PARADISE UNIFIED SCHOOL DISTRICT
EDUCATION TECHNOLOGY PLAN
July 1, 2011 - June 30, 2016

Small Schools. Big Results.

District Tech Plan Creation Date: 09/15/2010

County Name:	Butte County
District Name:	Paradise Unified School Dist.
County and District Code:	04-61531
Superintendent's Name:	Roger Bylund
Address:	6696 Clark Road
City & Zip Code:	Paradise, CA 95969
Phone Number & Ext.:	(530) 872-6400 ext. 223
FAX#:	(530) 872-6409
Tech Plan Contact:	Mary Rose Monney
Job Title:	Technology Director
Email:	mrmonney@pusdk12.org
Back up Contact Name:	Dal Dhaliwal
Job Title:	Network Administrator
Email:	ddhaliwal@pusdk12.org

Acknowledgments

School Board of Trustees

Tom Conry
Michael Greer
Lisa Nelson
Donna Nichols
Judith Peters

District Educational Technology Plan Team

District Personnel

Curriculum / Data Personnel
Roger Bylund, Superintendent
Susan Davis, Asst. Superintendent, Curriculum, Instruction, Student Services, Personnel

Financial Personnel
Susan Stutznegger, Asst. Superintendent/Financial Services

Technology Personnel
Mary Rose Monney, Director of Technology
Dal Dhaliwal, Network Administrator

Site Administrators

Michael Ervin, Principal, Cedarwood Elementary
Michelle John, Principal, Paradise Elementary
Tom Taylor, Principal, Ponderosa Elementary
David Burdine, Principal, Pine Ridge School
Reiner Light, Principal, Paradise Intermediate School
Michael Lerch, Principal, Paradise Senior High School
Jeff Marcus, Principal, Ridgeview High School
Dena Kapsalis, Principal, Honey Run Academy, Community Day
Kathleen Blacklock, Director, Paradise eLearning Academy
Chris Reid, Paradise Charter Middle School
Michael Ervin, Principal, HomeTech Charter School
Bruce Crist, Principal, Children's Community Charter School

Teachers

Members of the District Technology Advisory Council

Parents / Students

Site Council Groups from various schools in the district
The Superintendent's Parent Advisory Council

Government Agencies

CTAP Region 2, Ed Tech Coordinator – Nancy Silva

Community Group & Businesses

Cedar Creek Publishing

Higher Education

Don Bailey, College Connection teacher/coordinator, PHS/Butte Community College

Table of Contents

District Profile

The Paradise Unified School District is located in the Sierra Nevada foothills about ninety miles north of Sacramento and 15 miles east of Chico, CA where California State University, Chico is located. The school district covers an area of 32.3 square miles. The tables below offer a snapshot of our district and schools during the 2009-2010 school year.

The following data was collected from the California Department of Education, Dataquest web site. http://data1.cde.ca.gov/dataquest/ and from School City's FREE CA Student Achievement Data Charts: *http://stars11.sccoe.org/schoolcharts/Login.aspx*

Login: region2@sccoe.org Password: superintendent

Paradise Unified School District School Data

	Number of Schools	Total Enrollment	# Full-Time Equivalent Teachers	Pupil-Teacher Ratio
Elementary	6	2252	116.5	19.3
Middle	2	702	32.3	21.7
High School	1	1427	60.3	23.7
K-12	1	117	7.8	15.1
Alternative	2	16	2.0	8.0
Continuation	1	134	8.0	16.8
Total	**13**	**4654**	**226.9**	**20.5**

	District %
American Indian	0.9
Asian	0.9
Pacific Islander	0.2
Filipino	0.3
Hispanic	5.9
African American	0.6
White	**82.7**
Multiple/No Response	**8.4**
Total	**100**

	District %
English Learners	11.2
Students with Disabilities	11.6
Graduates (prior year)	84.7
UC/CSU Eligible Grads (prior year)	20.7
Mobility	94
% Fully Credentialed Teachers	96.6
Avg. Pupil / Teacher Ratio	20.5
Avg. Class Size	27.7
% Free or Reduced Price Meals	65.2

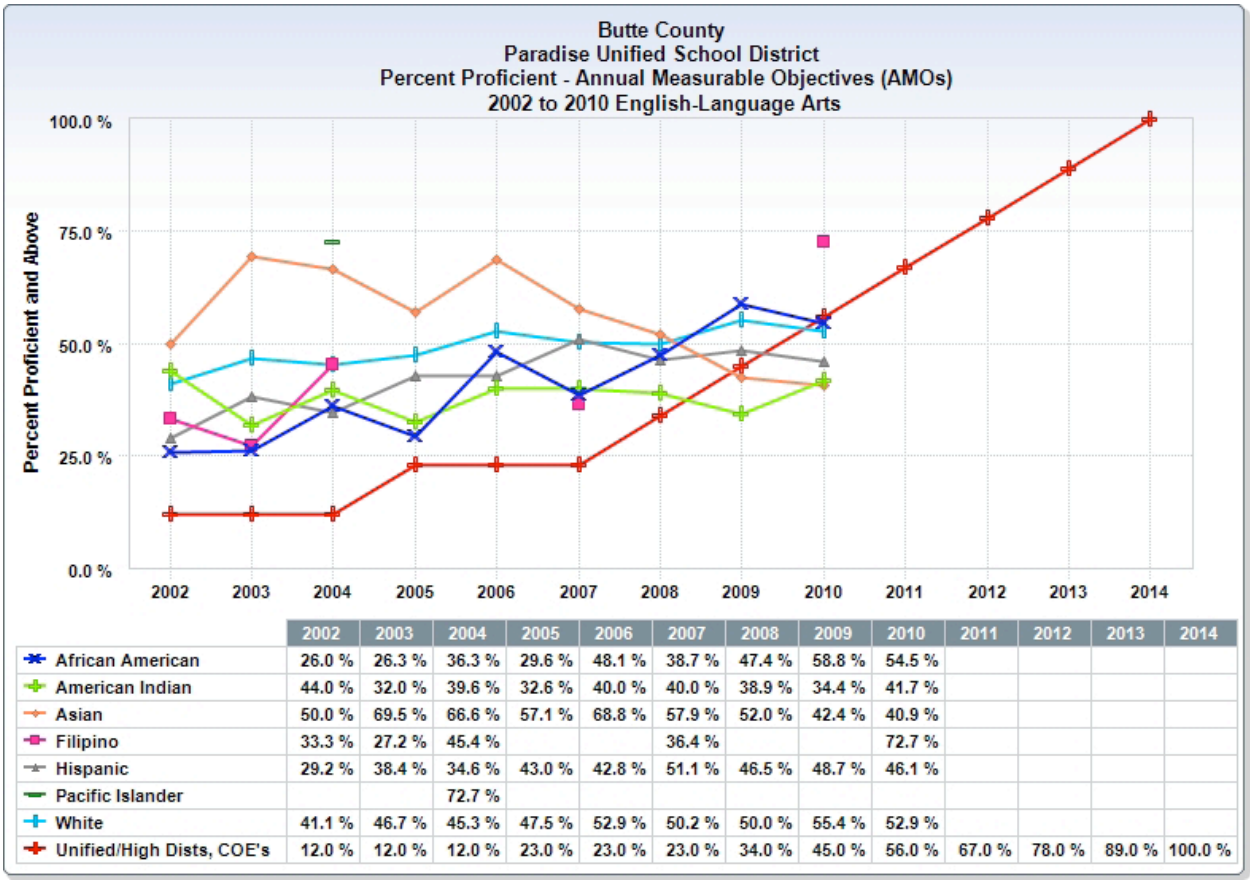
Paradise Unified District State Accountability: Academic Performance Index (API)

2007 API Base	2008 API Growth	Growth in the API from 2007 to 2008
734	**743**	**4**

Paradise Unified District Federal Accountability: Adequate Yearly Progress (AYP)

Made AYP 2009-10: Yes

	Met AYP Criteria English-Language Arts	Met AYP Criteria Mathematics
Percent Proficient	No	No
Participation Rate	Yes	Yes
API - Additional Indicator for AYP	Yes	
Graduation Rate	83.66%	
PI Status	Not in PI	



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
African American	26.0 %	26.3 %	36.3 %	29.6 %	48.1 %	38.7 %	47.4 %	58.8 %	54.5 %				
American Indian	44.0 %	32.0 %	39.6 %	32.6 %	40.0 %	40.0 %	38.9 %	34.4 %	41.7 %				
Asian	50.0 %	69.5 %	66.6 %	57.1 %	68.8 %	57.9 %	52.0 %	42.4 %	40.9 %				
Filipino	33.3 %	27.2 %	45.4 %			36.4 %			72.7 %				
Hispanic	29.2 %	38.4 %	34.6 %	43.0 %	42.8 %	51.1 %	46.5 %	48.7 %	46.1 %				
Pacific Islander			72.7 %										
White	41.1 %	46.7 %	45.3 %	47.5 %	52.9 %	50.2 %	50.0 %	55.4 %	52.9 %				
Unified/High Dists, COE's	12.0 %	12.0 %	12.0 %	23.0 %	23.0 %	23.0 %	34.0 %	45.0 %	56.0 %	67.0 %	78.0 %	89.0 %	100.0 %

Section 1: Tech Plan Vision & Duration

This revised EdTech Plan encompasses the next five years, from July 1, 2011 – June 30, 2016. It is the result of many hours of discussion and collaboration among a diverse representation of administrators, teachers, parents, students, and business partners. Our Technology Advisory Council began the revision process by reviewing our former research-based 2005-2011 Education Technology Plan. We assessed our achievements to date, discussed lessons learned, determined our new district vision for the next five-years, and developed strategies to get us there. Our revised Ed Tech plan envisions a 21st century teaching and learning environment grounded in the reality of our knowledge-based, Digital Age. Used as a tool, not an end in itself, technology will be an integral part of the way we work, teach, and learn. Students will use technology seamlessly, as an integral part of the learning process to enhance their critical thinking, problem solving skills, and communication skills. Educators will learn to use technology to create teachable moments, and to provide just-in-time learning interventions. District staff will use technology to facilitate effective and efficient organizational operations and decision-making within the district. Interactive communication and activities among home, school, and community will increase and improve student learning.

Section 2: Stakeholders

Our ongoing technology planning is guided by a collaborative vision of how technology can help students meet grade level academic content standards and reach the desired learning outcomes identified by our school district and its community. Annually at the beginning of the new school year, and regularly throughout the year, our teachers, school site administrators, and district administrators review the district's curriculum goals and current student achievement data through Professional Learning Communities, and then determines how technology may be effectively and efficiently used to help students reach the academic goals for the year. Additionally our Technology Advisory Council, comprised of teachers, site administrators, district representatives, and district curriculum, data, and information technology staff, is responsible for guiding the implementation of the of the plan. Students, and parents are included in the ongoing implementation process through School Site Council representation. Our district website and e-mail provides all stakeholders including Community members, as well as partners in higher education, community non-profit groups, and local businesses with a mechanism for ongoing updates and input regarding the objectives, funding, budgets, and curricular guidelines contained within our technology plan. The CTAP representative on our tech plan team offered Ed 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.

The Technology Advisory Council, which meets 8-10 times per year:

- Will evaluate the status of the current technology plan and make adjustments if needed.
- Monitors progress on current technology projects.
- Evaluates district technology data with regard to hardware, wiring, resources, professional development, and projects.
- Identifies and updates common technology needs and issues at the school site level.
- Shares how technology is being implemented in the schools
- Shares the work of the Technology Advisory Council with school site stakeholders.

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: The Superintendent, Assistant Superintendent of Instruction and Testing Coordination.
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, site administrators and department and grade level professional learning communities, 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: The Technology Director, Network Administrator, Network/Workstation Technician, and Data System/Information Management Technicians.
Development & Support Roles: Representatives on our Tech Plan team provide overall coordination of the technology implementation and information management, funding resources, and the implementation of the goals and objectives set forth in this updated Ed Technology plan.

