910	55	16.6
Middle	1	490	27	18.2
Alternative	2	15	2	8
Total	**6**	**1415**	**84**	**16.9**

Thermalito Union District, Student & Teacher Data				
	District %			**District %**
American Indian	3	**English Learners**		34
Asian	32	**Students with Disabilities**		6
Pacific Islander	0	**Graduates (prior year)**		n/a
Filipino	0	**UC/CSU Eligible Grads (prior year)**		n/a
Hispanic	8	**Mobility**		
African American	1	**% Fully Credentialed Teachers**		100
White	**44**	**Avg. Pupil / Teacher Ratio**		16.9
Multiple/No Response	**11**	**Avg. Class Size**		
Total	**100**	**% Free or Reduced Price Meals**		82

Thermalito Union District State Accountability: Academic Performance Index		
2008 API Base	**2009 API Growth**	**Growth in the API from 2008 to 2009**
691	**709**	**18**

Thermalito Union District Federal Accountability: Adequate Yearly Progress		
Made AYP 2008-09: No		
	Met AYP Criteria English-Language Arts	**Met AYP Criteria Mathematics**
Percent Proficient	No	No
Participation Rate	Yes	Yes
API - Additional Indicator for AYP	No	
Graduation Rate	N/A	
PI Status	PI year 3	

Section 1: Tech Plan Vision & Duration

Plan Duration

The Thermalito Union School District educational technology plan covers five years, from July 1, 2010 through June 30, 2015. It will serve as the primary tool to guide the District's acquisition, sustainability, and integration of technology to support the District's curricular goals. This plan will be monitored periodically by District curriculum, data, and technology administrators, and school administrators 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 Board of Trustees. The District Technology Coordinator will then work with the Superintendent to implement any required revisions directly with site-based administrators.

Section 2: Stakeholders

The Thermalito Union School District Technology Committee consists of a variety of school district personnel including: the Superintendent, District Technology Coordinator, the Director of Maintenance, Operations, and Transportation, Information Systems Analyst, Site Administrators, Site Representatives as well as other staff trained in the use of technology as a tool for learning. Some members serve as community members as well as District employees. The team shall meet as needed to work on topics related to the technology plan. Some meetings will require all day meetings, and some will take place after school.

These five components are:
- Curriculum
- Professional Development
- Infrastructure, Hardware, Technical Support and Software
- Funding and Budget
- Monitoring and Evaluation

Stakeholder Support of Tech Plan

The following list identifies the variety of stakeholders that participated in our district's tech planning process.

District Curriculum Personnel – Superintendent, Director of Instructional Services, Curriculum, Assessment and Instruction co-coordinators
Development & Support Roles: Representatives on our Tech Plan team 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, monitor school performance, and make adjustments based on school performance.

District Technology Personnel –District Technology Coordinator and Information Systems Analyst
Development & Support 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 –Finance Director
Development & Support Roles: Representatives on our Tech Plan team provide coordination of technology funds and budget issues.

Site Administration –Site Principals and Dean of Students
Development & Support Roles: Representatives on our Tech Plan team provide site-based updates on tech 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 –Teacher representation from our elementary schools and middle school.
Development & Support Roles: Representatives on our Tech Plan team 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 – School Site Councils
Development & Support Roles: Representatives on our Tech Plan team 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 – The California Technology Assistance Project (CTAP) Region 2; BCOE; ITS
Development & Support Roles: The CTAP representative 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; K12 Vouchers; compliance issues; hardware, software, and infrastructure.

Community Groups & Businesses –Computers For Classrooms, in Chico CA
Development & Support Roles: Representatives on our Tech Plan team offered assistance with the implementation of our tech plan objectives focused on improving technology access to like-new refurbished computers for families.

Our District continues to solicit, expand, and sustain our partnerships with stakeholders to enhance the integration 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.

Section 3: Curriculum & Data Driven Technology Goals

3a. Current Technology Access

According to current district records, our student to computer ratio **for computers four years old or newer** is 27:1. All teachers in our district have access to a minimum of one multi-media computer with internet access in their classrooms as well as in the Library/Media Center and/ or Computer Labs, before, during, and after school hours. All teachers schedule before and/ or after school access to internet connected computers and electronic learning resources as needed by students to complete classroom activities.

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

Elementary Schools

Poplar Avenue Elementary School	
Enrollment (Unofficial CBEDS 2009)	265
Total # of Computers for Instructional Use	140
Total # of Computers in Classrooms	75
Total # of Internet Connected Computers in Classrooms	75
Total # of Computers in Classrooms older than 48 months	65
Total # of Computers in Classrooms 48 months old or newer	10
Student to Computer Ratio – Computers 48 months old or newer only	27:1
Total # of Computers in Computer Labs	65
Total # of Computers in Library/Media Center	3
Internet Access Connection Speed (DSL, T-1, >T-1)	T-1
Before & After School Student Access to Computers – Days & Time	0

Plumas Avenue Elementary School	
Enrollment (Unofficial CBEDS 2009)	311
Total # of Computers for Instructional Use	144
Total # of Computers in Classrooms	162
Total # of Internet Connected Computers in Classrooms	162
Total # of Computers in Classrooms older than 48 months	149
Total # of Computers in Classrooms 48 months old or newer	11
Student to Computer Ratio – Computers 48 months old or newer only	20:1
Total # of Computers in Computer Labs	0
Total # of Computers in Library/Media Center	6
Internet Access Connection Speed (DSL, T-1, >T-1)	T-1
Before & After School Student Access to Computers – Days & Time	N/A

Sierra Avenue Elementary School	
Enrollment (Unofficial CBEDS 2009)	300
Total # of Computers for Instructional Use	114
Total # of Computers in Classrooms	78
Total # of Internet Connected Computers in Classrooms	78
Total # of Computers in Classrooms older than 48 months	113
Total # of Computers in Classrooms 48 months old or newer	2
Student to Computer Ratio – Computers 48 months old or newer only	150:1
Total # of Computers in Computer Labs	54
Total # of Computers in Library/Media Center	3
Internet Access Connection Speed (DSL, T-1, >T-1)	T-1
Before & After School Student Access to Computers – Days & Time	0

Middle School

Nelson Avenue Middle School	
Enrollment (Unofficial CBEDS 2009)	**491**
Total # of Computers for Instructional Use	169
Total # of Computers in Classrooms	129
Total # of Internet Connected Computers in Classrooms	129
Total # of Computers in Classrooms older than 48 months	62
Total # of Computers in Classrooms 48 months old or newer	**67**
Student to Computer Ratio – Computers 48 months old or newer only	**7:1**
Total # of Computers in Computer Labs	32
Total # of Computers in Library/Media Center	8
Internet Access Connection Speed (DSL, T-1, >T-1)	T-1
Before & After School Student Access to Computers – Days & Time	32

Alternative School

Heritage Community Day School	
Enrollment (Unofficial CBEDS 2009)	6
Total # of Computers for Instructional Use	11
Total # of Computers in Classrooms	2
Total # of Internet Connected Computers in Classrooms	2
Total # of Computers in Classrooms older than 48 months	11
Total # of Computers in Classrooms 48 months old or newer	0
Student to Computer Ratio – Computers 48 months old or newer only	0
Total # of Computers in Computer Labs	9
Total # of Computers in Library/Media Center	0
Internet Access Connection Speed (DSL, T-1, >T-1)	T-1
Before & After School Student Access to Computers – Days & Time	N/A

Pioneer Community Day School	
Enrollment (Unofficial CBEDS 2009)	6
Total # of Computers for Instructional Use	11
Total # of Computers in Classrooms	0
Total # of Internet Connected Computers in Classrooms	0
Total # of Computers in Classrooms older than 48 months	0
Total # of Computers in Classrooms 48 months old or newer	11
Student to Computer Ratio – Computers 48 months old or newer only	0
Total # of Computers in Computer Labs	11
Total # of Computers in Library/Media Center	0
Internet Access Connection Speed (DSL, T-1, >T-1)	T-1
Before & After School Student Access to Computers – Days & Time	N/A

3b. Current Technology Integration in Curriculum

The following data offers a snapshot of the technology skills integrated in our district curriculum by subject area and typical frequency of use by grade level bands.

Subject Area	Typical Uses of Technology	Typical Frequency
English / Language Arts	K-3: Waterford; Accelerated Reader; Word Processing; English In a Flash; Document Camera; Read Naturally; Fluent Reader 4-6: Accelerated Reader; Read 180; Word Processing; Projector and Digital Camera; Unitedstreaming; Document Camera; English In a Flash; Read Naturally; Fluent Reader 7-8: Document Camera; SMART Boards	K-3: Daily/Weekly 4-6: Daily/Weekly 7-8: Daily
Mathematics	K-3: Skills software; Math Facts 4-6: Projectors; Document Cameras; Unitedstreaming; Math Facts 7-8:Document Cameras; SMART Boards; Accelerated Math	K-3: Weekly 4-6: Daily 7-8: Daily
Science	K-3:	K-3:

	4-6: Projector and Digital Camera; Unitedstreaming 7-8: Digital Flex Camera; Pasco Scientific Sensors; Student Response System (clickers); Plasma Monitor; Digital Microscope; SMART Boards	4-6: Daily 7-8: Daily
Social Science / History	K-8: Internet; Digital Projector; Document Camera; Unitedstreaming; Student Response System (clickers)	K-3: 4-6: Daily 7-8: Daily
Electives	7-8:Document Cameras; SMART Boards; Tech Design; Read Naturally; Fluent Reader	7-8: Daily
Special Education	K-3: Waterford, Accelerated Reader 4-6: Waterford, Accelerated Reader; Math Facts 7-8: Projectors; SMART Board; Accelerated Math	K-3: Daily 4-6: Daily 7-8:
Library	K-3: Destiny 4-6: Destiny 7-8: Destiny	K-3: Daily 4-6: Daily 7-8: Daily

3c. Summary of District's Curricular Planning Documents

Thermalito Union 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 district planning documents and efforts. The common underpinning of all our district and school improvement plans is to improve student achievement of the state content standards.

Thermalito District Curricular Goals

Our school board adopts key district goals annually, which are tied to, support the adopted, state approved, content standards in all academic areas, and support the LEA plan. Each of our schools aligns its site-based curricular goals directly to the district's LEA Plan and school board's key goals in their annually updated site-based comprehensive single plans for student achievement.

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

1. All schools in the district will meet or exceed the NCLB Annual Measurable Objectives (AMO's) for student proficiency, including all ethnic/racial, socio-economically disadvantaged and students with disabilities subgroups with the state content standards in English / Language Arts and Math. By June 30, 2014, all students in the district will be proficient or better with English/Language Arts and Math grade level content standards.
2. The district will meet all of its AYP criteria annually including requirements for numerically significant subgroups.
3. All schools in the district will meet or exceed the state's Annual Performance Index (API) growth target as well as the API growth targets for each numerically significant ethnic/racial, socio-economically disadvantaged and students with disabilities subgroups at the school.
4. The district will work with site administration to collect and analyze school and student data and develop continuous cycles and plans for school improvement including: improving curriculum, improving instruction, improving student support & intervention, improving the monitoring of student achievement, and improving home/ school/ and community partnerships.
5. All students will be educated in learning environments that are safe, drug-free, and conducive to learning.

These district goals and corresponding specific measurable objectives that support them can be found in the following district and site comprehensive planning documents.

- California academic content standards and frameworks.
- District and textbook curriculum guides aligned with CA academic content standards.
- District evaluation criteria for textbook adoption.
- District student and teacher technology standards.
- District LEA Plan
- The district plan for English Learners (EL) describes the policies for identifying, assessing, and reporting students who have a primary language other than English. This EL Master Plan provides details on the reclassification procedure and the English Language Development and instructional programs to be provided to EL students to assist them in meeting and/or exceeding state academic content standards and graduation requirements.
- Site–based Single Plan for Student Achievement and SARC from district schools
- The District's current Educational Technology Plan.

3d- 3k Curricular Driven Technology Goals, Implementation Plans, Benchmarks, Timelines, Monitoring and Evaluation
All of the Curriculum Component Criteria 3d-3k elements are included in the curricular driven action plan charts in the Section 3: Action Plan pages that follow. Our curricular driven technology plans include clear, specific, realistic goals and measurable objectives that will support our district's curriculum goals and student achievement of the state content standards.

The following goals will strategically meet our students' need to acquire and refine their 21st century information and communication technology skills in order to improve the effectiveness, efficiency, and ideally the enjoyment of their learning experiences as they master the core content standards.

Here is a summary of our curricular driven Education Technology goals.
Goal 1: Improve Student Achievement & Close Student Achievement Gaps
All K-8 teachers will integrate technology into the district's core instructional program to assist students in meeting academic content standards and district curricular goals.
Goal 2: Student Acquisition of Technology and Information Literacy Skills.
By the 2015 school year, all students will achieve the NCLB goal of being technology literate by 8th grade.
Goal 3: Student Acquisition of Digital Citizenship Skills
Increase students' awareness of safe, secure, legal and ethical use of the Internet and other forms of electronic communications.
Goal 4: Improve Student Data Collection, Analysis & Decision Making
District and school administrators and teachers will use technology to improve the collection, analysis, reporting and use of formative, benchmark, and state student achievement data.
Goal 5: Improve Communication Among Home, School, and Community
All district and school administrators and teachers will use technology to improve communication between home and school.

Goals, objectives, benchmarks, implementation strategies, and timelines can be found in the pages that follow.

THERMALITO UNION SCHOOL DISTRICT
TECHNOLOGY ACTION PLAN
July 1, 2010– June 30, 2015
(Appendix C Sections: 3d-3k)

Section 3d
Goal 1: Improve Student Achievement & Close Student Achievement Gaps
All K-8 teachers will integrate technology into the district's core instructional program to assist students in meeting academic content standards and district curricular goals.
Target Group: All students.

Goal 1: Specific Measurable Objective by June 2015
Objective 1: By June 2015, 100% of all district students will be proficient or better with state grade level standards in math and English Language Arts supported by state and district approved instructional resources, technology-based supplemental resources, professional development, student achievement data-driven decision making, and collaboration time (Professional Learning Community).

Goal 1: Annual Benchmarks for Objective 1
Year 1: minimum of **56.8%** by June 2011   **Year 3:** minimum of **78.4%** by June 2013
Year 2: minimum of **67.6%** by June 2012   **Year 4:** minimum of **89.2** by June 2014
                  Year 5: minimum of **100%** by June 2015

Objective 2: By June 2015, 90% of all district teachers will utilize technology (hardware, software and web-based services) to differentiate instruction and offer varied learning opportunities for all students.

Goal 1: Annual Benchmarks for Objective 2
Year 1: minimum of **50 %** by June 2011   **Year 3:** minimum of **75 %** by June 2013
Year 2: minimum of **65 %** by June 2012   **Year 4:** minimum of **85 %** by June 2014
                  Year 5: maintain a minimum of **90 %** by June 2015

Goal 1: Evaluation Instrument(s) & Data
Instrument 1: Trimester benchmark assessments; Annual STAR/CST test results in English/Language Arts;
Data: Percentage scoring proficient or above

Instrument 2: Grade/subject level district and site professional development and collaboration meeting times / agendas / participation records and outcomes.
Data: Teachers' use of standards-aligned learning objectives, instructional and intervention time, research based programs, practices, and arrangements.

Instrument 3: Annual CDE EdTech Profile online tech proficiency survey (www.edtechprofile.org)
Data: teacher's self assessed technology and integration skills

Data reviewers
Technology Committee

Goal 1: Enhancing Student Achievement with Technology
Implementation Strategies / Timelines

1. Beginning in the 2010-11 school year and continuing through the duration of the tech plan, the LEA/schools will schedule regular professional learning community meetings to develop and refine the district's common viable articulated ELA and math curriculum comprised of common essential grade level content standards, relevant information & communication technology skills and aligned assessments.
2. Annually, the district and the school(s) will invest the necessary time to identify and/ or review grade level essential standards and assessments based on CDE's latest CST Blueprints and released test questions.
3. Annually, purchase as needed state adopted instructional materials (K-8 and supplemental curriculum-based technology resources (adopted and/ or CLRN approved) and ensure they are being used with fidelity in the classroom during monthly classroom visits by school administration.
4. Ongoing, the district, principal, and teachers will research, learn, and integrate research-based best practices and technology that support specific ELA and Math student achievement needs identified during data reviews of significant subgroup populations at the school.
5. Annually, the district and the school(s) will effectively allocate funding, time, training and human resources to overcome the schools identified barriers to student academic achievement.
6. Annually, provide direct instruction in reading at grade level.
7. Every school year, assess students periodically throughout the year with common grade level standards-aligned assessments to monitor student progress and provide immediate intervention support.
8. Annually, provide students with adequate learning support including, but not limited to, a standards-aligned curriculum, quality instructional materials, technology access and resources, support services, and supplies for every pupil.
9. Annually, provide professional development on adopted curriculum and technology resources (such as SB 472 (formerly AB 466) for teachers, AB 430 (formerly AB 75) training for site admins.)
10. Beginning in fall 2010 and every year thereafter, provide systematic professional development and learning community collaboration time for site administration and teachers to align standards-based instruction and quarterly assessments horizontally and vertically through grade levels in the district, review data, learn and share best practices including the use of technology.
11. Annually, continue to leverage grant, district, school, site council, and community resources to increase access to technology resources, hardware, and peripherals for students and teachers.
12. Annually, continue to provide technology productivity and integration training as needed.
13. Ongoing district support and professional development opportunities on the integration of E/LA skills and standards across the curriculum including in career tech courses.

Goal 1: Digital Resources to be Integrated

- Adopted Text Supplemental Tech resources including publisher software and websites.
- CLRN and district approved curriculum software such as: Renaissance Learning, Accelerated Reader, Waterford, United Streaming
- Diagnostic reading, writing, and math proficiency software.
- Microsoft Office and other productivity software.
- Internet Access and Resources,
- Peripherals such as LCD projectors, digital cameras, video cameras, and printers.

Section 3e
Goal 2: Student Acquisition of Technology and Information Literacy Skills
By the 2015 school year, all students will achieve the NCLB goal of being technology literate by 8th grade.

Goal 2: Specific Measurable Objective by June 2015
Objective 1: By June 2015, all students (100%) will demonstrate proficiency with district-adopted grade-level technology standards.

Goal 2: Annual Benchmarks for Objective 1
Year 1: minimum of **60%** by June 2011   **Year 3:** minimum of **80%** by June 2013
Year 2: minimum of **70%** by June 2012   **Year 4:** minimum of **85%** by June 2014
                    Year 5: minimum of **100%** by June 2015

Goal 2: Evaluation Instrument(s) & Data
Instrument: Annual CDE Ed Tech Profile (www.edtechprofile.org)
Data: Students' self assessed technology integration proficiency skills.

Data reviewers
District Technology Committee

Goal 2: Student Acquisition of Technology & Information Literacy Skills
Implementation Strategies / Timelines
1. Continue providing Professional Development opportunities (from the District, and CTAP Region 2) to K-8 teachers on integrating technology standards in their curriculum.
2. Student will continue learning how to effectively utilize technology productivity tools and information literacy, as appropriate, during curricular assignments.

Goal 2: Digital Resources to be Integrated
*   Adopted Text Supplemental Tech resources including publisher software and websites.
*   CLRN and district approved curriculum software such as: Renaissance Learning, Accelerated Reader, and Waterford
*   Web-based student assessment platform (Data Director) and web based student information and reporting platforms (Aeries).
*   Microsoft Office and other productivity software.
*   Internet Resources
*   Peripherals such as LCD projectors, digital cameras, video cameras, and printers.

Sections 3f & 3G
Goal 3: Ethical Use of Technology (Copyright) and Internet Safety
Increase students' awareness of safe, secure, legal and ethical use of the Internet and other forms of electronic communications.

Goal 3: Specific Measurable Objective by June 2015

Objective 1: By June 2015, **100%** of all students in grades K-8 will receive formal instruction on digital citizenship including social, ethical, copyright and cyber safety issues.

Year 1: minimum of **25%** by June 2011   **Year 3:** minimum of **45%** by June 2013
Year 2: minimum of **35%** by June 2012   **Year 4:** minimum of **60%** by June 2014
                    Year 5: minimum of **100%** by June 2015

Goal 3: Evaluation Instrument(s) & Data
Instrument: Percentage of students completing on-line digital citizenship lessons
Data: 100% of students participating in the integration of lesson plans on ethical use of technology including copyright and plagiarism.

Instrument: Annual Ed Tech Profile Survey
Data: teachers' and students' self assessed technology and integration skills

Data reviewers
District Technology Committee

Goal 3: Ethical Use of Technology (Copyright) and Internet Safety
Implementation Strategies / Timelines
1. By fall 2011, all teachers will be offered professional development opportunities on the Ethical Use of Technology and Internet Safety for students aligned to the NETS student standard # 5: Digital Citizenship, offered through CTAP Region 2 or the equivalent.
2. During the 2011-2012 school year, district teachers with support of computer lab technicians will develop a scaffolded, articulated K- 8th grade NETs technology integration curriculum aligned to NETS standard # 5: Digital Citizenship. Curriculum results will be reviewed annually in June and modified as necessary.
3. By fall 2011, roll-out a revised acceptable use policy for students addressing internet safety, cyber bullying, and plagiarism.
4. Beginning in the fall 2012 and then annually thereafter, all K-12th grade students will begin systematically learning grade level NETS standard # 5: Digital Citizenship skills during curricular assignments.

Goal 3: Digital Resources to be Integrated
- Adopted Text Supplemental Tech resources including publisher software and websites.
- CLRN and district approved curriculum software and/ or free Digital Citizenship internet resources
- Microsoft Office Professional Suite and other productivity software.
- Peripherals such as LCD projectors, digital cameras, video cameras and printer.

Section 3h
District Policy on Equitable Access
It is district policy to provide ALL students and teachers with equal access to all of the school's technology to support achievement of the academic standards in the classroom, district curricular goals, and ultimately for success in the workplace. Student subgroups will have access to the same NETS integration activities and high standards expected of all other students, although the programs and methods for achieving the objectives may be adapted to best meet individual student needs.

Section 3i
Goal 4: Efficient & Effective Student Data Collection, Analysis & Decision Making
District administrators and teachers will use technology to improve the collection, analysis, reporting, and use of formative, benchmark, and state student achievement data.

Target Group: All district schools.

Goal 4: Specific Measurable Objectives by June 2015
Objective 1: By June 2015, 100% of all district and school administrators and teachers will access and utilize Data Director to monitor student progress and drive instructional practice.