District Financial Personnel: The Assistant Superintendent of Business Services and staff.
Development & Support Roles: Representatives on our Tech Plan team provide coordination of technology funds and budget issues.

Site Administration: Site Principals and Assistant Principals.
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's representation from our Elementary, Middle, High School, Alternative and Continuation Schools**.**
Development & Support Roles: Representatives on our Tech Plan team provide input on efforts and outcomes using research-based Ed Technology programs and practices to support the district curricular goals and academic content standards and improve teaching and learning.

Parents / Students: Parents of children enrolled in our Elementary, Middle, High School, Alternative and Continuation Schools, School Site Council members and students.
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.
Development & Support Roles: The CTAP representatives on our tech plan team offered Ed 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: Cedar Creek Publications, Paradise Parks and Recreation District, the Boys and Girls Club, the Paradise Post, a local newspaper, local media and Diverse Network Associates (DNA).
Development & Support Roles: Representatives on our Tech Plan team offered assistance with the implementation of our tech plan objectives focused on improving technology equity, access, after school opportunities, and home-school-community communications.

Higher Education – Butte Community College, College Connection,
Development & Support Roles: A representatives on our Tech Plan team reviewed a draft of our tech plan and offered input on research-based best practices in the adoption and integration of technology by teachers and students to better prepare for higher education.

The Paradise Unified School 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 11:1 All teachers at all schools in our district have access to a minimum of one multi-media computer with Internet access in their classrooms. However most teacher computers are older than 4 years old. There are computers in the Library/Media Centers, and/ or Computer Labs, during, school hours. Currently Paradise High School is the only school to provide consistent, before and or after school access to Internet connected computers and electronic learning resources as needed for 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 Ed Technology resources has been evaluated through district and site inventory records and summarized below.

Elementary Schools

Cedarwood Elementary	
Enrollment (Unofficial CBEDS 2010)	239
Total # of Computers for Instructional Use	68
Total Number of Laptops on Carts with Wireless Access	0
Total # of Computers in Classrooms	47
Total # of Internet Connected Computers in Classrooms	47
Total # of Computers in Classrooms older than 48 months	32
Total # of Computers in Classrooms 48 months old or newer	15
Student to Computer Ratio – Computers 48 months old or newer only	13:1
Total # of Computers in Computer Labs	0
Total # of Computers in Library/Media Center	21
Internet Access Connection Speed (DSL, T-1, >T-1)	>T-1/Fiber
Before & After School Student Access to Computers – Days & Time	None

Paradise Elementary	
Enrollment (Unofficial CBEDS 2010)	587
Total # of Computers for Instructional Use	137
Total Number of Laptops on Carts with Wireless Access	0
Total # of Computers in Classrooms	92
Total # of Internet Connected Computers in Classrooms	80
Total # of Computers in Classrooms older than 48 months	56
Total # of Computers in Classrooms 48 months old or newer	36
Student to Computer Ratio – Computers 48 months old or newer only	10:1
Total # of Computers in Computer Labs	34
Total # of Computers in Library/Media Center	11
Internet Access Connection Speed (DSL, T-1, >T-1)	>T-1/Fiber
Before & After School Student Access to Computers – Days & Time	By appointment with teachers

Pine Ridge School	
Enrollment (Unofficial CBEDS 2010)	541
Total # of Computers for Instructional Use	83
Total Number of Laptops on Carts with Wireless Access	0
Total # of Computers in Classrooms	53
Total # of Internet Connected Computers in Classrooms	53
Total # of Computers in Classrooms older than 48 months	47
Total # of Computers in Classrooms 48 months old or newer	6
Student to Computer Ratio – Computers 48 months old or newer only	90:1
Total # of Computers in Computer Labs	29
Total # of Computers in Library/Media Center	1
Internet Access Connection Speed (DSL, T-1, >T-1)	>T-1/Fiber
Before & After School Student Access to Computers – Days & Time	None

Ponderosa Elementary	
Enrollment (Unofficial CBEDS 2010)	447
Total # of Computers for Instructional Use	101
Total Number of Laptops on Carts with Wireless Access	0
Total # of Computers in Classrooms	72
Total # of Internet Connected Computers in Classrooms	62
Total # of Computers in Classrooms older than 48 months	61
Total # of Computers in Classrooms 48 months old or newer	11
Student to Computer Ratio – Computers 48 months old or newer only	13:1
Total # of Computers in Computer Labs	23
Total # of Computers in Library/Media Center	6
Internet Access Connection Speed (DSL, T-1, >T-1)	>T-1/Fiber
Before & After School Student Access to Computers – Days & Time	None

Junior High Schools

Paradise Intermediate School	
Enrollment (Unofficial CBEDS 2010)	478
Total # of Computers for Instructional Use	101
Total Number of Laptops on Carts with Wireless Access	13
Total # of Computers in Classrooms	58
Total # of Internet Connected Computers in Classrooms	55
Total # of Computers in Classrooms older than 48 months	55
Total # of Computers in Classrooms 48 months old or newer	3
Student to Computer Ratio – Computers 48 months old or newer only	30:1
Total # of Computers in Computer Labs	36
Total # of Computers in Library/Media Center	6
Internet Access Connection Speed (DSL, T-1, >T-1)	>T-1/Fiber
Before & After School Student Access to Computers – Days & Time	None

Comprehensive High School

Paradise Senior High School	
Enrollment (Unofficial CBEDS 2010)	1266
Total # of Computers for Instructional Use	314
Total Number of Laptops on Carts with Wireless Access	16
Total # of Computers in Classrooms	280
Total # of Internet Connected Computers in Classrooms	276
Total # of Computers in Classrooms older than 48 months	136
Total # of Computers in Classrooms 48 months old or newer	144
Student to Computer Ratio – Computers 48 months old or newer only	9:1
Total # of Computers in Computer Labs	34
Total # of Computers in Library/Media Center	5
Internet Access Connection Speed (DSL, T-1, >T-1)	>T-1/Fiber
Before & After School Student Access to Computers – Days & Time	1-1.5 hours daily before and after school

Continuation High School

Ridgeview High School	
Enrollment (Unofficial CBEDS 2010)	171
Total # of Computers for Instructional Use	34
Total Number of Laptops on Carts with Wireless Access	0
Total # of Computers in Classrooms	18
Total # of Internet Connected Computers in Classrooms	18
Total # of Computers in Classrooms older than 48 months	9
Total # of Computers in Classrooms 48 months old or newer	9
Student to Computer Ratio – Computers 48 months old or newer only	8:1
Total # of Computers in Computer Labs	16
Total # of Computers in Library/Media Center	0
Internet Access Connection Speed (DSL, T-1, >T-1)	>T-1/Fiber
Before & After School Student Access to Computers – Days & Time	None

Alternative School

Honey Run Academy	
Enrollment (Unofficial CBEDS 2010)	11
Total # of Computers for Instructional Use	2
Total Number of Laptops on Carts with Wireless Access	0
Total # of Computers in Classrooms	2
Total # of Internet Connected Computers in Classrooms	2
Total # of Computers in Classrooms older than 48 months	0
Total # of Computers in Classrooms 48 months old or newer	2
Student to Computer Ratio – Computers 48 months old or newer only	5:1
Total # of Computers in Computer Labs	0
Total # of Computers in Library/Media Center	0
Internet Access Connection Speed (DSL, T-1, >T-1)	>T-1/Fiber
Before & After School Student Access to Computers – Days & Time	None

Charter Schools

Paradise eLearning Academy	
Enrollment (Unofficial CBEDS 2010)	18
Total # of Computers for Instructional Use	33
Total Number of Laptops on Carts with Wireless Access	24
Total # of Computers in Classrooms	12
Total # of Internet Connected Computers in Classrooms	1
Total # of Computers in Classrooms older than 48 months	0
Total # of Computers in Classrooms 48 months old or newer	12
Student to Computer Ratio – Computers 48 months old or newer only	1:1
Total # of Computers in Computer Labs	0
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	Students have Laptops at home

HomeTech Charter School – Grades K-12	
Enrollment (Unofficial CBEDS 2010)	118
Total # of Computers for Instructional Use	64
Total Number of Laptops on Carts with Wireless Access	19
Total # of Computers in Classrooms	16
Total # of Internet Connected Computers in Classrooms	16
Total # of Computers in Classrooms older than 48 months	6
Total # of Computers in Classrooms 48 months old or newer	29
Student to Computer Ratio – Computers 48 months old or newer only	1:4
Total # of Computers in Computer Labs	25
Total # of Computers in Library/Media Center	0
Internet Access Connection Speed (DSL, T-1, >T-1)	DSL
Before & After School Student Access to Computers – Days & Time	None

Paradise Charter Middle School	
Enrollment (Unofficial CBEDS 2010)	107
Total # of Computers for Instructional Use	27
Total Number of Laptops on Carts with Wireless Access	20
Total # of Computers in Classrooms	7
Total # of Internet Connected Computers in Classrooms	7
Total # of Computers in Classrooms older than 48 months	7
Total # of Computers in Classrooms 48 months old or newer	0
Student to Computer Ratio – Computers 48 months old or newer only	1:5
Total # of Computers in Computer Labs	20
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	None

Children's Community Charter School	
Enrollment (Unofficial CBEDS 2010)	241
Total # of Computers for Instructional Use	35
Total Number of Laptops on Carts with Wireless Access	25
Total # of Computers in Classrooms	15
Total # of Internet Connected Computers in Classrooms	35
Total # of Computers in Classrooms older than 48 months	15
Total # of Computers in Classrooms 48 months old or newer	0
Student to Computer Ratio – Computers 48 months old or newer only	1:9
Total # of Computers in Computer Labs	0
Total # of Computers in Library/Media Center	0
Internet Access Connection Speed (DSL, T-1, >T-1)	DSL
Before & After School Student Access to Computers – Days & Time	None

The next chart references routers, switches, domain controllers, servers and wireless points listed by school site.

Site	WAN Connection	LAN Connection	Routers	Switches	Domain Controllers	Servers	Wireless Access Points
District Office	1GB	10/100/1GB	1	2	2	12	1
Cedarwood Elementary	1GB	10/100/1GB	1	12	1	1	1
Pine Ridge School	1GB	10/100/1GB	1	13	1	1	1
Ridgeview High	1GB	10/100/1GB	1	4	1	1	0
Paradise High	1GB	10/100/1GB	1	17	2	4	8
Ponderosa Elementary	1GB	10/100/1GB	1	12	1	1	1
Paradise Intermediate	1GB	10/100/1GB	1	10	1	1	2
Paradise Elementary	1GB	10/100/1GB	1	12	1	1	2
Paradise Charter Middle	T-1	10/100	1	0	0	1	4
Children's Community Charter	Comcast	10/100	2	3	1	2	6
HomeTech Charter	DSL	10/100	1	3	1	1	2

3b. Current Technology Integration in Curriculum

The following data offers a snapshot of the technology skills integrated into our district curriculum by subject area and typical frequency of use by grade level bands. This snapshot includes online learning curriculum used at district charter schools.

Focus / Subject Area	Typical Uses of Technology	Typical Frequency
English / Language Arts	**K-3:** Accelerated Reading, Earobics, Star Reading, Starfall, Study Island, Type 2 Learn, Discovery Education, Online learning/Compass Learning Odyssey **4-6:** Accelerated Reading, Discovery Education, Star Reading, Study Island, Type 2 Learn, Typing Adventure, Discovery Education, MS Office Suite, Online learning/Compass Learning Odyssey **7-8:** Renaissance Learning Products; Star Reading, Accelerated Reader, and Discovery Education, MS Office Presentation combined with Internet research and report writing **9-12:** Ebsco Research Database, MS Office Suite, and Renaissance Learning Products; Star Reading, Accelerated Reader **English Learners:** Same access as Gen. Ed. **Special Education:** Same access as Gen. Ed.	**K-3:** Daily AR, weekly all others **4-6:** Daily AR, weekly all others **7-8:** Daily/Weekly in computer labs **9-12:** Daily/Weekly in computer labs **English Learners:** Same frequency as Gen. Ed. students **Special Education:** Same frequency as Gen. Ed. students
Mathematics	**K-3:** Accelerated Math, Discovery Education, Harcourt Math, Star Math, Study Island, Super Star Online, IXL Interventions, MathUSee **4-6:** Accelerated Math, Star Math, Discovery Education Study Island, IXL Interventions, MathUSee **7-8:** Star Math, Discovery Education **9-12** Ebsco Research Database, MS Office Suite,	**K-3:** AM daily, all others weekly in lab **4-6:** AM daily, all others weekly in lab **7-8:** Assessments each grading period **9-12:** Daily/Weekly in labs

Focus/Subject Area	Typical Uses of Technology	Typical Frequency
Mathematics Continued	Renaissance Learning Products; Star Math, Accelerated Math, Math Facts in a Flash **English Learners:** Same access as Gen. Ed. **Special Education:** Same access as Gen. Ed.	**English Learners:** Same frequency as Gen. Ed. students **Special Education:** Same frequency as Gen. Ed. students
Science	**K-3:** **4-6:** MS Office Presentation combined with Internet research and report writing, Discovery education **7-8:** MS Office Presentation combined with Internet research and report writing, discovery Education **9-12:** Ebsco Research Database, MS Office Suite **English Learners:** Same access as Gen. Ed. **Special Education:** Same access as Gen. Ed.	**K-3:** **4-6:** biweekly in computer Labs **7-8:** Daily/Weekly in computer labs **9-12:** Daily/Weekly in computer labs **English Learners:** Same frequency as Gen. Ed. students **Special Education:** Same frequency as Gen. Ed. students
Social Science / History	**K-3:** Some free Internet search sites **4-6: :** MS Office Presentation combined with Internet research and report writing, Discovery Education Scholastic **7-8: :** MS Office Presentation combined with Internet research and report writing, Discovery Education **9-12:** Ebsco Research Database, MS Office Suite English Learners: Same access as Gen. Ed. Special Education: Same access as Gen. Ed.	**K-3:** **4-6:** Daily/Weekly in computer labs **7-8:** Daily/Weekly in computer labs **9-12:** Daily/Weekly in computer labs **English Learners:** Same frequency as Gen. Ed. students **Special Education:** Same frequency as Gen. Ed. students
Library	**K-3:** Renaissance Learning Products; Star Reading**,** Accelerated Reader**,** **4-6:** Renaissance Learning Products; Star Reading**,** Accelerated Reader**,** **7-8:** Mavis Beacon Typing, MS Office Suite, **9-12:** Ebsco Research Database, MS Office Suite **English Learners:** Same access as Gen. Ed. **Special Education:** Same access as Gen. Ed.	**K-3:** **4-6:** **7-8:** Daily/Weekly in computer labs **9-12:** Daily/Weekly in computer labs **English Learners:** Same frequency as Gen. Ed. students **Special Education:** Same frequency as Gen. Ed. students

In addition to the typical uses of technology described above, educators at all grade levels use our student information system, Aeries daily for attendance. In addition, approximately 50% of teachers use Aeries for their electronic gradebook. Our district-wide electronic learning assessment system, DataDirector is in its first full year of implementation. Most teachers at all grade levels are using DataDirector for common grade level and department assessments in ELA Math, and Science. Both district level and school site administrators have an active role in providing support and assistance for teachers during this implementation year and beyond as part of the district's Professional Learning Communities.

3c. Summary of District's Curricular Planning Documents

Paradise Unified School District has established clear curricular goals based on achievement of the California academic content standards. Performance and progress is 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.

Paradise Unified School District Curricular Goals

Our school district has an adopted LEA Plan, that is aligned with and supports the district adopted, state approved curriculum, and the California academic content standards in all academic areas. Each of our schools aligns its site-based curricular goals to the district's LEA Plan through the 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 curriculum guides aligned with CA academic content standards.
- District evaluation criteria for textbook adoption.
- 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.
- The Board Approved Policies and Administrative Regulations regarding students' instruction, promotion and retention, equity, administration, personnel, community relations, business, and much more.

- Site–based Single Plan for Student Achievement, SARC, WASC and CCR self-study reviews and actions plans.
- 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

Teachers will integrate technology in the district's curriculum to support the district curricular goal of ALL students attaining proficiency or better with ELA & math grade level content standards by end of the 2013-14 school year.

Goal 2: Student Acquisition of Technology and Information Literacy Skills.

ALL Students will acquire the National Education Technology grade level profile standards for students (NETS) or district equivalent as they are developed, to support achievement of the academic standards in the classroom, district curricular goals, and ultimately for lifelong learning and success in our digital society.

Goal 3: Student Acquisition of Digital Citizenship Skills

All students will be proficient with grade level ethical use of technology and Internet safety skills (NETS for students: Digital Citizenship- standard #5).

Goal 4: Improve Student Data Collection, Analysis & Decision Making

District teachers and administrators 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

District teachers and administrators will use technology to improve communication among home, school, and community.

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

PARADISE UNIFIED SCHOOL DISTRICT
TECHNOLOGY ACTION PLAN
July 1, 2011– June 30, 2016
(Appendix C Sections: 3d-3k)

Section 3d

Goal 1: Improve Student Achievement & Close Student Achievement Gaps

Teachers will integrate technology in the district's curriculum to support the district curricular goal of ALL students attaining proficiency or better with ELA & math grade level content standards by end of the 2013-14 school year and maintain 100% proficiency annually.

Target Group: All students including special education, English Learners, and GATE students.

Goal 1: Specific Measurable Objective by June 2016

Objective 1: By June 2016, 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 Communities). ***(~ NCLB AMO benchmark for all students including significant subgroups by 2014)**

Goal 1: Annual Benchmarks for Objective 1

All students in Paradise Unified School District will make steady progress toward meeting grade-level standards in core academic subjects, including EL and special education students.

Annually between May 2011 and May 2016:

- Students at Far Below Basic will progress in one year to Below Basic on CST test.
- Students at Below Basic will progress in one year to Basic on CST test.
- Students at Basic will progress in one year to Proficient on CST test.
- Students at Proficient will maintain this level or better on CST test.

Annually between May 2011 and May 2016:

- English Learners at Beginning will progress in one year to Early Intermediate on the CELDT.
- English Learners at Early Intermediate will progress in one year to Intermediate on the CELDT.
- English Learners at Intermediate will progress in one year to Early Advanced on the CELDT.
- English Learners at Early Advanced will progress in one year to the English proficient level on the CELDT.
- Students reaching the English proficient level on the CELDT will maintain this level until reclassified fluent English proficient (R-FEP).

Goal 1: Evaluation Instrument(s) & Data

Instruments: Trimester /Quarterly Grade level assessments; Annual STAR/CST test results in English/Language Arts; CAHSEE
Data: Percentage scoring proficient or above/passing

Instrument: Professional Learning Communities Grade/subject level, district, and site professional development, and collaboration meeting times/agendas, participation records and outcomes.
Data: Percent of teachers participating: Calibrated and articulated standards-aligned Grade/subject level objectives and assessments across the district and standardized list of District supported research based programs and practices.

Instrument: Ongoing Classroom Observations by site admin. / Principals aligned to teachers' evaluation schedule.
Data: Teachers' use of standards-aligned learning objectives, instructional and intervention time, research based programs, practices, and arrangements.

Instrument: Annual Site Academic Software Survey:
Data: Curriculum-based state and district approved software and productivity software in use at each site.

Instrument: Annual CDE EdTech Profile online tech proficiency survey, (www.edtechprofile.org)
Data: Teachers' self assessed Ed Technology and integration skills

Data Reviewers:

District Superintendents, School Site Administrators, District Technology Director, Professional Learning Community Teams, and Technology Advisory Council members, will analyze end of school year results annually between June and September and report to stakeholders annually in October.

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

Beginning in the 2011-12 school year and continuing through the duration of the tech plan, the LEA will coordinate quarterly grade and or subject area district 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.

1. Annually, the district and the schools 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.
2. Annually, purchase as needed state adopted instructional materials (K-8), standards-aligned textbooks (9-12), and supplemental curriculum-based Ed Technology resources (adopted and or CLRN approved), and ensure they are being used with fidelity in the classroom or school computer labs during monthly classroom visits by school administration.

3. Ongoing, the district administration, principals, assistant principals and teachers will research, learn, and integrate research-based best practices and technology that supports specific ELA and Math student achievement needs identified during data reviews of significant subgroup populations at the school.
4. Annually, the district and the schools will effectively allocate funding, time, training and human resources to overcome the school's identified barriers to student academic achievement.
5. From the 2011-12 school year, and continuing thereafter, reading and math intervention programs will be provided for students in grades 5 to 8, inclusive, whose reading scores are Far below Basic and Below Basic in the CST performance level. Intervention programs will be implemented as they are developed and funding can be secured.
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. A practice was implemented in the fall of 2010 that will continue through the duration of this plan that will 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. By fall 2011, design and distribute an annual site academic software usage survey.
12. Beginning in the fall 2011 and annually thereafter, provide professional development for district/CLRN approved curriculum software and online resources as needed.
13. 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.
14. Annually, continue to provide technology productivity and integration training as needed.
15. Ongoing, provide 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 Technology resources including publisher software and websites.
- CLRN and district approved curriculum software such as: Renaissance Learning products including Accelerated Reader, Accelerated Math, Accelerated Math Intervention, Freedom web publishing software, Study Island, Type to Learn, Super Star Online
- Diagnostic reading, and math, proficiency software such as Star Reading and Star Math
- Microsoft Office and other productivity software.

- Internet Access and Resources
- Peripherals such as LCD projectors, document cameras, digital cameras, video cameras, and printers.
- Online Professional Development and Learning Communities

Section 3e

Goal 2: Student Acquisition of Technology and Information Literacy Skills

All students will be proficient or better with the National Education Technology (NETS) grade level profile standards for students, or district equivalent as they are developed, to support achievement of the academic standards in the classroom, district curricular goals, and ultimately for lifelong learning and success in our digital society.

Target Group: All students including special education, English Learner and GATE students.

Goal 2: Specific Measurable Objective by June 2016

Objective 1: By June 2016, 70% of students in grades K-12 will be proficient or better with grade level NETS standards (or district equivalents as they are developed). Students will learn the NETS skills, or district equivalent tech skills during relevant curricular assignments and provide samples of technology standards integrated assignments throughout the school year.

1. Creativity and Innovation
2. Communication & Collaboration
3. Research and Information Fluency – (information literacy)
4. Critical Thinking, Problem Solving, and Decision-making
5. Digital Citizenship, (includes social, ethical, copyright, and cyber safety issues).
6. Technology Operations and Concepts

Goal 2: Annual Benchmarks for Objective 1

Growth from 2009-10 baseline proficiency data

Year 1: minimum of 20% by June 2012
Year 2: minimum of 30% by June 2013
Year 3: minimum of 40% by June 2014
Year 4: minimum of 50% by June 2015
Year 5: minimum of 70% by June 2016

Goal 2: Evaluation Instrument(s) & Data

Instrument: End of year sample assignments of NETS integrated assignments or district equivalent tech standards aligned assignments.
Data: Percentage achieving grade level NETS or district equivalent tech standards

Instrument: Annual CDE Ed Tech Profile (www.edtechprofile.org)
Data: Teachers' self assess Ed Technology integration proficiency skills.

Data Reviewers:

District Superintendents, School Site Administrators, District Technology Director, Professional Learning Community Teams, and Technology Advisory Council members, will analyze end of school year results annually between June and September and report to stakeholders annually in October.

Goal 2: Student Acquisition of Technology & Information Literacy Skills Implementation Strategies / Timelines

1. During the 2011-12 school year The Technology Advisory Council, a focus group of teachers, administrator, and librarians, will research NETS standards and design scaffolded K-12 District Technology Standards.
2. Beginning in the fall 2011 and annually thereafter, provide Professional Development opportunities (from the District, and CTAP Region 2) to K-12 teachers on integrating the student NETS or district equivalent grade level skills and standards into their curriculum.
3. By fall 2012, Students will begin systematically learning the NETS or District equivalent skills including technology productivity tools, and information literacy, as appropriate, during curricular assignments.
4. By spring 2013, begin administering annually the standards-aligned grade span NETS or district equivalent based exit assessments or a sampling of student portfolios for grades K-12.