Goal 4: Annual Benchmarks for Objective 1
Year 1: minimum of 50% by June 2011 Year 3: minimum of 80% by June 2013
Year 2: minimum of 65% by June 2012 Year 4: minimum of 90% by June 2014
Year 5: minimum of 100% by June 2015

Goal 4: Evaluation Instrument(s) & Data
Instrument: Data Director
Data: Data Director usage reports

Data reviewers District Technology Committee

Goal 4: Efficient & Effective Student Data Collection, Analysis & Decision Making
Implementation Strategies / Timelines Use of Technology
1. During the 2010 - 2011 school year and every year thereafter until we meet our June 2015 objective, we will continue the rollout of Data Director integrated student assessment components.
2. Annually, provide systematic professional development and collaboration time (PLC) for administration and teachers to improve student achievement assessment, data collection, analysis, reporting, and data driven decision-making.

Goal 4: Digital Resources to be Integrated
- Data Director
- Aeries
- Excel Spreadsheets

Goal 5: Improve Communication Among Home, School, and Community
All district and school administrators and teachers will use technology to improve communication between school and home.

Target Group: Administrators, teachers, key clerical staff, parents, and the community.

Goal 5: Specific Measurable Objective by June 2015
Objective 1: By June 2015, all teachers (100%) will have pertinent, timely, up-to-date classroom information including classroom/homework assignments and grades posted on Aeries Parent Portal and/or School Center.
Annual Benchmarks for Objective 1
Year 1: minimum of **40%** by June 2011   **Year 3:** minimum of **60%** by June 2013
Year 2: minimum of **50%** by June 2012   **Year 4:** minimum of **70%** by June 2014
Year 5: minimum of **100%** by June 2015

Goal 5: Evaluation Instrument(s) & Data
Instrument: Ongoing "how to access" district SIS communications and/ or trainings, parent password requests, and parent usage records.
Data: 30% of parents requesting passwords; 20% of parents using parent component of Aeries

Instrument: District, school, and teacher websites and communication artifacts
Data: evidence of efforts to improve two-way communication

Data reviewers
District Technology Committee

Goal 5: Improve Communication Among Home, School, and Community
Implementation Strategies / Timelines

1. By fall 2011, ensure all district schools have the hardware, infrastructure, and training needed to implement the parent component of the district's online student information system.
2. By fall 2011, all district schools will be providing all district parents with access and training on using the parent component of the district's online student information system.
3. Annually the LEA will communicate to all stakeholders (teachers, paraprofessionals, parents, and students) via a variety of media (web sites, class and school booklets, classroom posters, newsletters).
4. Annually, continue to fund and maintain, district and school websites where news, announcement, staff contact information, teacher class information, events, etc. are communicated with students and parents.
5. Annually, provide web-publishing software training opportunities for teachers to learn to publish / communicate on their school web site.
6. Annually, provide Word and Desktop publishing training to teachers and classified staff to learn to publish professional documents to improve communication between home, school, and community.

Goal 5: Digital Resources to be Integrated

- Aeries SIS suite.
- Web publishing software.
- Word, desktop publishing, and Outlook e-mail.
- District IT work order management system and equipment inventory database.

Section 3K: Ongoing Monitoring for Continuous Improvement

The district curriculum, data, and Technology Coordinator, school administrators, and the rest of the District Technology Committee will conduct ongoing formative data reviews. The team will meet throughout the school year to track the development and implementation of all tech plan activities and accomplishments. Modifications to our Tech Plan activities will be made as needed in order to insure that we meet or exceed our goals by June 2015. The Technology Coordinator is responsible for a mid-year tech plan implementation status report to stakeholders in February. Annual summative data analysis and needs assessments are conducted in late August / September after the state releases all relevant district data and schools complete early assessments of incoming students. The Technology Coordinator is responsible for an annual summative performance report to stakeholders in October.

Section 4: Professional Development

4a. Summary of District Teachers' & Administrators' Technology Skills

Our Education Technology Plan provides a clear summary of our district teachers', administrators' and students' current technology skills from the CDE's Ed Tech Profile. 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.
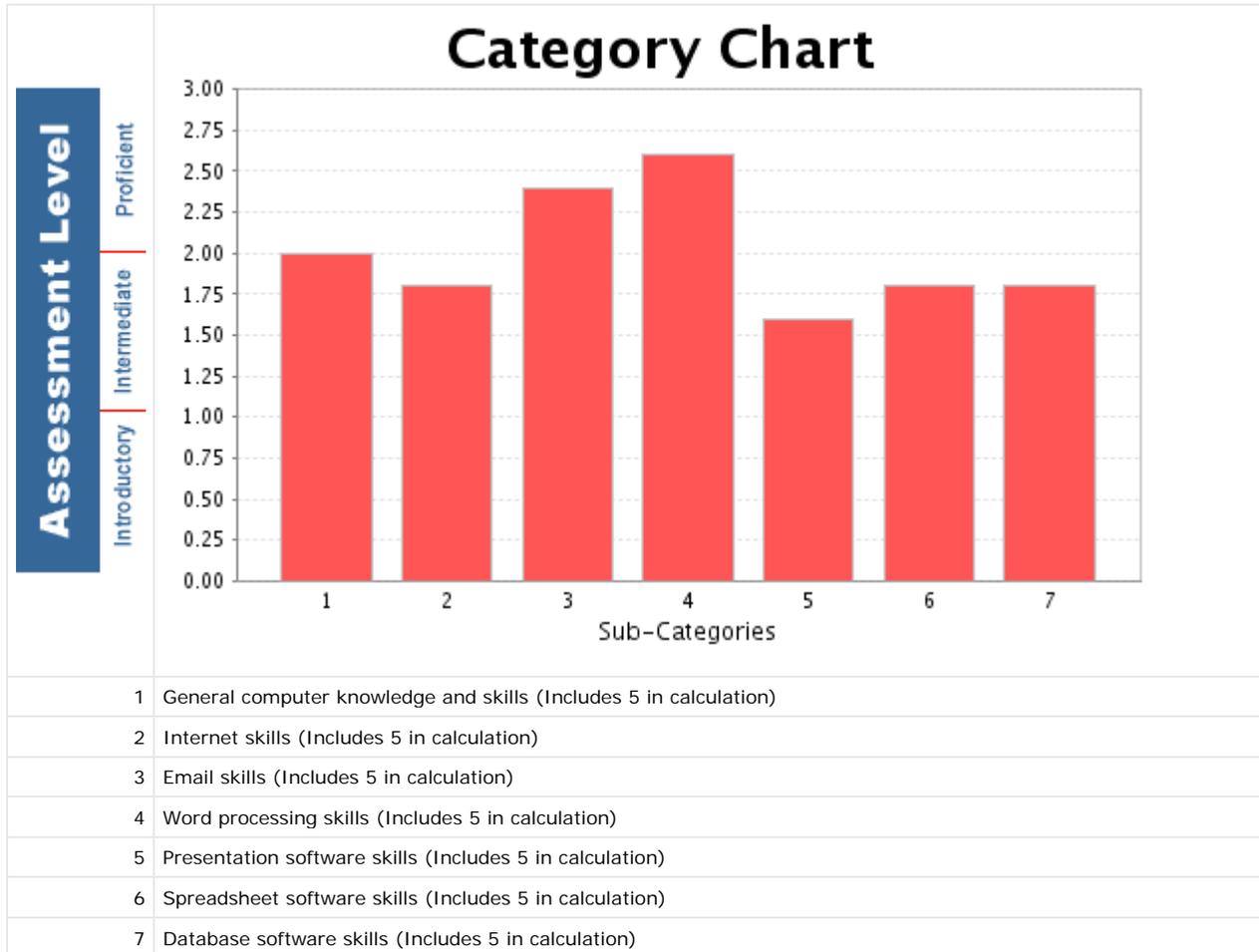
Our district reviews the CDE's Ed Tech Profile survey data and teacher input annually in the spring to plan for district sponsored professional development activities for the next school year. Schools use their site's Ed Tech Profile survey data and teacher input annually to plan for site-based professional development needs.

Site Administrators' Survey Data

The CDE's Ed Tech Profile survey data of district school site administrator's as of September 2009, indicates that most administrators are at the proficient levels with e-mail and word

processing. Administrators are at the intermediate level in general computer knowledge, internet, spreadsheet, and database skills.
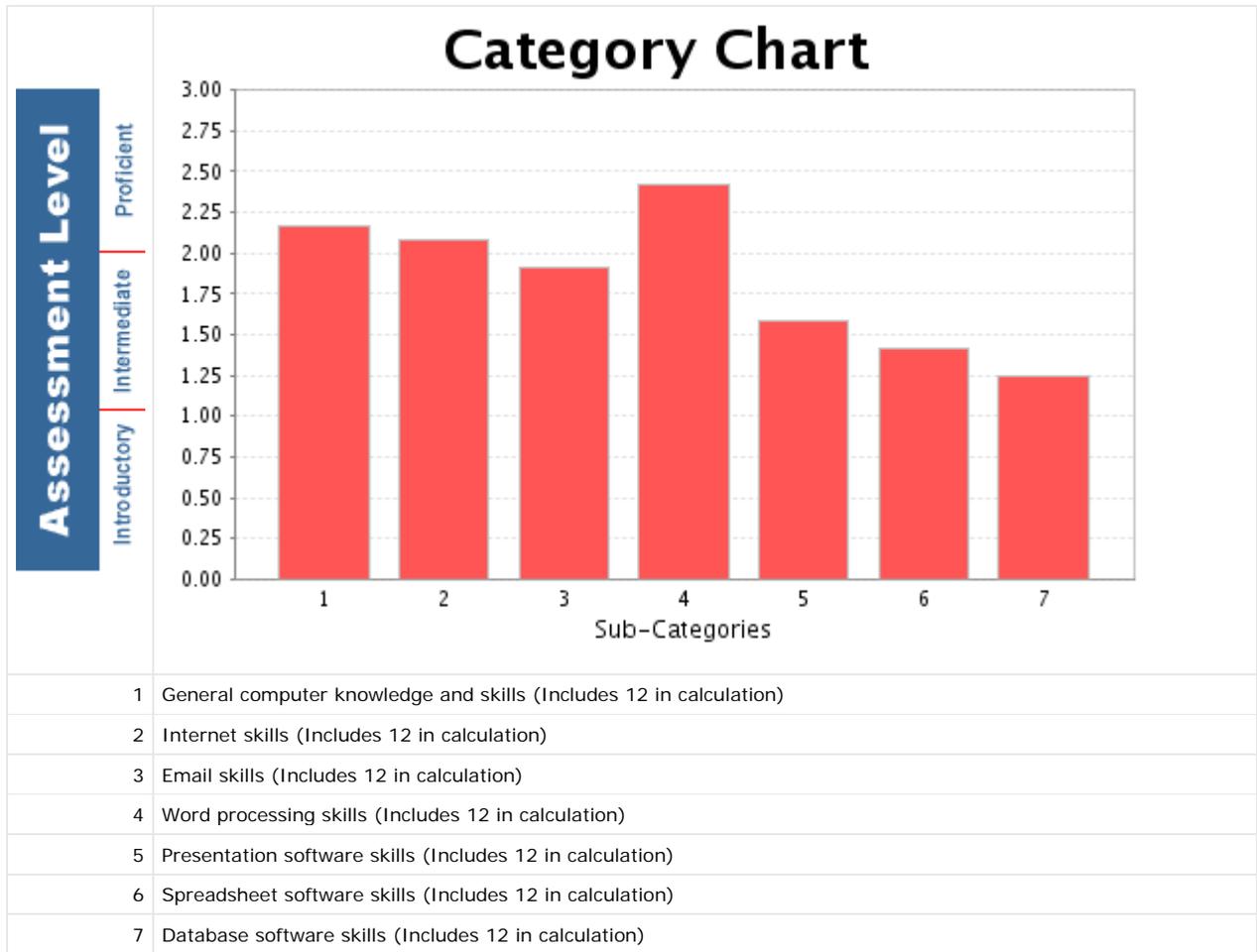
Implication: At this time, **a**dministrators are not in need of professional development opportunities in basic Personal Technology proficiencies. Administrators will be receiving additional training on the district-adopted student assessment management system, Data Director.