Goal 2: Digital Resources to be Integrated

1. Adopted Text Supplemental Tech resources including publisher software and websites.
2. CLRN and district approved curriculum software such as: Renaissance Learning products including, Accelerated Reader, Accelerated Math, Accelerated Math Intervention, Freedom web publishing software, Study Island, Type to Learn, and Super Star Online.
3. Web-based student assessment platform, Data Director and web based student information and reporting platform Aeries Browser Interface.
4. Microsoft Office and other productivity software
5. No Cost / Low Cost - Internet Resources
6. Peripherals such as LCD projectors, document cameras, interactive white boards, digital cameras, video cameras, and printers

Sections 3f & 3G

Goal 3: Ethical Use of Technology (Copyright and Internet Safety)

All students will be proficient or better with grade level ethical use of technology and Internet safety standards (NETS #5- Digital Citizenship, or district equivalents as they are developed).
Target Group: All students including special education, English Learner, and GATE students.

Goal 3: Specific Measurable Objective by June 2016

Objective 1: By June 2016, 80% of students in grades K-12 will be proficient or better with grade level (NETS #5- Digital Citizenship, or district equivalents as they are developed), (includes social, ethical, copyright, and cyber safety issues).

Goal 3: Annual Benchmarks for Objective 1
2009-10 baseline proficiency data plus growth

Year 1: minimum of 20% by June 2012 **Year 3:** minimum of 40% by June 2014
Year 2: minimum of 30% by June 2013 **Year 4:** minimum of 60% by June 2015
Year 5: minimum of 80% by June 2016

Goal 3: Evaluation Instrument(s) & Data

Instrument: Lesson plans integrating ethical use of technology including copyright and plagiarism
Data: Percentage of teachers participating in the integration of lesson plans on ethical use of technology including copyright and plagiarism.

Instrument: Lesson plans integrating technology on Internet safety and cyber-bullying.
Data: Percentage of teachers participating in the integration of lesson plans on Internet safety and cyber-bullying.

Instrument: Rubric for Grade level student lesson samples, presentations, and or classroom work, which will demonstrate technical skills and information literacy.
Data: Percentage meeting grade-level NET standards, or district equivalents as they are developed.
Instrument: Annual Ed Tech Profile Survey
Data: 70% teachers' and students' self assessed Ed Technology and integration skills

Data Reviewers
District Superintendents, School Site Administrators, District Technology Director, Professional Learning Community Teams, and Technology Advisory Council members, will analyze end of school year results annually between June and September and report to stakeholders annually in October.

Goal 3: Ethical Use of Technology (Copyright) and Internet Safety
Implementation Strategies / Timelines

1. During the 2011-2012 school year, all teachers will be offered professional development opportunities offered through CTAP Region 2 on the Ethical Use of Technology and Internet Safety for students, aligned to the NETS student standard # 5 Digital Citizenship, or district equivalent as it is developed.
2. 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 or district equivalent as it is developed, during curricular assignments.
3. Beginning in the spring 2013, grade level technology assessments and/or portfolio reviews will be conducted at the end of each school year.
4. By fall 2012, replace the current AUP with a revised acceptable use policy for students addressing Internet safety, cyber bullying, and plagiarism.

Goal 3: Digital Resources to be Integrated

- Adopted Text Supplemental Technology 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, document cameras, interactive white boards, digital cameras, video cameras, and printers.

Section 3h
District Policy on Equitable Access

It is district policy to provide ALL students and teachers with equal access to all of the schools' 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 or district standards when developed, 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. Students with an active Individualized Education Program (IEP) have appropriate access to technology hardware, peripherals, and software including assistive technology as deemed appropriate and defined by the IEP, site team and the students' IEP goals. EL students have appropriate access to technology hardware, peripherals, and software needed to support their English language acquisition as well as their achievement of the academic standards.

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 2016

Objective 1: By June 2016, 100% of teachers will use the district's full suite of SIS and electronic learning assessment tools to analyze student data and make data-driven decisions to meet individual student academic needs.

Goal 4: Annual Benchmarks for Objective 1

Year 1: minimum of 40% by June 2012 **Year 3:** minimum of 70% by June 2014
Year 2: minimum of 50% by June 2013 **Year 4:** minimum of 80% by June 2015
Year 5: minimum of 100% by June 2016

Goal 4: Evaluation Instrument(s) & Data

Instrument: Data Director usage statistics
Data: Percentage of teachers using electronic learning assessment tools to inform instruction

Instrument: SIS usage records
Data: Percentage of teachers using all SIS suite components

Instruments: District SIS suite training participation records for new hires
Data: Percent of teachers completing training – all components

Data Reviewers:

District Superintendents, School Site Administrators, District Technology Director, Professional Learning Community Teams, and Technology Advisory Council members, will analyze end of school year results annually between June and September and report to stakeholders annually in October.

Goal 4: Efficient & Effective Student Data Collection, Analysis & Decision Making Implementation Strategies / Timelines

1. During the 2011 - 2012 school year and every year thereafter until we meet our June 2016 objective, we will continue the rollout of Data Director integrated student assessment components.
2. During the 2011 - 2012 school year and every year thereafter as needed, participating teachers will get necessary training for effectively using the Data Director exam reports features.
3. 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

- SIS/Aeries
- Diagnostic reading, writing, and math digital applications
- Web-based student learning diagnostic assessment platform such as Data Director.
- Online assessment data sites e.g. CDE's Dataquest
- Excel Spreadsheets

Section 3j

Goal 5: Improve Communication Among Home, School, and Community

Districts administrators and teachers will use technology to improve communication among home, school, and community.

Target Group: School site administrators, teachers, key clerical staff, parents, and the community.

Goal 5: Specific Measurable Objective by June 2016

Objective 1: By June 2016, 80% of administrators and teachers will have pertinent, timely, up-to-date district and classroom information posted on school and / or district web sites.

Annual Benchmarks for Objective 1

Year 1: minimum of 10% by June 2012 **Year 3:** minimum of 30% by June 2014
Year 2: minimum of 20% by June 2013 **Year 4:** minimum of 50% by June 2015
Year 5: minimum of 80% by June 2016

Objective 2: By June 2016, 100% of school site administrators will offer parents password protected, online access to up to date student attendance, assignments, and grades on the district's web-based student information system, (SIS).

Goal 5: Annual Benchmarks for Objective 1

Year 1: minimum of 40% by June 2012 **Year 3:** minimum of 70% by June 2014
Year 2: minimum of 50% by June 2013 **Year 4:** minimum of 80% by June 2015
Year 5: minimum of 100% by June 2016

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: Percent of parents trained; percent of parents requesting passwords; percent of parents using parent portal component of Aeries

Instrument: Ed Tech Survey data.
Data: Percent of teachers who self report an increase in the use of e-mail to improve two-way communication

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

Data Reviewers:

District Superintendents, School Site Administrators, District Technology Director, Professional Learning Community Teams, and Technology Advisory Council members, will analyze end of school year results annually between June and September and report to stakeholders annually in October.

Goal 5: Improve Communication Among Home, School, and Community

1. By fall 2013, all district schools will be providing district parents with access and training on using the parent component of the district's online student information system.
2. Annually the LEA and schools will solicit community, business, and/or university partnerships.
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, school, and teacher websites where news, announcements, staff contact information, teacher class information, events, etc. are communicated with students and parents.
5. Annually, provide web publishing and desktop publishing training opportunities for teachers and classified staff to learn to publish and communicate on their school web site.
6. Annually, provide Web 2.0 application training to teachers and classified staff to improve communication between home, school, and community.

Goal 5: Digital Resources to be Integrated

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

Section 3K: Ongoing Monitoring for Continuous Improvement

District Superintendents, School Site Administrators, District Technology Director, the entire Technology Team, Professional Learning Community Teams, and Technology Advisory Council members, will conduct ongoing formative data reviews. The team will meet quarterly to track the development and implementation of all tech plan activities and accomplishments. Between quarterly meetings, pertinent tech plan updates are shared with the district via email and SharePoint. Modifications to the PUSD Tech Plan implementation strategies or timeline are made as needed to support meeting or exceeding our goals by June 2016. The Technology Director 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 Director 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' and administrators' current technology skills. Our survey findings are summarized 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 uses survey data and teacher input annually to plan for district sponsored professional development activities for the next school year.

Site Administrators' Survey Data

Our administrators are at the intermediate levels with general computing, Internet, e-mail and word processing and at the introductory level in presentation, spreadsheet and database skills.
Implication: Administrators need professional development opportunities in advanced Personal Technology proficiencies.

District Teachers' Survey Data

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.
Implication: Teachers need professional development opportunities in basic Personal Technology proficiencies.

Technology Integration Skills

In addition, to proficiency with productivity applications, 30% of teachers in the district rated themselves proficient with integrating technology in the curriculum to improve student learning.

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.

Based on a needs assessment and teacher input the following goals for our professional development plan were identified. The goals are to provide individualized professional development to improve the personal technology proficiency of our administrators and teachers by providing CTAP Online technology productivity and integration training as needed. Additionally our plan provides professional development for technology integration into the curriculum and the district/ CLRN approved curriculum software and online resources. We will continue training in the use of Aeries student information system. The district will provide teachers and administrators with annual systematic Aeries and DataDirector training to improve the collective, reporting and analysis of student assessment data. Aeries student information system training will also serve to improve the two-way electronic communication between school and home. Additionally DataDirector training will be provided to assist the Professional Learning Communities which meet with regularity to individualize instruction and provide RTI for the district's students.

Goal 1: District teachers will be proficient with the same general grade level NETS technology skills (or district equivalents when developed by PUSD) as their students' as well as be proficient with technology integration skills and teacher/ admin. electronic learning and productivity tools.

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

Goal 3: Our coordinated education technology professional development will be accomplished with a three-tiered approach based on teachers' individual technology training needs.
Annually as needed, we will offer personal proficiency training on NETs skills, (or district equivalents when developed by PUSD), 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.
Annually as needed, we will offer professional proficiency training on integrating; NETS standards (or district equivalents when developed by PUSD), in math and ELA curriculum (including information literacy, copyright, and cyber safety), curriculum-based software, adopted textbook supplemental electronic resources, and online resources such as SETS (Statewide Education Technology Services), and Calaxy, (CA K-12 HSN suite of tools).
Annually as needed, we will provide technology integration mentor training for district staff to provide at school sites on a rotating basis.

Each fall, the district technology director and curriculum personnel will schedule a variety of training topics and options during the school year.

We anticipate our Ed Tech professional development plan will cost the district approximately $82,717.00 annually. Our district anticipates the ability to provide the Ed Tech professional development outlined with existing categorical funds. In addition, we will maximize the use of existing and free web 2.0 applications 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, (or district equivalents when developed by PUSD) technology skills 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 networks, opportunities and resources.
- National, State and local online research-based strategies and resources will be leveraged and integrated during faculty meetings, collaboration time, and professional development such as: the U.S. Department of Education's web site What Works Clearinghouse. We will regularly examine and use relevant data from the What Works Clearinghouse (WWC), which was established in 2002 by the U.S. Department of Education's Institute of Education Sciences to provide educators, policymakers, researchers, and the public with a central and trusted source of scientific evidence of what works in education.
- We will also rely on the 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.

Paradise Unified School District Ed. Tech Professional Development

July 1, 2011 – June 30, 2016

Section 4b

Goal 1 –Technology Literacy & Integration

District teachers will be proficient with the same general grade level NETS, (or district equivalents when developed by PUSD) technology skills required of their students as well as be proficient with technology integration skills and teacher/ administrator electronic learning and productivity tools.

Target Group: Certificated Teachers

Goal 1: Specific Measurable Objectives by June 30, 2016

Objective 1: By June 2016, 80% teachers, who participate in district sponsored educational technology professional development, will become proficient with general technology knowledge and skills, classroom productivity tools, and information literacy skills aligned to the NETs for teachers and NETS standards for students, (or district equivalents when developed by PUSD). All district ELD, Special Education teachers will become proficient in technology skills and assistive tools for their subgroup populations.

Annual Benchmarks for Objective 1

Year 1: minimum of 10% by June 2012 **Year 3:** minimum of 30% by June 2014
Year 2: minimum of 20% by June 2013 **Year 4:** minimum of 50% by June 2015
Year 5: minimum of 80% by June 2016

Goal 1: Evaluation Instrument(s) & Data

Instrument: Pre and post Ed Tech Profile completed for all district sponsored Education Technology professional development programs
Data: Administrators' and teachers' self assessed Ed Technology and integration skills

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

Data Reviewers:

District Superintendents, School Site Administrators, District Technology Director, Professional Learning Community Teams, and Technology Advisory Council members, 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 spring, require administrator and teacher completion of Ed Tech Profile survey by all who participate in district sponsored Ed 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, site administrators, and district administrators.
4. Annually in the fall, schedule and promote district sponsored Ed Technology workshops for administrators and for teachers during the school year aligned to district curricular goals, the content standards, to the NETS standards (or district equivalents as we develop them), 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 Ed 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, 9-12) during the school year aligned to the content standards and to identified Ed Tech Profile tech integration needs.
6. 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 the CDE's Ed Tech Profile

Goal 2 - Using Technology to Support Data Driven Instruction

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

Specific Measurable Objectives by June 30, 2016

Objective 1: By June 2016, 100% of teachers and site administrators will be proficient with using technology 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 10% by June 2012 **Year 3:** minimum of 30% by June 2014
Year 2: minimum of 20% by June 2013 **Year 4:** minimum of 50% by June 2015
Year 5: minimum of 80% by June 2016

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: 80% of teachers and administrators trained and using electronic learning assessments system to inform instruction.

Data Reviewers:

District Superintendents, School Site Administrators, District Technology Director, Professional Learning Community Teams, and Technology Advisory Council members, will analyze end of school year results annually between June and September and report to stakeholders annually in October.

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 Ed 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 Ed Technology workshops for administrators and for teachers during the school year on all SIS components.
5. Annually in the fall, schedule and promote district sponsored Ed Technology workshops for administrators and for teachers during the school year on the district's integrated electronic learning assessment system.
6. 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.
- Electronic learning assessment and diagnostic applications
- Peripherals such as LCD projectors, digital cameras, video cameras, and printers.

- Online resources including the CDE's Ed Tech Profile

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

District site administrators and teachers will learn to use technology to improve two-way communication between home, school, and community.

Target Group: Certificated teachers, administrators, and clerical staff
Objective 1: By June 2016, 80% of teachers will be proficient with using technology to disseminate pertinent and timely district, school, and student information via) monthly district and site newsletters, district, school and teacher web sites, auto phone system, and email.
Objective 2:
By June 2016 100% of site administrators and teachers will offer parents password protected, online access to up to date student attendance, assignments, and grades on the district's web-based student information system. Currently about 30% of parents are being offered the district's web-based SIS portal.
Year 1: minimum of 40% by June 2012 **Year 3:** minimum of 70% by June 2014
Year 2: minimum of 50% by June 2013 **Year 4:** minimum of 80% by June 2015
Year 5: minimum of 100% by June 2016

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: Percent of teachers trained, percent of parents requesting passwords and instructions, percent of parents accessing the parent connect portion of district SIS.

Instrument: Communication records and artifacts from district, schools, and teachers.
Data: evidence of efforts to improve two-way communication.

Data Reviewers:

District Superintendents, School Site Administrators, District Technology Director, Professional Learning Community Teams, and Technology Advisory Council members, will analyze end of school year results annually between June and September and report to stakeholders annually in October.

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 Ed 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 Ed Technology workshops for administrators, clerical and for teachers on using Microsoft Office Suite and other desktop publishing software.
4. Annually in the fall, schedule and promote district sponsored Ed Technology workshops for administrators and for teachers on the district's web-based student information system, Aeries Browser Interface and client e-mail software.

5. Annually in the fall, schedule and promote district sponsored Ed Technology workshops for parents.
6. By spring 2012, 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

- SIS/ Aeries components
- District's Web publishing application
- Email client software and online, remote access.
- Low cost , no cost online resources
- CDE's Ed Tech Profile

4C: Ongoing Monitoring for Continuous Improvement

Annual professional development needs assessments at the start of each school year will drive our district's professional development schedule for that year. The district technology and curriculum directors will track implementation of the Ed Tech professional development plan quarterly and report progress at district Superintendent's Advisory Council meetings. The district curriculum, and technology director, school administrators, and the rest of Technology Advisory Council will conduct ongoing formative data reviews. The team will meet quarterly to track the development and implementation of all tech plan activities and accomplishments. Between quarterly meetings, pertinent tech plan updates are shared with the district Technology Advisory Council via email if needed. Modifications to our Tech Plan activities will be made as needed in order to insure that we meet or exceed our goals by June 2016. The Technology Director is responsible for a mid-year tech plan implementation status report to stakeholders annually 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 Technology Director is responsible for an annual summative performance report to stakeholders in October.

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

5a: Current Status

The next chart references routers, switches, domain controllers, servers and wireless points listed by school site.

Following this chart is an outline of the existing hardware, Internet access, infrastructure, electronic learning & assessment resources, and technical support available at our district office and school sites.

Site	WAN Connection	LAN Connection	Routers	Switches	Domain Controllers	Servers	Wireless Access Points
District Office	1GB	10/100/1GB	1	2	2	3	1
Cedarwood Elementary	1GB	10/100/1GB	1	12	1	1	1
Pine Ridge School	1GB	10/100/1GB	1	13	1	1	1
Ridgeview	1GB	10/100/1GB	1	4	1	1	0

High							
Site	**WAN Connection**	**LAN Connection**	**Routers**	**Switches**	**Domain Controllers**	**Servers**	**Wireless Access Points**
Paradise High	1GB	10/100/1GB	1	17	2	4	8
Ponderosa Elementary	1GB	10/100/1GB	1	12	1	1	1
Paradise Intermediate	1GB	10/100/1GB	1	10	1	1	2
Paradise Elementary	1GB	10/100/1GB	1	12	1	1	2
Paradise Charter Middle	T-1	10/100	1	0	0	1	4
Children's Community Charter	Comcast	10/100	2	3	1	2	6
HomeTech Charter	DSL	10/100	1	3	1	1	2

At The District Office

Current Infrastructure & Internet Connectivity

The PUSD WAN maintains fiber optic cable connections to all seven schools. The three Charter Schools connect to the WAN via mixed connections as outlined in section 3a and Section 5a. The District Office connects to Butte County Office of Education via a 1GB fiber connection to access the K12 High Speed Network. See Section 5a more detail. The ERATE discount for Paradise Unified School District is 72%.

Current Hardware

See charts in Section 3a. and the beginning of 5a.

Current Telephone System

A Nortel phone system is currently being used. PUSD is receiving Priority 1 E-Rate discounts as well as California Teleconnect Fund, CTF. The E-RATE discount for Paradise Unified School District is 72%.

Current Electronic Learning, Productivity, Assessment and Student Information System Applications

PUSD Supported Software and Web-based applications

- Microsoft Exchange Email Server with Outlook Web Access for all PUSD employees
- Microsoft Office 2003 Professional Suite for Windows
- Microsoft Office 2004 for Mac
- Microsoft Office 2008 for Mac
- Adobe Acrobat Professional
- Adobe FileMaker Professional
- Aeries Client-Server Student Information System from Eagle Software
- Aeries Browser Interface (ABI) – Web-based attendance, grade books and grade reporting system
- IFAS (Integrated Financial and Administrative Solution) – Payroll, business services, human resources, site administrators, and office support staff use this system to varying degrees depending on their position.

- Renaissance Learning Software (Accelerated Reader, Accelerated Math, Star Reading, Star Math, Math Facts In A Flash)
- SEIS (Special Education Information System)
- Aesop Education Online – Automated substitute placement and employee absence management system
- Data Director – Student achievement, assessment and data management system.
- District and School website creation and maintenance application: CatapultCMS (Formerly Freedom Web) from Diverse Network Associates (DNA).
- Study Island – An online standards mastery and test preparation program
- Web Help Desk – Web-based help desk software
- Remote support
  - Bomgar – A secure remote computer support system
  - SharePoint – Collaboration software for content management and sharing
- CSBA Agenda Online – Web based Automated Electronic Board Meeting

Current Technical Support

Members of the technology department, primarily the network administrator and the network/workstation technician provide tech support for the district office. The average response time for tech support on a work order varies based on the priority of the task. Most often support is provided to the district school sites within 1-2 days for higher priority items and a week for lower priority tickets.

At The Elementary Schools

Current Infrastructure & Internet Connectivity

The PUSD WAN maintains fiber optic cable connections to all seven, district schools. The three Charter Schools connect to the WAN via mixed connections as outlined in section 3a and Section 5a. The District Office connects to Butte County Office of Education via a 1GB fiber connection to access the K12 High Speed Network. See Section 5a for more detail. The ERATE discount for Paradise Unified School District is 72%.

Current Hardware

Please reference charts in 3a and at the beginning of 5a.

Current Telephone System

A Nortel phone system is currently being used. PUSD is receiving Priority 1 E-Rate discounts as well as California Teleconnect Fund, CTF. The ERATE discount for Paradise Unified School District is 72%.

Current Electronic Learning, Productivity, Assessment and Student Information System Applications

The student information system used district-wide is Aeries. Data Director is also provided district-wide except at the charter schools.

Following is a list of electronic learning, productivity tools, assessment software, and digital resources used at the elementary schools:

Microsoft Office 2003 for Windows Microsoft Office 2004 for Mac Microsoft Office 2008 for Mac Adobe Acrobat Professional Adobe FileMaker Professional AeriesCS Student Information System Aeries Browser Interface IFAS (Integrated Financial and Administrative Solution) SEIS (Special Education Information System) Data Director CatapultCMS Renaissance Learning Software • Accelerated Reader • Accelerated Math • STAR Reading • STAR Math Apple iTunes, iPhoto, iMovie, iDVD	Subscriptions: Study Island Renaissance Place Aesop Education Online

Current Technical Support

Members of the technology department, primarily the network administrator and the network/workstation technician provide tech support for the district office. The average response time for tech support on a work order varies based on the priority of the task. Most often support is provided to the district school sites within 1-2 days for higher priority items and a week for lower priority tickets.

At The Middle Schools

Current Infrastructure & Internet Connectivity

The PUSD WAN maintains fiber optic cable connections to all seven, district schools. The three Charter Schools connect to the WAN via mixed connections as outlined in section 3a and Section 5a. The District Office connects to Butte County Office of Education via a 1GB fiber connection to access the K12 High Speed Network. See Section 5a for more detail. The ERATE discount for Paradise Unified School District is 72%.

Current Hardware

Please reference charts in 3a and at the beginning of 5a.

Current Telephone System

A Nortel phone system is currently being used. PUSD is receiving Priority 1 E-Rate discounts as well as California Teleconnect Fund, CTF.

Current Electronic Learning, Productivity, Assessment and Student Information System Applications

The student information system used district wide is Aeries. Data Director is also provided district-wide except at the charter schools.

Following is a list of electronic learning, productivity tools, assessment software, and digital resources used at the middle schools:

Microsoft Office 2003 for Windows Microsoft Office 2004 for Mac Microsoft Office 2008 for Mac Adobe FileMaker Professional AeriesCS Student Information System Aeries Browser Interface IFAS (Integrated Financial and Administrative Solution) SEIS (Special Education Information System) Data Director CatapultCMS Renaissance Learning Software • Accelerated Reader • Accelerated Math • STAR Reading • STAR Math Apple iTunes, iPhoto, iMovie,	Subscriptions: Study Island Free Online Typing Resources Aesop Education Online

Current Technical Support

Members of the technology department, primarily the network administrator and the network/workstation technician provide tech support for the district office. The average response time for tech support on a work order varies based on the priority of the task. Most often support is provided to the district office within 1-2 days for higher priority items and a week for lower priority tickets.