	1	General computer knowledge and skills (Includes 5 in calculation)
	2	Internet skills (Includes 5 in calculation)
	3	Email skills (Includes 5 in calculation)
	4	Word processing skills (Includes 5 in calculation)
	5	Presentation software skills (Includes 5 in calculation)
	6	Spreadsheet software skills (Includes 5 in calculation)
	7	Database software skills (Includes 5 in calculation)

District Teachers' Survey Data
The CDE's Ed Tech Profile survey data of district teachers as of September 2009, indicates that most teachers are at similar intermediate levels as administrators with general computing, Internet, e-mail, and word processing and at the introductory level in presentation, spreadsheet, and database skills. However, teachers' technology integration skills are at a basic level across the board.

Implication: Teachers are in the intermediate or proficient range in the basic technology skill areas.

Category Chart

1	General computer knowledge and skills (Includes 12 in calculation)
2	Internet skills (Includes 12 in calculation)
3	Email skills (Includes 12 in calculation)
4	Word processing skills (Includes 12 in calculation)
5	Presentation software skills (Includes 12 in calculation)
6	Spreadsheet software skills (Includes 12 in calculation)
7	Database software skills (Includes 12 in calculation)

In addition, the following district technology training preferences came from 2009 Ed Tech Profile survey data for the district and were factored into our professional development plans.

Teacher needs and preferences regarding the type or level of technology training at their school.	Basic computer/ technology skills	Integrating technology into the curriculum	Neither
I need opportunities to participate in educational technology staff development focused on:	9%	91%	0%

Implication: Although we will continue to offer both Basic Personal Proficiency and Professional proficiency technology integration training, we will offer more curriculum integration opportunities to meet the need.

Teacher needs and preferences regarding technology training format at their school.	One-on-one informal technology training.	Small group technology training.	Online web-based technology training.
The training format I prefer is:	0%	64%	36%

Implication: We will offer small group technology training supported by online web-based resources and provide one on one technology coach site-based support.

Teacher needs and preferences regarding technology training availability at their school.	During the school day.	After school.	In the evening.	On the weekend.	During the summer/off track.
I prefer technology training to be offered:	**17%**	**22%**	**11%**	**17%**	**33%**

Implication: We will attempt to offer technology training at a variety of times, with most offerings during the summer.

4b. Professional Development Goals, Benchmarks, Timelines, Monitoring, and Evaluation.

The Professional Development Criteria 4b elements are included in the teachers' and administrators' professional development action plan charts on the following pages. Our professional development action plans are based on a thorough needs analysis and include clear needs-based goals and measurable objectives that will provide our teachers and administrators with sustained, ongoing professional development necessary to implement the Curriculum Component (Section 3) of our education technology plan.

Goal 1: Teachers will be proficient with the same general technology skills required of their students as well as be proficient with technology integration skills.

Goal 2: District and school administrators and teachers will be proficient with using Data Director to improve student achievement data collection, analysis, reporting, and instructional decision-making.

Goal 3: District administrators, teachers and computer lab clerks will be proficient in use of Aeries Parent Portal, School Center and Connect-Ed to improve two-way communication between home and school.

Our coordinated education technology professional development will be accomplished with a three-tiered approach based on teachers' individual technology training needs.
1.   Annually as needed, we will offer personal proficiency training on NETs skills including general computer knowledge and skills; Internet skills; Email skills; Word processing skills; Presentation software skills; job specific productivity and assessment tools; and Spreadsheet /Database software skills.
2.   Annually as needed, we will offer professional proficiency training on integrating; NETs student standards in math and ELA curriculum (including information literacy, copyright, and cyber safety); curriculum-based software; adopted textbook supplemental electronic resources; online resources such as SETS.
3.   Annually as needed, we will provide technology integration mentor training a computer lab clerk to mentor staff at their school site.

The district will offer a variety of training options such as face-to-face training, online training, collaboration time, and one-on-one coaching. We will maximize the use of existing and free technology and site resources to support the goals and objectives for curriculum, instruction, intervention, and assessment, including but not limited to the following:

- Annually provide face-to-face NETS technology skill and technology integration professional development opportunities provided by the district, the county office, and CTAP Region 2 based on student, teacher, and administrator technology proficiency data and District curricular goals.
- Content and grade-band specific technology integration face-to-face professional development offered by the district, the county office, and CTAP Region 2, and free online resources.
- Annual completions of the Ed Tech Profile survey and professional development data analysis to track improvements and training needs.
- Identification, training, and use of low and no cost Internet, video-conferencing and face-to-face learning opportunities and resources.
- We will also rely on the district, the county office, and CTAP Region 2 resources, and the Statewide Education Technology Services (SETS) which includes: California Learning Resource Network (CLRN- http://www.clrn.org/)- 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- http://www.portical.org/) - 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- http://www.techsets.com/) - which provides technical professionals in California schools improved access to training, support and other resources.

The professional development criteria 4b. is addressed in the teachers' and administrators' professional development action plan charts in the Section 4 pages that follow.

THERMALITO UNION SCHOOL DISTRICT
TECHNOLOGY PROFESSIONAL DEVELOPMENT
July 1, 2010 – June 30, 2015

Section 4b
Goal 1 –Technology Literacy & Integration
Teachers will be proficient with the same general technology skills required of their students as
well as be proficient with technology integration skills.
Target Group: Certificated teachers

Goal 1: Specific Measurable Objectives by June 30, 2015
Objective 1: By June 2015, 90% of the teachers, who participate in district sponsored
educational technology professional development, will become proficient with general
technology knowledge, skills and tools, technology integration skills, and information literacy
skills.

Annual Benchmarks for Objective 1
Year 1: minimum of 50% by June 2011   Year 3: minimum of 70% by June 2013
Year 2: minimum of 60% by June 2012   Year 4: minimum of 80% by June 2014
Year 5: minimum of 90% by June 2015

Goal 1: Evaluation Instrument(s) & Data
Instrument 1: Pre and post Ed Tech Profile completed for all district sponsored Education Technology
professional development programs
Data: Administrators' and teachers' self assessed technology and integration skills

Data reviewers
District Technology Committee will analyze end of school year results annually between June and
September and report to stakeholders annually in October.

Goal 1: Technology Literacy & Integration
Implementation Strategies / Timelines
1. Annually in the fall and spring, require administrator and teacher completion of Ed Tech Profile
    survey by all who participate in district sponsored technology training programs.
2. Annually, in June, analyze administrator and teacher Ed Tech Profile survey data to plan for
    professional development offerings during the following school year.
3. Annually, provide Ed Tech Profile workshops to teachers, administrators, and district or site Ed Tech
    Profile admins.
4. Annually in the fall, schedule and promote district sponsored technology workshops for
    administrators and for teachers during the school year aligned to district curricular goals, the content
    standards, to the NETs, assistive technology, and to identified Ed Tech Profile professional
    development needs. Encourage all paraprofessionals to participate in training as well.
5. Annually in the fall, schedule and promote district sponsored technology integration and CLRN
    approved curriculum-based software and resource workshops for Math and ELA teachers by grade
    bands (K-2, 3-5, 6-8,) during the school year aligned to the content standards and to identified Ed
    Tech Profile tech integration needs.
6. Annually, the district will train and support site-based Technology Integration Mentors (TIMs) to
    support teachers, paraprofessionals, and administrators at the site level.
7. Annually, 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 periodic benchmark assessments horizontally and vertically through grade levels in the district.

Goal 1: Digital Resources to be Integrated

- Microsoft Office Suite, e-mail, Internet.
- Diagnostic reading, writing, and math proficiency software.
- Peripherals such as LCD projectors, digital cameras, video cameras, and printers.
- CLRN approved curriculum-based software
- Online resources including SETs and CDE's Ed Tech Profile

Goal 2 - Using Technology to Support Data Driven Instruction

District and school administrators and teachers will be proficient with using Data Director to improve student achievement data collection, analysis, reporting, and instructional decision-making.

Specific Measurable Objectives by June 30, 2015

Objective 1: By June 2015, as a result of district-sponsored trainings, 100% of teachers and 100% of district and site administrators will be proficient with Data Director (or equivalent) to collect and analyze assessment data and with making data-driven decisions to meet individual student academic needs and targeted student interventions.

Annual Benchmarks for Objective 1

Year 1: minimum of **50%** by June 2011   **Year 3:** minimum of **80%** by June 2013
Year 2: minimum of **65%** by June 2012   **Year 4:** minimum of **90%** by June 2014
                    Year 5: minimum of 100% by June 2015

Objective 2: By June 2015, 100% of district administrators will be able to analyze school and district-wide data to facilitate/support school level instructional goal-setting, planning and implementation and measure growth in student achievement.

Annual Benchmarks for Objective 2

Year 1: minimum of **50%** by June 2011   **Year 3:** minimum of **80%** by June 2013
Year 2: minimum of **65%** by June 2012   **Year 4:** minimum of **90%** by June 2014
                    Year 5: minimum of 100% by June 2015

Goal 2: Evaluation Instrument(s) & Data

Instrument: Annual teacher and admin Ed Tech Profile completions for all district sponsored Education Technology professional development programs.
Data: Administrators' and teachers' self assessed use of electronic learning assessment systems and data analysis skills.

Instrument: District and site-based SIS training agendas and records
Data: Professional development participation correlated with proficiency in Ed Tech Profile survey

Instrument: District electronic learning assessments system training participation records and usage records
Data: 100 % of teachers and administrators trained and using electronic learning assessments system to inform instruction.

Data reviewers

District Technology Committee

Goal 2: Using Technology to Support Data Driven Instruction
Implementation Strategies / Timelines
1. Annually, require administrator and teacher completion of Ed Tech Profile survey by all who participate in district sponsored technology training programs.
2. Annually, in June, analyze administrator and teacher Ed Tech Profile survey data to plan for technology integration and electronic productivity tool professional development offerings during the following school year.
3. Annually by September, 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.
4. Annually in the fall, schedule and promote district sponsored technology workshops for administrators and for teachers during the school year on all Aeries SIS components.
5. Annually in the fall, 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.
6. Annually in the fall, schedule and promote district sponsored technology workshops for administrators and for teachers during the school year on the district's integrated electronic learning assessment system, Data Director.
7. Annually, 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 horizontally and vertically through grade levels in the district.

Goal 2: Digital Resources to be Integrated
- Microsoft Office Suite, e-mail, Internet.
- Aeries and Data Director
- Electronic learning assessment and diagnostic applications
- Peripherals such as LCD projectors, digital cameras, video cameras, and printers.
- Online resources including SETs and CDE's Ed Tech Profile

Goal 3 – Improve Communication between Home, School, and Community
District administrators, teachers and computer lab clerks will be proficient in use of Aeries Parent Portal and the district's online web site tool - School Center to improve two-way communication between home and school.

Target Group: Teachers, administrators, and clerical staff

Goal 3: Specific Measurable Objectives by June 30, 2015
Objective 1: By June 2015, 50% teachers will be proficient and regularly utilize the district's web site software, School Center.