At The High Schools

Current Infrastructure & Internet Connectivity

The PUSD WAN maintains fiber optic cable connections to all seven, district schools. The three Charter Schools connect to the WAN via mixed connections as outlined in section 3a and Section 5a. The District Office connects to Butte County Office of Education via a 1GB fiber connection to access the K12 High Speed Network. See Section 5a for more detail. The E-RATE discount for Paradise Unified School District is 72%.

Current Hardware

Please reference charts in 3a and at the beginning of 5a.

Current Telephone System

A Nortel phone system is currently being used. PUSD is receiving Priority 1 E-Rate discounts as well as California Teleconnect Fund, CTF.

Current Electronic Learning, Productivity, Assessment and Student Information System Applications

The student information system used district wide is Aeries. Data Director is also provided district-wide except at the charter schools.

Following is a list of electronic learning, productivity tools, assessment software, and digital resources used at the high schools:

Microsoft Office 2003 for Windows Microsoft Office 2004 for Mac Microsoft Office 2008 for Mac Adobe Acrobat Professional Adobe FileMaker Professional AeriesCS Student Information System Aeries Browser Interface IFAS (Integrated Financial and Administrative Solution) SEIS (Special Education Information System) Data Director CatapultCMS Renaissance Learning Software • Accelerated Reader • Accelerated Math • STAR Reading • STAR Math • Math Facts In A Flash Apple iTunes, iPhoto, iMovie, iDVD Music Software? (PHS) Adobe Creative Suite 5 (PHS) Typing Software? (PHS)	Subscriptions: EBSCO Research Database

Current Technical Support

Members of the technology department, primarily the network administrator and the network/workstation technician provide tech support for the district office. The average response time for tech support on a work order varies based on the priority of the task. Most often support is provided to the district office within 1-2 days for higher priority items and a week for lower priority tickets.

Paradise Unified School District Charter Schools

At Children's Community Charter School

Current Infrastructure & Internet Connectivity

Children's Community Charter School's Internet Service Provider is Comcast. The campus has connectivity throughout all buildings. The network cabling is 10/100/1000 and is a fully switched network. There are three, port switches to allow other communications to the cat 5e point of entry in various classrooms. The campus also provides wireless access to the network and Internet. Four wireless access points are distributed throughout the campus to provide full coverage for all wireless network users. The wireless network deploys 802.11 b/g n technology. There are separate subnets for the student and administrative users.

Current Hardware

Two classrooms house several network switches and routers. Network hardware also includes the placement of small 8 port switches to allow other connections to the cat 5e point of entry in various classrooms. There are two servers. One server to execute and one to store. There is a secure domain for teacher laptops on the wireless network and one for students. Others services include email, web access, domain file services, databases, VPN services and content

filtering/transparent proxy services. Network management services provide hardened and protected core network services aligning within open standards and open technologies. Delivery of the firewall for the entire network is set up so the DMZ, administration network, and student wireless network are all separate and secure. The web and email server are deployed with the DMZ. Secure protocols including IMAPS, secure authenticated SMTP and HTTPS are provided for access to the DMZ resources. This server provides the school with a portal and a collaboration website. The administrative network server within the administrative network provides file services, file sharing, database storage and administrative collaboration tools. Content filtering is deployed utilizing black list to authorize access to web content. Please reference charts in 3a and at the beginning of 5a.
Peripherals include: 4 SmartBoards and 9 document cameras.
There are 25 student laptops less than 48 months old and 15 teacher laptops greater than 48 months old used for instructional purposes.

Current Telephone System

The telephone system is through Comcast, with a local vendor for installation of new phones or service of existing phones. The school ERATE discount is 72%.

Current Electronic Learning, Productivity, Assessment and Student Information System Applications

The student information system used district wide is Aeries.
Following is a list of electronic learning, productivity tools, assessment software, and digital resources used at the school:

Renaissance Learning Products; Star Reading, Accelerated Reader, Star Math, Accelerated Math, Microsoft Office Suite, AeriesCS and ABI	Subscriptions; Discovery Education, Free Internet research tools and resources

Current Technical Support

The technology support CCCS receives from Paradise Unified School District is for the support of Aeries, the student information system. Support consists of hosting, storage, and updates, roll over, database management and back up of the SIS. Additionally support is provided for software updates to two office workstations, database management, and Aeries Browser Interface set up and support, allowing teachers to take attendance electronically and use ABI grade books. Currently there is no paid technology support, or IT person at CCCS. At the beginning of the 2010-2011 school year CCCS contracted for services from a parent to re-image teacher laptops and student laptops on the cart. There is a support@paradiseccccs.org link that teachers can use to report problems. The site administrator receives a copy of these emails and facilitates corrections as possible

At HomeTech Charter School

Current Infrastructure & Internet Connectivity

HomeTech Charter School is wired with network drops throughout all classrooms and offices. All desktop computers are connected through a switch to a server which in turn connects them to the WAN. HomeTech charter school is connected to the Internet through a standard DSL

modem. We do not connect to the K12 high-speed network. The Erate discount for HomeTech Charter School is the same as for Paradise Unified School District which is 72%.

Current Hardware

HomeTech Charter currently runs network services on a Mac OS X Server 2x2 GHz Dual-Core Intel Xeon Server. It is shielded from the WAN by a SonicWall Pro 2040 firewall. The server is connected to the LAN by a Dell Power Connect 3448 switch. Two wireless routers are connected at strategic places on the LAN to provide complete wireless coverage for the entire school. Please reference charts in 3a and at the beginning of 5a.

We have 29 computers less than or equal to 48months old that are used for instruction. 19 of those are in the laptop cart and 10 of those are desktops set up in the computer lab. We also have 6 desktop computers that are greater than 48 months old set up in the elementary computer lab. Additionally we also have 24 desktop computers, 5 laptops used by teachers and 5 laptops that can be loaned to students on an as-needed basis that are also greater than 48 months old. Peripherals include: 1 scanner, 1 digital projector, 2 still cameras, 3 video cameras, 2 external hard drives, 1 smart board, 1 color laser printer, and 2 black laser printers. Please reference charts in 3a. and the beginning of 5a.

Current Telephone System

HomeTech currently uses a Panasonic KX-TG4000B phone system. Erate discounts for phone service is 72%.

Current Electronic Learning, Productivity, Assessment and Student Information System Applications

The student information system used district wide is Aeries.

Following is a list of electronic learning, productivity tools, assessment software, and digital resources used at the school:

Microsoft Office Suite Apple's; Pages, iMovie, iPhoto, Garage Band, iTunes Mindstorms NXT Lego Robotics Read Naturally, iStop Motion Google Docs, AeriesCS, and ABI	Subscriptions: campuslearning.com typingadventure.com Renaissance Place student assessment system CompassLearning/Odyssey curriculum, and Free Internet research tools and resources

Current Technical Support

The technology support HomeTech Charter receives from Paradise Unified School District is for the support of Aeries, the student information system. Support consists of hosting, storage, and updates, roll over, database management and back up of the SIS. Additionally support is provided for software updates to two office workstations, database management, and Aeries Browser Interface set up and support, allowing teachers to take attendance electronically and use ABI grade books. The school site provides approximately 1/5 FTE person for the job.

At Paradise Charter Middle School

Current Infrastructure & Internet Connectivity

Paradise Charter Middle School is currently connected to the Butte County Office of Education WAN and the Paradise Unified School District LAN via a T1 Line. Erate discount is the same as

Paradise Unified School District which is 72%. The campus is wired with network drops throughout the offices and classrooms. The campus is also wireless

Current Hardware

Paradise Charter Middle School currently has aT1 line with a router, managed by Butte County Office of Education ITS. There is one switch. There is one server dedicated to the management of student laptops. Of the 27 computers on campus used for instructional purposes 25 laptops and 5 desktop computers are less than 48 months old. Two teacher desktop computers are older than 48 months. Please reference charts in 3a and at the beginning of 5a.

Current Telephone System

AT&T provides phone service to the campus. The Erate discount is the same as Paradise Unified School District which is 72%

Current Electronic Learning, Productivity, Assessment and Student Information System Applications

The student information system used district wide is Aeries.

Following is a list of electronic learning, productivity tools, assessment software, and digital resources used at the school:

Microsoft Office Suite, Mavis Beacon, AeriesCS and ABI	Subscriptions: Free Internet research tools and resources

Current Technical Support

The technology support PCMS receives from Paradise Unified School District includes the support of Aeries, the student information system. Support consists of hosting, storage, and updates, roll over, database management and back up of the SIS. Additionally support is provided for software updates to two office workstations, database management, and Aeries Browser Interface set up and support, allowing teachers to take attendance electronically and use ABI grade books. PUSD also supports the network functions (DNS and DHCP) for PCMS. Additional technology support is shared among staff and a parent who supports the portable laptop cart for student use.

5b: District Needs Over the Next Five Years

Below is an outline of our district's known needs to support the activities in the Curriculum (Section 3) and Professional Development Components(Section 4) of our tech plan in terms of: Infrastructure, Hardware, Electronic Learning & Assessment Resources/Software, Networking, Telecommunication Infrastructure, physical plant modifications, and technical support needed.

District Office Needs

Infrastructure & Internet Connectivity Needs

There are no current plans for the District Office WAN or LAN. The WAN has a fiber connection that is sufficient for our needs for the next 3-5 years. The LAN infrastructure was also recently upgraded and will not need any improvements for the next 3-5 years.

Hardware Needs

The district office hardware needs for the next five years will include: a video conference unit; video projection system for the district office board room; upgrading the wireless access point to integrate with our managed wireless system; and upgrade district office computers and printers as needed.

Telephone System Needs

There are currently no plans to upgrade existing phone systems within the district.

Current Electronic Learning, Productivity, Assessment and Student Information System Applications

The district office software needs over the next 3-5 years include upgrading to Office 2010 and upgrading the operating systems to Microsoft Windows 7. Maintain district supported software subscriptions such as Aesop, Catapult web hosting, AeriesCS, AeriesABI, Blackboard Connect, Agenda Online, and Data Director.

Technical Support Needs

No plans for changes to technical support.

Physical Plant Modifications Needs

No changes to physical plant modifications are anticipated over the next 3-5 years.

For All PUSD Schools Needs

Infrastructure & Internet Connectivity Needs

No changes to WAN connection speeds are anticipated over the next 3-5 years. The LAN connection speeds will be upgraded, see chart below in Hardware Needs.

Hardware Needs

It is the goal of the district to replace existing instructional computers greater than 48 months old. We also will be upgrading existing laptop carts at the middle and high schools as funds become available. The schools sites will be upgrading their current wireless access points to integrate with a managed wireless system already in place. These units will be replaced as needed. The following infrastructure project chart outlines our plans over the next 3-5 years.