Annual Benchmarks for Objective 1
Year 1: minimum of **15%** by June 2011   **Year 3:** minimum of **30%** by June 2013
Year 2: minimum of **20%** by June 2012   **Year 4:** minimum of **40%** by June 2014
                          Year 5: minimum of **50%** by June 2015

Objective 2: By June 2015, 90% of teachers, 100% of school administrators and 100% of school administrative secretaries will be proficient with using Aeries Parent Portal to provide pertinent and timely student information including student attendance, classroom assignments, homework assignments and grades

Annual Benchmarks for Objective 2
Year 1: minimum of **50%** by June 2011 **Year 3:** minimum of **70%** by June 2013
Year 2: minimum of **60%** by June 2012 **Year 4:** minimum of **80%** by June 2014
Year 5: minimum of **90%** by June 2015

Goal 3: Evaluation Instrument(s) & Data

Instruments: District records of the number of teachers trained to use the district's suite of SIS applications for communicating timely student attendance and achievement info to parents.
Data: Percentage of teachers trained; Percentage of parents requesting passwords and instructions; Percentage of parents accessing artifacts from district, schools, and teachers.
Data: evidence of efforts to improve two-way communication via the parent connect portion of district SIS.

Data reviewers
District Technology Committee

Goal 3 – Improve Communication between Home, School, and Community

Implementation Strategies / Timelines

1. Annually, require administrator and teacher completion of Ed Tech Profile survey by all who participate in district sponsored technology training programs.

2. Annually, in June, analyze Ed Tech Profile administrator and teacher student information/ data analyses results to plan for professional development offerings during the next school year.
3. Annually in the fall, schedule and promote district sponsored technology workshops for administrators, clerical and for teachers on using Microsoft Word and other desktop publishing software.
4. Annually in the fall, schedule and promote district sponsored technology workshops for administrators and for teachers on the district's web-based student information (i.e. Aeries) and reporting system and School Center web site tools.
5. Annually in the fall, schedule and promote district sponsored technology workshops for parents.
6. By spring 2011, schedule and promote district-sponsored workshops for administrators, clerical, and teachers on district / school web site development using district applications. Continue training annually.

Goal 3: Digital Resources to be Integrated

*   Aeries SIS suite of applications
*   District's Web publishing application – School Center
*   Email client software and online, remote access.
*   Low cost , no cost online resources including SETs
*   CDE's Ed Tech Profile

4C: Ongoing Monitoring for Continuous Improvement

The district technology coordinator will track tech plan implementation monthly and report progress at our monthly district/ site admin meetings. The district curriculum, data, and Technology Coordinator, school administrators, and the rest of the District Technology Committee will conduct ongoing formative data reviews. The team will meet quarterly to track the development and implementation of all tech plan activities and accomplishments. Modifications to our Tech Plan activities will be made as needed in order to insure that we meet or exceed our goals by June 2015. The Technology Coordinator is responsible for a mid-year tech plan implementation status report to stakeholders in February. Annual summative data analysis and professional development needs assessments will be conducted between June and September, after the state releases all relevant district data and schools complete early assessments of incoming students. The annual professional development needs assessments will drive district

professional development offerings during the school year. The Technology Coordinator is responsible for an annual summative performance report to stakeholders in October.

Section 5: Infrastructure, Hardware, Software, & Technical Support

Since the use of technology is not possible without infrastructure, hardware, technical support and software, The TUSD Technology Committee will continue to discuss, monitor, revise and make recommendations for keeping technology on the forefront here at TUSD. All technology related expenditures and implementation plans are reviewed through this committee. This gives us a chance to work together as a District and focus our efforts more effectively. Management and coordination of technical support is an ongoing collaborative partnership including but not limited to Site Administration, District Coordinator of Technology, Computer Lab Technicians, Butte County Office of Education and the Information Systems Analyst.

Technology Support Services

Services related to software and hardware is provided to sites and administrative offices in two basic forms.

1. All Macintosh products are supported by site computer lab technicians and BCOE Information Technology Service (ITS).

2. All Windows-based products and the WAN and LAN are supported by site computer lab technicians and BCOE Information Technology Service (ITS).

Standards

In order to meet the needs of the curriculum goals stated in this plan, the District Technology Committee has determined that the following standards be met as funding and training allows.

Office Administration Standards
- When hardware and/or software do not meet the needs of its intended use, efforts shall be made to upgrade or replace the hardware and/or software.
- Replacement options include new purchases, trading/transferring workstations to best fit the user's needs.
- Exceptions will be made on an individual basis with consultation with ITS, District Information Systems Analyst, administration, and consistent with our Technology Plan.

Server standards for the WAN/LAN for District and site levels
- Accept BCOE / ITS recommended server standards in general.

Data protection and systems security
- Security layer on the wireless and wired technology will be installed.
- Standards for terms of use will be monitored, enforced, reviewed and updated as necessary.

Data backup of servers

- Tape rotation implementation schedule shall be developed in conjunction with ITS.
- Off-site storage and different storage capabilities shall be developed and implemented.

Site Level Standards

- One lab at each site-30 stations in each lab-1 teacher station and/or access to a wireless mobile lab.
- Appropriate space for lab that is reserved for that purpose.
- Purchase District licensing for software and hardware through a consortium, such as CAL Save when possible.
- Each teacher has a laptop.
- LCD projector at each site available for checkout.
- Digital copier at each site.
- 100% of classrooms will be model classrooms, as outlined below (each site has workstations, printers, peripherals, etc.)

Minimum standards for each classroom

K-3 Classrooms
- Network connections: 8 per classroom
- Computers: 2-4
- Printers: 1 laser printer and/or access to networked laser or digital copier
- Peripherals: Digital Camera and digital projector
- Teacher Station: laptop.

4-5 Classrooms
- Network connections: 8 per classroom
- Computers: 4-6
- Printers: 1 laser printer and/or access to networked laser or digital copier
- Peripherals: Digital Camera and digital projector
- Teacher Station: laptop.

6-8 Classrooms
- Network connections: 8 per classroom
- Computers: 4-6
- Printers: 1 laser printer and/or access to networked laser or digital copier
- Peripherals: Digital Camera and digital projector
- Teacher Station: laptop.

Heritage and Pioneer Community Day Schools
- Network connections: 8 per classroom
- Computers: 2-4
- Printers: 1 laser printer and/or access to networked laser or digital copier
- Peripherals: Digital Camera and digital projector
- Teacher Station: laptop.

Infrastructure

Each campus and administrative building will need an updated server for curriculum delivery and student use, as well as a server for teacher use for data manipulation. The District currently uses a fiber optic backbone from MDF's to IDF's and Ethernet from IDF's to classrooms. This network requires technical and financial support to maintain and keep them operational. The District is actively seeking ways to maintain and upgrade the existing telecommunications infrastructure; obsolete equipment will be replaced as needed. Designated employees will use the district assigned cell phones for increased communication capabilities and student safety. (Maps are available at Maintenance, Operations and Transportation, and at Butte County Office of Education-ITS.)

Thermalito Union School District will continue to aggressively seek funding and adequate resources to meet the levels of infrastructure as stated above. Through grants such as EETT, ERATE, and District funds, we will continue to equip sites and administrative buildings with what is needed to implement curriculum and staff development goals.

Future purchases in the Thermalito Union School District will follow the guidelines specified in the CAL Save, WSCA, ITS Purchasing Policy (see appendices). All future hardware purchases will require purchase of a warranty and funds should be budgeted with each purchase to provide maintenance and upkeep. The Thermalito Union School District Technology Committee will establish guidelines and processes for disposing and replacing obsolete equipment. Part of this process will include making recommendations for software and hardware upgrades as necessary.

Current District Hardware

(See pages 80-97 for complete list of current hardware.)
Maintain current infrastructure:
Network:
- Gigabit Fiber WAN Backbone
- Gigabit Fiber Campus Backbone
- 10/100/1000mb LAN

Servers:
- Keep current maintenance contracts for servers

5a: Current Status
Maintain current infrastructure:
Network:
- Gigabit Fiber WAN backbone
- Gigabit Fiber Campus Backbone
- 10/100/100mb LAN

Servers:
- Keep current maintenance contracts for servers

At the District Office
Current Infrastructure
Gigabit fiber uplink to Internet via Butte County Office of Education. Gigabit fiber LAN backbone. 10/100/1000 copper connection to workstations.

Current Hardware
Network Equipment: Cisco routers and switches, with the exception of Apple Airport Extreme Wireless Access points.
Severs: HP ML 370 series servers, with the exception of a single Apple XServe G5.
Server Operating Systems: Windows Server 2003 Standard Edition.
Services: Microsoft Active Directory, Domain, Microsoft Exchange 2003 mail system.

Current Electronic Learning Resources/Software
Standard District Management Applications: Aeries SQL student attendance system.
VersaTrans RP bus routing software. Follett Destiny library management software.
Office Applications: Microsoft Office 2003, IFAS, Work Order System, Adobe Pro
Curriculum Applications: Waterord Early Learning. Renaissance Place. Scholastic Read 180 Suite, Read Naturally.

Current Technical Support
The district has a support contract with the county office of education to provide technical support 3 days a week. In the event of an emergency, the county will also respond within one hour. Student Information System support is Aeries Eagle Software. Each site has Computer Lab Technicians, or Media Clerks

At elementary, middle school and alternative education school sites
Current Infrastructure
Gigabit fiber uplink to Internet via Butte County Office of Education. Gigabit fiber LAN backbone. 10/100/1000 copper connection to workstations.

Current Hardware
Network Equipment: Cisco routers and switches, with the exception of Apple Airport Extreme Wireless Access points.
Severs: HP ML 370 series servers, with the exception of a single Apple XServe G5.
Server Operating Systems: Windows Server 2003 Standard Edition.
Services: Microsoft Active Directory, Domain, Microsoft Exchange 2003 mail system.

Current Electronic Learning Resources/Software
Standard District Management Applications: Aeries SQL student attendance system.
VersaTrans RP bus routing software. Follett Destiny library management software.
Office Applications: Microsoft Office 2003, IFAS, Work Order System, Adobe Pro
Curriculum Applications: Waterford Early Learning. Renaissance Place. Scholastic Read 180 Suite, Read Naturally.

Current Technical Support
The district has a support contract with the county office of education to provide technical support 3 days a week. In the event of an emergency, the county will also respond within one hour. Student Information System support is Aeries Eagle Software. District Information System Analyst and each site has part-time Computer Lab Technicians.

5b: District Needs Over the Next Five Years

District Office Needs

Infrastructure Needs
Replace end of life Cisco switches. Maintain maintenance contracts on currently supported Cisco equipment.

Hardware Needs
Migrate to VMWare vSphere to consolidate servers. Any new server's setup will run Windows Server 2008. Upgrade e-mail system to Exchange 2007.

Electronic Learning Resources/Application Needs
None

Technical Support Needs
None

Physical Plant Modifications Needs
Relocate server room to a more climatically controlled environment.

At Nelson Avenue Middle School

Infrastructure Needs
Maintain current infrastructure
Network:
- Gigabit Fiber WAN backbone
- Gigabit Fiber Campus Backbone
- 10/100/100mb LAN

Servers:
- Keep current maintenance contracts for servers

Hardware Needs
Update student/teacher/staff computers

Electronic Learning Resources/Application Needs
None

Technical Support Needs
None.

Physical Plant Modifications Needs
None.

At Plumas Avenue Elementary School

Infrastructure Needs
Maintain current infrastructure:
Network:
- Gigabit Fiber WAN backbone
- Gigabit Fiber Campus Backbone
- 10/100/100mb LAN

Servers:
- Keep current maintenance contracts for servers

Hardware Needs
Update student/teacher/staff computers

Electronic Learning Resources/Application Needs
Read 180

Technical Support Needs
None.

Physical Plant Modifications Needs
None.

At Poplar Avenue Elementary School

Infrastructure Needs
Maintain current infrastructure:
Network:
- Gigabit Fiber WAN backbone
- Gigabit Fiber Campus Backbone
- 10/100/100mb LAN

Servers:
- Keep current maintenance contracts for servers

Hardware Needs
Update student/teacher/staff computers

Electronic Learning Resources/Application Needs
Read 180

Technical Support Needs
None.

Physical Plant Modifications Needs
None.

At Sierra Avenue Elementary School

Infrastructure Needs
Maintain current infrastructure:
Network:
- Gigabit Fiber WAN backbone
- Gigabit Fiber Campus Backbone
- 10/100/100mb LAN

Servers:
- Keep current maintenance contracts for servers

Hardware Needs
Update student/teacher/staff computers

Electronic Learning Resources/Application Needs
Renaissance Place

Technical Support Needs
None.

Physical Plant Modifications Needs
Improve climate controls in the server room. Air Conditioning is optimal.

At Pioneer Community Day School

Infrastructure Needs
Maintain current infrastructure:
Network:
- Gigabit Fiber WAN backbone
- Gigabit Fiber Campus Backbone
- 10/100/100mb LAN

Servers:
- Keep current maintenance contracts for servers

Hardware Needs
Update student/teacher/staff computers

Electronic Learning Resources/Application Needs
Read 180

Technical Support Needs
None.

Physical Plant Modifications Needs
Improve climate controls in the server room. Air Conditioning is optimal.

At Heritage Community Day School

Infrastructure Needs
Maintain current infrastructure:
Network:
- Gigabit Fiber WAN backbone
- Gigabit Fiber Campus Backbone
- 10/100/100mb LAN

Servers:
- Keep current maintenance contracts for servers

Hardware Needs
Update student/teacher/staff computers

Electronic Learning Resources/Application Needs
Read 180

Technical Support Needs
None.

Physical Plant Modifications Needs
Improve climate controls in the server room. Air Conditioning is optimal.

5c: Annual Benchmarks, Action Steps, Timelines, and
Annual Benchmarks for Infrastructure:
Years 1-5 : Maintain current infrastructure and upgrade LAN if funding becomes available.

Action Steps & Timeline:
1. Submit Erate 470 form annually in the fall and include router/switch upgrades as needed.
2. If Erate application is approved, the selected Erate vendor will upgrade district school sites annually as needed.

Annual Benchmarks for Hardware:
Year 1: By June 2011, replace 12-15 of existing instructional/administrative computers district-wide > than 48 months old.
Year 2: By June 2012, replace 12-15 of existing instructional/administrative computers district-wide > than 48 months old.
Year 3: By June 2013, replace 12-15 of existing instructional/administrative l computers district-wide > than 48 months old.
Year 4: By June 2014, replace 12-15 of existing instructional/administrative l computers district-wide > than 48 months old.
Year 5: By June 2015, replace 12-15 of existing instructional/administrative computers district-wide > than 48 months old.

Action Steps & Timeline:
1. Annually in the spring, alt school site/ district administrators will include a budget line item for replacing existing instructional computers > than 48 months old.
2. Annually in the summer, the district will ghost and replace instructional computers district-wide > than 48 months old at school site.

Annual Benchmarks for Electronic Resources:
Years 1-5: If funding becomes available during the implementation of this five year ed tech plan, the district will improve climate controls in the all district and school server rooms.

Action Steps & Timeline:
1. Annually review ed tech budget to ascertain if funding is available to improve climate control in server rooms.
2. As funding becomes available, purchase and install Reading 180 software over the summer.
3. Annually, as needed, provide teacher training on Reading 180 software.

Annual Benchmarks for Physical Plant Modifications:
Years 1-5: If funding becomes available during the implementation of this five year ed tech plan, the district will purchase Reading 180 software for its community day schools.

Action Steps & Timeline:
1. Annually review ed tech budget to ascertain if funding is available to purchase and sustain Reading 180 software.
2. If funding becomes available, improve climate control in server rooms.

Section 5d: Benchmark Monitoring and Evaluation Process
The District Technology Coordinator and school site administrators will track the accomplishment of benchmarks and the implementation of necessary action steps and inventories. Modifications to our district activities will be made as needed in order to insure that we meet or exceed annual benchmarks. District Technology Coordinator, school site admins., and school site tech coordinators will analyze progress annually in September and report to district stakeholders in October.

Section 6: Education Technology Funding & Budget

6a. Established and Potential Funding Sources

Established Funding Sources

Our school district receives varied federal, state, and local sources of funding. These include state categorical funds, lottery funds, K12 Voucher, Erate discounts, CA DAS discounts, Title II Part A, Title III, Title IV, Title V, Title VI – Subpart 1 and GATE funds. However, economic conditions in California and the nation may continue to affect K-12 education budgets and grants through the duration of our 5-year tech plan. Therefore, our established and potential funding sources to implement our Ed. Technology Plan may be impacted as well.

The district General Fund generally covers the costs for:
* The salaries for the Information Technology Services staff
* The student information system (SIS), including implementation & training costs.
* The student learning assessment system, including implementation & training costs
* Internet Connectivity costs that are not covered by Erate
* Equipment, resources, and tools used by the Information Technology Services department.
* Elementary grades standards-based report card system

The district Ed Tech budget pays for:
* Teacher technology staff development to meet Ed Tech curricular goals (basic and integration proficiencies)
* Teacher & school webpage design and publishing resources and training
* Advanced training for our IT technical staff
* Extra technical help for special project deployment
* Security and productivity applications
* Some hardware costs as the ed tech budget allows.

The continued need for up-to-date student and teacher computers (4 years old or newer) and for site technical help are the biggest budget challenges for technology in our district. District and Site Ed Tech budgets from various sources help pay for needed hardware. School site budgets often choose to pay for additional site-based technical support, educational software, additional computers & peripherals, etc. as their budgets allow.

Potential Funding Sources

Potential additional funding sources include additional K12 Vouchers to be released to Round One voucher applicants; ongoing EETT Formula funds; new Federal, State, and Private Grants; new block grants and other categorical funds.

Given the uncertainty of our Ed Tech sources of funding, we have established the following priorities list to guide budget allocation:
1. Increase up to date student and teacher computers and productivity software
2. Purchase curricular software & associated internet subscriptions
3. Improve technical support at school sites and reduce response time
4. Upgrade infrastructure

6b. Estimate of Annual Implementation Costs

While the charts that follow project realistic total costs of implementing our district's technology plan, actual amounts the district office will expend in each year of our tech plan will be contingent on fiscal realities as well as district office priorities each academic school year. During the spring/summer of each school year for the duration of our tech plan, we will review, revise, and update our tech plan to align with our annual Ed Tech budget realities.

Category	Item Description 2010-11 Projected Expenditures	Estimated TCO Year One	ERATE* Eligible Amount ?	Year One Funding Source(s) for Non ERATE Eligible items
1000-1999 Certificated Salaries	Substitutes and stipends for staff development	$4,500	N/ A	Title IID
2000-2999 Classified Salaries	Tech Support Salaries	N/ A	N/ A	N/ A
3000-3999 Employee Benefits	Benefits for certificated and classified related to Ed Tech Plan	$900	N/ A	N/ A
4000-4999 Books and Supplies	Misc. Infrastructure	$2,000	$1,800	$200 - Title IID
	Computers	$12,000	N/ A	Title I/Title IID
	Printers	$1,500	N/ A	Title I
	LCD Projectors	$4,000	N/ A	Title I/MAA/EETT Grant
	Misc. Other Peripherals	$1,000	N/ A	Title I/MAA/EETT Grant
	Productivity Software	$500	N/ A	Title IID/General Fund
	ELRs –(Electronic Learning Resources)	$3500	N/ A	Title I/EETT Grant
	ELARs – (Electronic Learning Assessment Resources)	$5,000	N/ A	Title I/EETT Grant
5000 -5999 Services, operating expenses, travel	Staff Development Prof. Dev	$18,000	N/ A	Title I/EETT Grant
	Telecommunication Services (Internet Access & Basic Phone)	$26,000	$23,400	$2600 -General Fund
	BCOE Tech Support Services	$170,000	$153,000	$17,000 -General Fund
	Web Site Publishing & Hosting	$1,000	$900	$ 100- General Fund
6000-6999	Capitol Outlay	N/ A	N/ A	General Fund
TOTALS		**$249,900**	**$179,100**	**$70,800**

(*see annual ERATE supplement for details)

Our district has estimated the Total Cost of Ownership (TCO) of our Ed Tech Plan accounting for all the major cost factors over the duration of the plan. Please note that all of the budget figures in the chart that follows are TCO estimates and will only be expended if funding is available.

Total Cost of Ownership for 5 year Tech Plan	yr 1	yr 2	yr 3	yr 4	yr 5
Ed Tech Professional Development Stipends and Supplies	**$4,500**	**$4,500**	**$4,500**	**$4,500**	**$4,500**
TCO Hardware & Peripherals	**$18,500**	**$18,500**	**$18,500**	**$18,500**	**$18,500**
TCO Productivity Applications, Electronic Learning Resources, Online Subscription Services, and Upgrades	**$9,000**	**$9,000**	**$9,000**	**$9,000**	**$9,000**
TCO Networking,Telecommunications Services, Misc. Infrastructure	**$28,000**	**$28,000**	**$28,000**	**$28,000**	**$28,000**
TCO Web site hosting / Publishing services	**$1,000**	**$1,000**	**$1,000**	**$1,000**	**$1,000**
TCO Contracted Services Prof. Development, Internet Access, Tech Support, and/or Retrofitting	**$188,900**	**$188,900**	**$188,900**	**$188,900**	**$188,900**
Total Estimated Cost Per Year	**$249,900**	**$249,900**	**$249,900**	**$249,900**	**$249,900**
Five Year Total Cost of Ownership Cost Estimate	**$1,249,500**				
Minus potential Erate Discounts of over 5 years	**$-895,500** **$354,000 5 year TCO Estimate**				

6c. District's Replacement Policy for Obsolete Equipment

The district's replacement policy for obsolete equipment is to replace all equipment that are more than four years old, but ultimately, replacement is dependent on annual fiscal realities as well as district priorities each academic school year. Site administrators work with the district technology staffs to determine whether the obsolete computers can be repurposed for less demanding applications or upgraded, or whether they are no longer able to support any of the current programs and processes that are required to implement the curricular goals of the school. If the computers cannot be repurposed at the site or worth upgrading, the equipment is deemed obsolete. A local compute**r** refurbishing entity picks-up any re-useable electronic components at no cost to the district.

6d. District's Budget and Funding Monitoring Process

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 school sites.

The district superintendent, school board, Technology Coordinator and Site Administrators have the primary responsibility for funding goals and objectives specified in this plan. In addition, the district technology committee, reviews the ed tech budget and purchases during regularly scheduled quarterly meetings and provides input on any budget adjustments that are deemed necessary by the Superintendent and the Technology Coordinator. The Technology Coordinator takes budget recommendations and revision requests to cabinet-level meetings and the School Board as needed. The Chief Business director will monitor ed tech implementation costs as part of the district's regular budget and purchase order processing. The Technology Coordinator, district technology committee, and parent organizations routinely research new funding opportunities for district education technology. School site technology budgets are the domain of site principals and school site councils.