Site	Project Scope	List of equipment
Cedarwood Elementary	Part of managed wireless project district-wide	Wireless access points (10)
	Replacement of old switches	24 port switch (2) w/ mini GBIC Connectors
	Replacement of old switches	48 port switch (1) for lab project w/ mini GBIC Connectors
Pine Ridge School	Part of managed wireless project district-wide	Wireless access points (13)
	Replacement of old switches	24 port switch (3) w/ mini GBIC Connectors
	Rack for switches, battery backup	12 U Rack (2)
	Need to connect GYM to rest of campus with fiber	Fiber connection from SHINE to GYM
Ridgeview High	Part of managed wireless project district-wide	Wireless access points (6)
	Replacement of old switches	24 port switch (2) w/ mini GBIC Connectors
Ponderosa Elementary	Need to connect Intermediate distribution frames (IDF's) to the Main distribution frame (MDF) with fiber connections	Fiber connection from MDF to each IDF (10)
	Rack for switches, battery backup	12 U Rack (10)

	Replacement of old switches	24 port switch (4) w/ mini GBIC Connectors
Paradise High	Part of managed wireless project district-wide	Wireless access points (25)
	Replacement of old switches	24 port switch (10) w/ mini GBIC Connectors
	Replacement of old switches	48 port switch (3) for MDF w/ mini GBIC Connectors
	Rack for switches, battery backup	12 U Rack (5)
Paradise Elementary	Part of managed wireless project district-wide	Wireless access points (12)
	Replacement of old switches	24 port switch (4) w/ mini GBIC Connectors
Site	**Project Scope**	**List of equipment**
PES Cont.	Rack for switches, battery backup	12 U Rack (1)
	Rack for switches, battery backup	18 U Rack (1)
	The entire site needs to be rewired. The current wiring is out of date and is not labeled, etc.	Rewiring entire campus
Paradise Intermediate	Part of managed wireless project district-wide	Wireless access points (15)
	Replacement of old switches	24 port switch (6) w/ mini GBIC Connectors
	Replacement of old switches	48 port switch (3) for lab project w/ mini GBIC Connectors
	Rack for switches, battery backup	12 U Rack (5)
	Rack for switches, battery backup	18 U Rack (1)
Honey Run Academy	Part of managed wireless project district-wide	Wireless access points (3)
	Rack for switches, battery backup	12 U Rack (2)
	Replacement of old switches	24 port switch (2) w/ mini GBIC Connectors

Telephone System Needs

There are currently no plans to upgrade existing phone systems within the district.

Current Electronic Learning, Productivity, Assessment and Student Information System Applications

The school site software needs over the next 3-5 years include upgrading to Office 2010 and upgrading the operating systems to Microsoft Windows 7. Maintain district supported software subscriptions such as Aesop, Catapult web hosting, Aeries CS, Aeries ABI, Blackboard Connect, Agenda Online, and Data Director. Maintain site-specific software and subscriptions such as Study Island, EBSCO, Type-To-Learn, Earobics, and Renaissance Learning software.

Technical Support Needs

With the implementation of additional computer hardware, software, subscriptions, and peripherals, we will need to add additional support personnel as funds become available.

Physical Plant Modifications Needs

No changes to physical plant modifications are anticipated over the next 3-5 years.

5c: Annual Benchmarks, Action Steps, Timelines, and Monitoring

In Section 5b, we indicated a need to add additional technical support personnel. However, we have not yet identified the needed funds to acquire this resource. Therefore we have not provided annual benchmarks and action steps for this needed service in section 5C of the plan nor have we budgeted for this resource in Section 6. Should funds become available during the implementation of this tech plan, we will update these sections of our tech plan with an addendum.

Infrastructure & Internet Connectivity Needs

Annual Benchmarks:

Year 1: 20% of all sites upgraded to Gigabit LAN or better by June 2012
Year 2: 40% of all sites upgraded to Gigabit LAN or better by June 2013
Year 3: 60% of all sites upgraded to Gigabit LAN or better by June 2014
Year 4: 80% of all sites upgraded to Gigabit LAN or better by June 2015
Year 5: 100% of all sites upgraded to Gigabit LAN or better by June 2016

Action Steps & Timeline:

1. Submit E-rate 470 form annually in the fall and include router/switch upgrades to Gigabit Ethernet LAN.
2. If E-rate application is approved, the selected Erate vendor will upgrade 20% of all district school sites annually to Gigabit LAN or better.

Hardware Needs: New Computers for Teacher & Student Use

Annual Benchmarks:

Year 1: By June 2012, replace 20% of existing instructional computers ≥ than 48 months old.
Year 2: By June 2013, replace 20% of existing instructional computers ≥ than 48 months old.
Year 3: By June 2014, replace 20% of existing instructional computers ≥ than 48 months old.
Year 4: By June 2015, replace 20% of existing instructional computers ≥ than 48 months old.
Year 5: By June 2016, replace 20% of existing instructional computers ≥ than 48 months old.

Action Steps & Timeline:

1. Annually in the spring, the district and school site administrators will include a budget line item for replacing existing instructional computers ≥ than 48 months old.
2. Annually in the summer, district and site tech support will label, ghost, and install new computers at school sites and replace or repurpose instructional computers ≥ than 48 months old

Current Electronic Learning, Productivity, Assessment and Student Information System Applications Needs

Annual Benchmarks:

1. School sites will have access to district approved electronic learning and productivity resources to support math and ELA curriculum and intervention programs.
2. District and school sites will implement a student achievement assessment system and benchmark assessment process.
3. The district will have a standardized Information Technology Services (ITS) work order process and tracking system in place.
4. The district will provide staff development on using the new online helpdesk system, to submit IT work orders for timely Technical Support.
5. The district will have ITS computer, software, and network security standards in place for district supported Educational Technology (i.e. Virus protection, DeepFreeze software).

Action Steps & Timeline:

The action steps and timeline for the benchmarks above are annual and ongoing.

1. During the first year of this plan the district will have implemented Accelerated Math Intervention at 2 sites.
2. The student achievement assessment system, Data Director is being further implemented during year 1 of this tech plan. Grade level teams and high school departments will further enhance its use by developing benchmark assessment pieces.
3. At this writing the district is preparing to implement a new ITS work order process and tracking system. During year 1 of this tech plan the ITS department will implement the features of the new system.
4. During the end of the current school and beginning fully during year one of this tech plan the ITS department will provide professional development for using the new online helpdesk system.
5. During the first year of this tech plan the ITS department will expand the use of newly acquired network security and begin writing network security standards.

Section 5d: Benchmark Monitoring and Evaluation Process

The district Technology Director, Network Administrator 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. The district Technology Director, Network Administrator, and school site administrators, will conduct formative data reviews. Pertinent technology plan and funding updates are shared with the Technology Advisory Council via email and SharePoint. The Technology Advisory Council will meet quarterly to track the development and implementation of the 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 2016. The Technology Director is responsible for a mid-year tech plan implementation status report to stakeholders annually 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 Technology Director is responsible for an annual summative performance report to stakeholders in October.

Section 6: Education Technology Funding & Budget

6a. Established and Potential Funding Sources

Established Funding Sources

Economic conditions in California and the nation continue to impact our district's education budgets . Therefore, our established and potential funding sources to implement our Education Technology Plan will likely be impacted as well. The PUSD school district receives varied federal, state, and local sources of funding. These include state Tier 3 categorical funds, lottery funds, Microsoft K12 Voucher reimbursement (ending in2012), E-rate discounts, CTF discounts, a variety of federal ESEA Title funds, and miscellaneous grants. We also receive very limited donations from the community members and businesses. The continued need for up-to-date student and teacher computers (4 years old or newer) and for district based, school site technical support are the biggest budget challenges for technology in our district.

The district General Fund covers the costs for:

- The salaries for the district's Information Technology Services staff
- The district's student information system (SIS), including implementation & training costs.
- The district's student learning assessment system, including implementation & training costs
- Telecommunication services such as phone and Internet connectivity that are not covered by E-rate.
- Hosting and management of the district and site-based web pages
- Equipment, resources, and tools used by the district's Information Technology Services department.
- Upgrades to district supported digital learning and productivity applications
- Upgrades and maintenance for district and site based servers
- Upgrades and maintenance of the district and site based infrastructure
- Network Security applications

The District's Ed Tech Funds Pay For:

- Education technology staff development for teachers, administrators, paraprofessionals, and classified staff to meet Ed Tech curricular goals in district tech plan.
- Teacher & school webpage design, publishing and hosting resources and training
- Training costs for our IT technical staff
- Extra technical help deployment for special district projects.
- Some costs for new hardware and peripherals if the district's Ed Tech budget allows.

Site-based Funds Pay For:

School sites often choose to pay for, digital and web based teaching and learning applications, additional computers & peripherals, etc. as individual site-based needs dictate and budgets allow.

District Erate Discount as of Fall 2010:

The current Erate discount as of the Fall 2010 is 72%.

Potential New Funding Sources

Potential additional funding sources include; additional K12 Voucher reimbursements to be released to Round One voucher applicants, EETT Formula funds (currently may not be federally funded, 7000/4R, new Grants, in-kind services, and donations.

Given the uncertainty of our Ed Tech funding sources, we have established the following priorities list to guide district budget allocation:

1. Increase student and teacher access to computers < 48 months old.
2. Provide Ed Tech Staff Development for teachers, paraprofessional, and classified staff.

3. Upgrade infrastructure at all sites and continue with district-wide virtualization project
4. Improve technical support at school sites and reduce response time
5. Continue to provide online subscriptions to curricular and assessment systems
6. Provide Ed Tech Staff Development for administrators
7. Continue to provide auto attendant communication/ notification system for parents

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 will expend will be contingent on annual fiscal realities as well as competing district priorities. During the summer and early fall of each school year, we will review, revise, and update our tech plan to align with our annual Ed Tech budget realities.

Category	Projected Ed Tech Expenditures 2011-12	Estimated TCO Year One	ERATE* Eligible Amount?	Year 1 Funding Source(s) for Non ERATE Eligible Amt.
1000-1999 Certificated Salaries	Substitutes and stipends for staff development	$82,717.00	N/ A	District Ed Tech Budget
2000-2999 Classified Salaries	Tech Support Salaries	*$184,303.00*	*N/ A*	District General Fund
3000-3999 Employee Benefits	Tech Support Benefits	*$106,560.00*	*N/ A*	District General Fund
4000-4999 Books and Supplies	New Computers: 20% per year from sec.5c = 180 computers x $1500.00	$270,000.00	N/ A	District & School Budgets
	Misc. Peripherals: LCD Projectors, Printers	$9,000.00	N/ A	District & School Budgets
	Productivity Applications (e.g. Office, Network Security) 180 computers x $65.00, plus such as Aesop, Web Helpdesk, Bomgar, Agenda Online, Aeries SIS	$36,572.00	N/ A	District & School Budgets & any available MS Voucher software funds
	Digital curriculum & library resources; such as Renaissance Place, EBSCO, Study Island, Apex Online, etc.	$20,553.00	N/ A	District & School Budgets & any available MS Voucher applicable software funds
	Student Achievement Formative Assessment System (e.g. DataDirector)	*$24,000.00*	*N/ A*	District General Fund
5000 -5999 Services, operating expenses, travel	Telecommunication Services (e.g. phone and internet access)	$178,391.00	$130.255.00	District General Fund
	Web Site Publishing & Hosting	$10,000.00	N/A	District General Fund
	Contracted Prof. Dev. Provider	$3000.00	N/ A	District Ed Tech Budget
	Contracted District Tech Support	$100,000.00	N/ A	District General Fund
6000 -6999 Capital Outlay	New Virtual Servers: $2000.00 each	$4,000.00	N/ A	District General Fund
	Totals:	**$1,029,096.00** TCO	**$130,255.00** -- E-rate Discount	**= $ 898,841.00** TCO minus Erate Discount

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 Substitutes & Stipends	$82,717.00	$82,717.00	$82,717.00	$82,717.00	$82,717.00
TCO District Funded Ed Technical Support & Benefits	$290,863.00	$296,680.00	$302,613.00	$308,665.00	$314,838.00
TCO Hardware and Peripherals	$283,000.00	$279,000.00	$279,000.00	$279,000.00	$279,000.00
TCO Digital Applications,Upgrades, and Online Subscription Services	$57,125.00	$57,125.00	$57,125.00	$57,125.00	$57,125.00
TCO Student Achievement Formative Assessment System *(e.g. DataDirector)*	$24,000.00	$24,000.00	$24,000.00	$24,000.00	$24,000.00
TCO Student Information System (SIS)	$10,000.00	$10,000.00	$10,000.00	$10,000.00	$10,000.00
TCO Networking and Telecommunications w/ E-rate Discounted Services e.g. Network / Infrastructure Services, Internet Access,	$48,136.00	$48,135.00	$48,135.00	$48,135.00	$48,135.00
TCO Other Contracted Services *e.g. Prof.Development, Tech Support, Retrofitting, out sourced maintenance.*	$103,000.00	$53,000.00	$3,000.00	$3,000.00	$3,000.00
Total Estimated Cost Per Year	$898,841.00	$850,657.00	$806,590.00	$812,642.00	$818,815.00
Five Year Total Cost of Ownership Cost Estimate* (Based on goals, objectives, and action steps in Tech Plan sections 3, 4, & 5.)	$4,187,545.00				
*Potential Annual Erate discounts are included in TCO in this chart.					