Section 7: Monitoring & Evaluation of Technology Plan

7a. Evaluation Process

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 and continuous improvement is embedded in our tech plan components under the moni**t**oring and evaluation components in sections 3, 4, & 5. These sections of the tech plan include specific evaluation

instruments and data that will be collected on an ongoing basis and analyzed annually to assess the tech plan's impact on teaching and learning.

Each identified objective in our Technology Plan will be reviewed and evaluated monthly by the District Technology Coordinator, who has the overarching responsibility for ensuring that our goals and objectives are monitored, adjusted as necessary, and ultimately achieved. In addition, the district's Technology Committee will track the development and implementation of all activities and accomplishments during quarterly meetings as well as review the latest data and any needed revisions to the plan. Between meetings, the District Technology Coordinator communicates tech planning issues and setbacks to committee members and solicits feedback via e-mail and voice-mail on an ongoing basis. In addition, the Technology Coordinator is responsible for providing stakeholders with a formative assessment of tech plan implementation every February and an annual summative evaluation report in October.

7b. & 7c.: Annual Monitoring, Evaluation and Communication of Tech Plan
The following chart specifies the monitoring and evaluation annual timeline as well as the process and frequency of communicating results to tech plan stakeholders.

Annual Monitoring, Evaluation and Communication of Tech Plan Implementation and Impact

Person(s) Responsible	Process	Monitoring	Evaluation
District Technology Coordinator & Tech. Committee	Provide overall Tech Plan management and coordination	Ongoing	Ongoing
District Technology Coordinator, Tech. Committee, and Curriculum Director	Manage, coordinate, implement, monitor, and evaluate curriculum-based technology integration staff development.	Ongoing	Annually in June
District Technology Coordinator, Tech. Committee, and Curriculum Director	Manage, coordinate, implement, monitor, and evaluate staff development focused on teaching students NETS skills.	Ongoing	Annually in June
District Technology Coordinator & Tech. Committee	Coordinate, manage, and evaluate technology budget, acquisitions, installation, and maintenance.	Ongoing	Annually in August
District Superintendent, Technology Coordinator, & Tech. Committee	Standardize, develop, manage, monitor, and revise as necessary network, hardware, infrastructure, software, and technical support specifications, policies, and procedures.	Ongoing	Annually in August
District Superintendent, Technology Coordinator, & Tech. Committee	Collect and analyze staff development data on technology proficiencies through the annual completion of the EdTechProfile survey.	Annually April / May	Annually in June
District Superintendent, Technology Coordinator, & Tech. Committee	Coordinate ongoing tech committee and stakeholder involvement.	Ongoing	Annually in August
District Technology Coordinator, Tech. Committee, and Data Director	Collect and analyze data regarding students' NETS skills and students' academic achievement	Ongoing	Annually in August
District Superintendent and Technology Coordinator	Communicating tech plan implementation update to stakeholders including the district school board.	Annually in February and whenever circumstances warrant	N/A
District Superintendent and Technology Coordinator	Communicating annual tech plan evaluation results to stakeholders including the district school board. Parents and the community will receive annual reports via the district web site, newsletters, and press releases.	N /A	Annually in October after all tech plan data for the year is in.

Section 8: Adult Literacy and Technology

Our school district hosts Reading and Technology Family Involvement Nights as well as other parent involvement activities. Adult literacy classes are available via the Oroville Union School District Adult Education program and through the local community college, Butte College. Our district will work with the county adult literacy program and Butte College to develop a plan for supporting the technology training needs of our parents and community members.

Section 9: Effective, Research-Based Strategies

9a. Summary of Relevant Research

Our technology plan lists clear goals and strategies for integrating technology into the curriculum to improve student learning in the specific areas of English/ Language Arts and Math. The learning objectives are based on the California State Academic Content 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.

Our revised education technology plan 2010-2015 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
- **CoSN, Total Cost of Ownership (TCO)Tool**
  The TCO Tool offers schools a formalized process for assessing the costs of technology investments. https://k12tco.gartner.com/home/default.aspx

Curriculum Component Research

Our plans to integrate technology in the curriculum align with the recommendations from the Partnership for 21st Century Skills white papers that follow as well as research from WestEd:

"21st Century Skills Assessment." (2007). Partnership for 21st Century Skills. 4 Sep 2008 <http://www.21stcenturyskills.org/documents/21st_century_skills_assessment.pdf>. (21st Century Skills Assessment, 2007)

> This white paper (epaper) explains the elements that are the critical systems necessary to ensure student mastery of 21st century skills, with a focus on assessment. 21st century standards, assessments, curriculum, instruction, professional development and learning environments must be aligned to produce a support system that produces 21st century outcomes for today's student.

"21st Century Curriculum and Instruction." (2007). Partnership for 21st Century Skills. 4 Sep 2008 <http://www.21stcenturyskills.org/documents/21st_century_skills_curriculum_and_instruction.pdf>. (21st Century Skills Assessment, 2007)

> This white paper (epaper) explains the elements that are the critical systems necessary to ensure student mastery of 21st century skills, with a focus on curriculum and instruction.

"21st Century Skills Standards." (2007). Partnership for 21st Century Skills. 4 Sep 2008
<http://www.21stcenturyskills.org/documents/21st_century_skills_skills.pdf>. (21st Century
Skills Assessment, 2007)

      This white paper (epaper) explains the elements that are the critical systems necessary to
      ensure student mastery of 21st century skills, with a focus on standards.

"21st Century Skills Development." (2007). Partnership for 21st Century Skills. 4 Sep 2008
<http://www.21stcenturyskills.org/documents/21st_century_skills_development.pdf>. (21st
Century Skills Assessment, 2007)

      This white paper (epaper) explains the elements that are the critical systems necessary to
      ensure student mastery of 21st century skills, with a focus on skills.

WestEd (2003). The learning return on our educational technology investment. San Francisco:
WestEd.

      Co-authors Loretta Kelley and Cathy Ringstaff report that "As schools invest heavily
      computer-based technology, they can benefit from the experiences and research of others
      focusing on the impact of this technology on student learning."

      This paper, produced by WestEd's Regional Technology in Education Consortium,
      summarizes major research findings related to technology use and, based on these
      findings, attempts to draw out implications for educators, policymakers, and the public.
      It provides guidance, intended primarily for people developing school or District
      Technology Plans, on the conditions that need to be in place for computer-based
      technology to have the most impact on student learning.

Professional Learning Component Research

**We will use the following research-based resources as the basis of our Professional
Development implementation plan:**

McKenzie, J. (1999). How teachers learn technology best. Bellingham, WA: FNO Press

      Jamie McKenzie looks at how educators learn technology effectively, outlining the myths
      and realities of professional learning and clearly spelling out the necessary steps to
      engage teachers with technology. He discusses issues of adult learning ("androgogy")
      and explains that adult learning should involve the learners in activities that match their
      individual interests, needs, and developmental readiness. For readers wanting more depth
      in particular aspects, McKenzie includes many website addresses.

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

      The authors have analyzed a 10-year research study of the Apple Classroom of
      Tomorrow (ACOT) school sites. The centerpiece of the study is the five-phase model of
      instructional evolution in technology-rich classrooms: entry, adoption, adaptation,
      appropriation, and invention. The model describes a shift in instructional style, from
      traditional to constructivist, that the authors believe takes place as teachers become expert
      technology users, leading to new levels of confidence and willingness to experiment with
      instruction.

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

<http://www.21stcenturyskills.org/documents/21st_century_skills_professional_development.pdf>. (21st Century Skills Assessment, 2007)

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

We will use the following research-based resources as the basis of our Copyright, Fair Use, and Safe & Responsibility Use of the Internet curriculum and professional development:
"Copyright." Copyright and Fair Use. (2008). US Copyright Office. 4 Sep 2008 <http://www.copyright.gov/>.

> Site introduces copyright basics, copyright laws, fact sheets and FAQs, along with a link to Taking the Mystery out of Copyright – a tour for students and teachers. Site also provides guidelines for Fair Use.

"Copyright & Fair Use." Stanford Copyright & Fair Use Center. (2008). Stanford Copyright & Fair Use Center. 4 Sep 2008 <http://fairuse.stanford.edu/>.

> Site provides primary materials, guide books, articles, and even videos on copyright laws and fair use issues.

Willard, Nancy. "Recent Reports and Articles." Center for Responsible Internet Use. 4 Sep 2008 <http://www.cyberbully.org/documents/>.

> Director Nancy Willard provides provides research and outreach services to address issues of the safe and responsible use of the Internet. Articles are pertinent to parents, educators, librarians, policy-makers, and others regarding effective strategies to assist young people in gaining the knowledge, skills, motivation, and self-control to use the Internet and other information technologies in a safe and responsible manner.

Infrastructure, Hardware, Technical Support, and Software Component Research

The following is an example of the research-based resources we will use as the basis of our funding priorities in regards to purchasing Infrastructure, Hardware, Technical Support, and Software Component Research.

McKenzie, J., (2000). Beyond technology: Questioning, research and the information literate school. Bellingham, WA: FNO Press.

> Jamie McKenzie voices his concerns that once they install networks, many schools discover they've paid too little attention to learning goals and a purpose that might mobilize teachers to embrace the new technologies with enthusiasm. McKenzie describes how questioning, research and information literacy can become driving forces so that even skeptics and late adopters acknowledge the value of the venture.

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

> The authors have analyzed a 10-year research study of the Apple Classroom of Tomorrow (ACOT) school sites. The centerpiece of the study is the five-phase model of instructional evolution in technology-rich classrooms: entry, adoption, adaptation, appropriation, and invention. The model describes a shift in instructional style, from traditional to constructivist, that the authors believe takes place as teachers become expert technology users leading to new levels of confidence and willingness to experiment with instruction.

Tomei, L. (2002). The technology façade. Boston: Allyn and Bacon.

The author looks at human factors, financial investment, commitment of resources, and instructional strategy as essential components to effective Technology Planning. He emphases importance of technology tools connecting to classroom curriculum.

The chart below includes additional research-based strategies that we will consider while implementing our tech plan.

Tech Plan Section	Research Source	Research based strategies that we plan to integrate.
Curriculum, Reading & Writing Technology Skills	Marzano, What Works in Schools, 2003.	"The defining characteristics of schools producing unprecedented gains in student achievement is that they rely on data to identify probable successful interventions."
Information Literacy Skills History/Social Studies	*Critical Issue: Using technology to improve student's achievement*, 1999 NCREL web site.	"Using technology within the curriculum framework can enhance important skills that will be valued in the workplace, such as locating and accessing information, organizing and displaying data, and creating persuasive arguments.
Core Content, including Math and Science	Sivin-Kachala and Bialo, *2000 research report on the effectiveness of technology in schools*, 2000.	"Computer-assisted instruction and drill-and-practice software can significantly improve students' scores on standardized achievement tests in all major subject areas."
Reading	Results! California Professional Development Institute. Research includes: Moats, *Educational Leadership*, March 2001; Reading/Language Arts Framework for California Public Schools Kindergarten Through Grade Twelve, Chapter 4; Fielding and Person, *Educational Leadership*, February 1994.	"Researched-based reading strategies can build a foundation for reading success in students of all ages. These include: Phonological awareness and decoding; reading fluency and word recognition; vocabulary and phrase meanings; teaching comprehension; and including writing response to reading. Administer measures of assessment and assign students materials and programs that will enable them to read with 90-95 percent accuracy. Teach individually or in small groups as much as possible. Schedule at least two hours a day for reading instruction for struggling readers. Monitor progress and adjust instruction and time allocations accordingly."
Learning as a Process	Glasgow & Hicks, What Successful Teachers Do, 2003.	"Strategy 68: Balance the rigors of new technology with content goals. When helping students acquire computer and technology skills, teach them to set goals that focus on the process of learning instead of on the outcome of learning." "Strategy 69: Use the Internet as a classroom….significant gains in content knowledge and a high level of motivation with the project."
Integration Strategies to Improve Teaching and Learning	DuFour & DuFour, Whatever It Takes, 2004.	"Eight Step Improvement Process…..Step 1- Disaggregate Data, Including Test Results…."
Staff Development: Adult Learning Models	Schacter, *The impact of education technology on student achievement: What the most current research has to say.* Milken Family Foundation web site, 1999	"The most important staff-development features include opportunities to explore, reflect, collaborate with peers, work on authentic learning tasks, and engage in hands-on active learning."
Internet Safety	www.wiredsafety.org – "Helping to Make You Cyber	"Video resources, lessons and activities to keep children safe from cyberbullying, cyber-predators and other

Tech Plan Section	Research Source	Research based strategies that we plan to integrate.
	Safe and Information Literate", 2006; www.techlearning.com "Cyberbullying – Responsibilities & Solutions", 2008.	dangers." "What differentiates cyber bullying from physical and verbal bullying is that perpetrators can exploit the secrecy of the Internet to conceal their identity while abusing their victims."
Ethical Issues/ Copyright	www.techlearning.com - "Educators Guide to Copyright and Fair Use", 2003. "Net Wise Teens: Safety, Ethics and Innovation", by Poftak, 2002.	"Write an AUP from a "positive versus negative" perspective. For example, in addition to telling kids not to copy another's work, words, or images without permission, Bloomfield's AUP states: "Always correctly quote your sources for reports, projects, or Web pages. Use free clip art sites or create your own graphics for projects."

9b. Extending District Curriculum

The Thermalito Union 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 free or low cost, Open Source and Web 2.0 tools and resources for students, teachers, and administrators such as those offered on Calaxy (http://www.k12hsn.org/calaxy/) via the California High Speed Network. We will continue to work with CTAP Region 2 and our County Office of Education to explore use of the High Speed Network to deliver rigorous academic curriculum online to our students.

Appendix C

1. PLAN DURATION CRITERION	Page in District office Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
The plan should guide the district's use of education technology for the next three to five years. (For a new plan, can include technology plan development in the first year)	4	The technology plan describes the county offices 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 2009-11.

2. STAKEHOLDERS CRITERION Corresponding EETT Requirement(s): 7 and 11 (Appendix D).	Page in district office Plan	Example of Adequately Addressed	Not Adequately Addressed
Description of how a variety of stakeholders from within the school county office and the community-at-large participated in the planning process.	4	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 county office actively sought participation from a variety of stakeholders.

3. CURRICULUM COMPONENT CRITERIA Corresponding EETT Requirement(s): 1, 2, 3, 8, 10, and 12 (Appendix D).	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. Description of teachers' and students' current access to technology tools both during the school day and outside of school hours.	6-8	The plan describes the technology access available in the classrooms, library/media centers, or labs for all students and teachers.	The plan explains technology access in terms of a student-to-computer ratio, but does not explain where access is available, who has access, and when various students and teachers can use the technology.
b. Description of the district's current use of hardware and software to support teaching and learning.	8	The plan describes the typical frequency and type of use (technology skills/information literacy/integrated into the curriculum).	The plan cites district policy regarding use of technology, but provides no information about its actual use.
c. Summary of the district's curricular goals that are supported by this tech plan.	11-16	The plan summarizes the district's curricular goals that are supported by the plan and referenced in district document(s).	The plan does not summarize district curricular goals.
d. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to improve teaching and learning by supporting the district curricular goals.	11-16	The plan delineates clear goals, measurable objectives, annual benchmarks, and a clear implementation plan for using technology to support the district's curriculum goals and academic content standards to improve learning.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
e. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire the technology skills and information literacy skills needed to succeed in the classroom and the workplace.	11-16	The plan delineates clear goal(s), measurable objective(s), annual benchmarks, and an implementation plan detailing how and when students will acquire technology skills and information literacy skills.	The plan suggests how students will acquire technology skills, but is not specific enough to determine what action needs to be taken to accomplish the goals.

3. **CURRICULUM COMPONENT CRITERIA** (continued)	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
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	**14**	The plan describes or delineates clear goals outlining how students and teachers will learn about the concept, purpose, and significance of the ethical use of information technology including copyright, fair use, plagiarism and the implications of illegal file sharing and/or downloading.	The plan suggests that students and teachers will be educated in the ethical use of the Internet, but is not specific enough to determine what actions will be taken to accomplish the goals.
g. List of goals and an implementation plan that describe how the district will address Internet safety, including how students and teachers will be trained to protect online privacy and avoid online predators.	**14**	The plan describes or delineates clear goals outlining how students and teachers will be educated about Internet safety.	The plan suggests Internet safety education but is not specific enough to determine what actions will be taken to accomplish the goals of educating students and teachers about internet safety.
h. Description of or goals about the district policy or practices that ensure equitable technology access for all students.	**6**	The plan describes the policy or delineates clear goals and measurable objectives about the policy or practices that ensure equitable technology access for all students. The policy or practices clearly support accomplishing the plan's goals.	The plan does not describe policies or goals that result in equitable technology access for all students. Suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.

3. **CURRICULUM COMPONENT CRITERIA** (continued)	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
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.	15	The plan delineates clear goal(s), measurable objective(s), annual benchmarks, and an implementation plan for using technology to support the district's student record-keeping and assessment efforts.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
j. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to improve two-way communication between home and school.	**16**	The plan delineates clear goal(s), measurable objective(s), annual benchmarks, and an implementation plan for using technology to improve two-way communication between home and school.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
k. Describe the process that will be used to monitor the Curricular Component (Section 3d-3j) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.	**16**	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding procedures, roles, and responsibilities.

4. **PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA** Corresponding EETT Requirement(s): 5 and 12 (Appendix D).	Page in District Plan	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
a. Summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development.	**17-19**	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 CTC Standard 9 and 16 proficiencies.	Description of current level of staff expertise is too general or relates only to a limited segment of the district's teachers and administrators in the focus areas or does not relate to the focus areas, i.e., only the fourth grade teachers when grades four to eight are the focus grade levels.
b. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing professional development opportunities based on your district needs assessment data (4a) and the Curriculum Component objectives (Sections 3d through 3j) of the plan.	**21-25**	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 through 3j) of the plan.	The plan speaks only generally of professional development and is not specific enough to ensure that teachers and administrators will have the necessary training to implement the Curriculum Component.
c. Describe the process that will be used to monitor the Professional Development (Section 4b) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.	**24-25**	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.

5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT CRITERIA Corresponding EETT Requirement(s): 6 and 12.	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. Describe the existing hardware, Internet access, electronic learning resources, and technical support already in the district that will be used to support the Curriculum and Professional Development Components (Sections 3 & 4) of the plan.	**25-29**	The plan clearly summarizes the existing technology hardware, electronic learning resources, networking and telecommunication infrastructure, and technical support to support the implementation of the Curriculum and Professional Development Components.	The inventory of equipment is so general that it is difficult to determine what must be acquired to implement the Curriculum and Professional Development Components. The summary of current technical support is missing or lacks sufficient detail.
b. Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed by the district's teachers, students, and administrators to support the activities in the Curriculum and Professional Development Components of the plan.	**29-32**	The plan provides a clear summary and list of the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support the district will need to support the implementation of the district's Curriculum and Professional Development Components.	The plan includes a description or list of hardware, infrastructure, and other technology necessary to implement the plan, but there doesn't seem to be any real relationship between the activities in the Curriculum and Professional Development Components and the listed equipment. Future technical support needs have not been addressed or do not relate to the needs of the Curriculum and Professional Development Components.
c. List of clear annual benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components identified in Section 5b.	**32-33**	The annual benchmarks and timeline are specific and realistic. Teachers and administrators implementing the plan can easily discern what needs to be acquired or repurposed, by whom, and when.	The annual benchmarks and timeline are either absent or so vague that it would be difficult to determine what needs to be acquired or repurposed, by whom, and when.
d. Describe the process that will be used to monitor Section 5b & the annual benchmarks and timeline of activities including roles and responsibilities.	**33**	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.

6. **FUNDING AND BUDGET COMPONENT CRITERIA** Corresponding EETT Requirement(s): 7 & 13, (Appendix D)	Page in District Plan	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
a. List established and potential funding sources.	**33**	The plan clearly describes resources that are available or could be obtained to implement the plan.	Resources to implement the plan are not clearly identified or are so general as to be useless.
b. Estimate annual implementation costs for the term of the plan.	**34-35**	Cost estimates are reasonable and address the total cost of ownership, including the costs to implement the curricular, professional development, infrastructure, hardware, technical support, and electronic learning resource needs identified in the plan.	Cost estimates are unrealistic, lacking, or are not sufficiently detailed to determine if the total cost of ownership is addressed.
c. Describe the district's replacement policy for obsolete equipment.	**35**	Plan recognizes that equipment will need to be replaced and outlines a realistic replacement plan that will support the Curriculum and Professional Development Components.	Replacement policy is either missing or vague. It is not clear that the replacement policy could be implemented.
d. Describe the process that will be used to monitor Ed Tech funding, implementation costs and new funding opportunities and to adjust budgets as necessary.	**36-37**	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.

7. MONITORING AND EVALUATION COMPONENT CRITERIA Corresponding EETT Requirement(: 11 (Appendix D).	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
a. Describe the process for evaluating the plan's overall progress and impact on teaching and learning.	**36-37**	The plan describes the process for evaluation using the goals and benchmarks of each component as the indicators of success.	No provision for an evaluation is included in the plan. How success is determined is not defined. The evaluation is defined, but the process to conduct the evaluation is missing.
b. Schedule for evaluating the effect of plan implementation.	**36-37**	Evaluation timeline is specific and realistic.	The evaluation timeline is not included or indicates an expectation of unrealistic results that does not support the continued implementation of the plan.
c. Describe the process and frequency of communicating evaluation results to tech plan stakeholders.	**36-37**	The plan describes the process and frequency of communicating evaluation results to tech plan stakeholders.	The plan does not provide a process for using the monitoring and evaluation results to improve the plan and/or disseminate the findings.

8. **EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS** Corresponding EETT Requirement: 11 (Appendix D).	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
a. If the district has identified adult literacy providers, describe how the program will be developed in collaboration with them. (If no adult literacy providers are indicated, describe the process used to identify adult literacy providers or potential future outreach efforts.)	37	The plan explains how the program will be developed in collaboration with adult literacy providers. Planning included or will include consideration of collaborative strategies and other funding resources to maximize the use of technology. If no adult literacy providers are indicated, the plan describes the process used to identify adult literacy providers or potential future outreach efforts.	There is no evidence that the plan has been, or will be developed in collaboration with adult literacy service providers, to maximize the use of technology.

9. **RESEARCHED-BASED METHODS, STRATEGIES, AND CRITERIA** Corresponding EETT Requirement(s): 4 and 9 (Appendix D).	**Page in District Plan**	**Example of Adequately Addressed**	**Not Adequately Addressed**
a. Summarize the relevant research and describe how it supports the plan's curricular and professional development goals.	**37-41**	The plan describes the relevant research behind the plan's design for strategies and/or methods selected.	The description of the research behind the plan's design for strategies and/or methods selected is unclear or missing.
b. Describe the district's plans to use technology to extend or supplement the district's curriculum with rigorous academic courses and curricula, including distance-learning technologies.	**36**	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.