6c. District's Replacement Policy for Obsolete Equipment

The district's replacement policy for obsolete equipment in most cases is to keep computers and support them on the network for up to seven years. The district's goal is to try to replace all computers 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. Due to severe budget cuts in the past three years the district has been forced to keep older equipment and maintain it on the network. Site administrators work with the district technology staff 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 are not worth upgrading, the equipment is deemed obsolete. A local computer 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, Assistant Superintendent of Finance, the School Board, Technology Director, Network Administrator and Site Administrators have the primary responsibility for funding goals and objectives specified in this plan. In addition, the district Technology Advisory Council , may review the Ed Tech budget and purchases at meetings on a quarterly basis. The Superintendent and the Assistant Superintendent of Finance may adjust the budget as they deem necessary throughout the duration of this technology plan. The Technology Director is responsible for taking budget recommendations and revision requests to cabinet-level meetings and the School Board as needed. The Assistant Superintendent of Finance monitors Ed Tech implementation costs as part of the district's regular budget and purchase order processing. The Technology Director, Network Administrator, Site Administrators, and parent organizations may routinely research new funding opportunities for district education technology. School site technology budgets are the domain of Site Administrators and School Site Councils with recommendations from the Technology Department.

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 monitoring 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 semi annually by the district Technology Director and Technology Department, 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 Advisory Council, 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 Director communicates tech planning issues and setbacks to the Technology Advisory Council members and solicits feedback via e-mail and voice-mail on an ongoing basis. In addition, the Technology Director 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 technology plan stakeholders.

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

Person(s) Responsible	Process	Monitoring	Evaluation
District Technology Director & Tech. Department Members	Provide overall Tech Plan management and coordination	Ongoing	Ongoing
District Technology Director, and Assistant Superintendent of HR & Curriculum	Manage, coordinate, implement, monitor, and evaluate curriculum-based Ed Technology integration staff development.	Ongoing	Annually in June

District Technology Director, & Assistant Superintendent of HR & Curriculum	Manage, coordinate, implement, monitor, and evaluate staff development focused on teaching students NETS skills, (or district equivalents when developed by PUSD).	Ongoing	Annually in June
District Technology Director, Network Administrator & Assistant Superintendent of Finance	Coordinate, manage, and evaluate technology budget, acquisitions, installation, and maintenance.	Ongoing	Annually in August
District Superintendent, Technology Director, & Network Administrator	Standardize, develop, manage, monitor, and revise as necessary network, hardware, infrastructure, software, and technical support specifications, policies, and procedures.	Ongoing	Annually in August
Technology Director, & Assistant Superintendent of HR & Curriculum	Collect and analyze staff development data on technology proficiencies through the annual completion of district survey.	Ongoing	Annually in June
Technology Director, & District Superintendent	Coordinate ongoing Technology Advisory Council and stakeholder involvement.	Ongoing	Bi-Monthly at Tech Advisory Council meetings
District Technology Director, Assistant Superintendent of HR & Curriculum, & Technology Advisory Council	Collect and analyze data regarding students' NETS skills, (or district equivalents when developed by PUSD), and students' academic achievement.	Ongoing	Annually in August
District Superintendent and Technology Director	Communicating tech plan implementation update to stakeholders including the district school board.	Minimally semi-annually in February	N/A
District Superintendent and Technology Director	Communicating annual tech plan evaluation results to stakeholders including the district school board. Parents and the community stakeholders will receive annual updates at Site Council and the Superintendent's various advisory council groups' meetings.	N /A	Annually in October after all tech plan data for the year is in.

Section 8: Adult Literacy and Technology

Adult literacy is provided in the district's attendance area through the Butte County Library Adult Reading Program and the Butte Literacy Council. During the summer of 2011, the district Technology Director will plan to meet with the adult literacy program directors to gather input on our revised Ed Technology plans, to learn how the adult literacy program is currently incorporating technology into its classes, and to discover how we may collaborate to better provide services to our students, our parents and the district's community. It is our goal to increase the awareness of the literacy services already being offered through the Paradise Branch of the Butte County Library and the Butte Literacy Council. Through better multiple agency collaboration it may be possible to make better use of two community rooms in two of our elementary school libraries as a place for adult literacy lessons to be provided. Better collaboration may also provide an avenue to discuss program options; define services; and collaboratively pursue adult literacy funding sources; explore best practices on technology integration to support adult literacy; and explore ways to improve the continuum of education support services and options to our students, parents and the community in general. During these difficult fiscal times collaboration with the local adult literacy programs may be an avenue to help everyone's funding reach a little further while at the same time bring better awareness and support for strong adult literacy programs already in existence.

Section 9: Effective, Research-Based Strategies

9a Effective technology strategies for student learning, teaching, and management

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.
During the course of our district's tech planning process, several research-based documents were reviewed to inform the planning efforts. What follows is a brief summary of the major findings that have been integrated in our 2011-2016 Education Technology Plan.

District Education Technology Vision Building

Paradise Unified School District's philosophy is that the use of technology should be integrated into the curriculum at all levels in order to improve student achievement. Technology improves student performances when the application directly supports the curriculum objectives being assessed.

One of the recent research reports that we reviewed as we began our planning process was, "The 2010 Horizon Report: K-12 Edition", a publication of The New Media Consortium. The Horizon Reports are an ongoing research effort established in 2002 that identifies and describes emerging technologies likely to have a large impact on teaching, learning, research, or creative expression within education around the globe. This volume of the 2010 Horizon Report: K-12 Edition, examines emerging technologies for their potential impact on and use in teaching, learning, and creative expression within the environment of pre-college education. Cloud computing and collaborative learning environments are set to take hold in K-12 schools in the very near future, with mobile devices, game-based learning, and other education technologies to follow suit in the next few years, according to the 2010 Horizon Report's K-12 Edition. Emerging technologies are an important topic of conversation in many stakeholder groups within the district. The Technology Advisory Council especially realizes their importance and as a result these conversations have been translated into the district's education technology vision and 5-year technology plan with an emphasis on exploring cloud computing options and collaborative environments.

Teachers' Use of Technology

Various stakeholder groups looked at several research-based sources that supported our plans in this area. After our initial efforts in technology, during the timeframe of the District's previous technology plan, it became clear that just providing teachers with access to technology did not necessarily result in a high level of usage in the classroom. The literature is very clear about this – successful integration of technology into the classroom requires the availability of quality technology support. Support is defined in a multifaceted way, comprising elements like access to technological tools (software and hardware), routine maintenance and specific, individualized training. In a study that we found from the National Center for Education Statistics teachers identified several "barriers" to the use of computers for instruction. These barriers included not having enough computers in their classrooms, a lack of time in their schedule for students to use computers in the classroom, and a lack of release time for teachers to learn how to use

computers. These issues are addressed in our plan through the comprehensive professional development component, the establishment of a department that will support instructional technology use in the district, and the plan for increasing access to district adopted hardware and software for teachers – among other things.

Specific conditions affect the positive influence technology can have on student academic achievement. Several sources agree that a critical component is providing appropriate teacher training in ways to effectively integrate technology into the curriculum, focusing on meaningful educational goals and improving student learning. (Glennan and Melmed, 1996, Silverstein et al, 2000, Reksten, 2000, Coley, 1997, Panuel b, Golan, Means, B and Korbak, c. 2000)

Infusing technology across the curriculum allows students to take more responsibility for their learning and teachers to create more meaningful and diverse learning activities. Through research on the Internet, communication with others through e-mail, analysis of information using databases, making oral reports using presentation software, producing written reports with word processing software and collaborating with peers, students will become confident problem-solvers and critical thinkers. This is particularly relevant, as recognized by Penuel et al. "Students using sophisticated Ed Technologies as everyday learning tools show marked growth in essential workplace skill. Moreover, such gains do not come at the expense of basic skills." (Penuel, Golan, Means & Korbak, 2000)

In support of this conclusion, a recent study conducted in West Virginia, "shows an increase in test scores resulting from integrating curriculum objectives for basic skills development in reading and mathematics with instructional software" (Cradler et al., 2002).

A two-year study conducted by the Southwest Educational Development Laboratory (SEDL) focused on helping teachers create a learner-centered, learning environment supported by technology. The conclusions revealed that while initially 47% of the classrooms in the study were classified as "low learner-centered classrooms" only 15% were given that label when the project was complete. The types of professional development offered to teachers influenced the transformation. 72 hours of training sessions were held in classrooms similar to those the teachers taught in to replicate the teaching environments they would use for instruction. Sessions offered many opportunities for a sharing of learning and reflecting on the learning process. Monthly on-site visits to classroom by SEDL staff members were essential to the success of the project.

As stated in the study, "The process of learning how to use and integrate technology created a new dynamic of learning for teachers and affected their ways they related to content, to their colleagues, and to their students. Finally, technology use had a cumulative effect on the project teachers in a school. Their enthusiasm about technology served as the impetus for their more reluctant or more skeptical colleagues to attempt to use technology in their classrooms – especially when student performance increased." (Burns 2002)

Teacher expertise is the most critical factor in increasing student performance. Nothing impacts student success in a standards-based curriculum more than a competent, reflective teacher in the classroom who interacts effectively with students, facilitates their learning experiences, and uses curriculum and curriculum materials effectively (Cohen and Ball 1999). As Guhlin states, "For

technology to impact student achievement, teachers must be empowered" (Guhlin 2002). They must also be completely at ease with the technologies the students are using, and they should be proactive about planning for effective technology integration.

Jerald and Orlafsky (1999) found that teachers "are more likely to use what they are learning about technology in their classrooms if they receive curriculum integration training rather than basic skills training in the use of technology." A later study (Bradshaw 2002) found that "When staff development efforts include a presentation of theory and information, demonstration, practice with feedback, and coaching and follow-up over time, the transfer to the classroom and the return on the investment in instructional improvement are significantly increased." All of these techniques are woven into the district's current staff development programs in technology.

Impact of Technology on Instruction and Student Achievement

We looked at the potential impact of technology on student achievement as we developed our plan. Certainly, with the cost of most computers and other technological learning tools, impact on student achievement is an important consideration for a district as it looks for funds to invest in this effort. We found several studies addressing this issue. What follows is a brief summary of a few.

Teacher capability was important in research by Wenglinsky (1998). Using the technique of structural equation modeling on data from the 1996 National Assessment of Educational Progress (NAEP), he conducted a study analyzing the relationship between educational technology and student achievement in mathematics. His findings indicate that, "when computers are used to perform certain tasks, namely applying higher order concepts, and when teachers are proficient enough in computer use to direct students toward productive uses more generally, computers do seem to be associated with significant gains in mathematics achievement" (p. 32). Wenglinsky also found that the frequency of home computer use was positively related to academic achievement.

In a study of educational software, IESD (1999) found the teacher's responsibility is of primary importance in "creating an effective, technology-based learning environment, an environment that is characterized by careful planning and frequent interaction among students and the teacher" (p. 3). Middleton and Murray (1999), in a study investigating teachers' perceptions of their levels of technology implementation, found that the level of technology used by the teacher did have a significant impact on math and reading academic achievement of fifth grade students attending schools in a South Carolina school district.

A national study examining the role of online communication in schools was conducted by the Center for Applied Special Technologies. The study consisted of 500 elementary and middle school students from seven large urban school districts who were assigned projects in an interdisciplinary unit on civil rights. Out of 28 participating classes, 14 experimental classes used online resources and 14 control classes did not have online access. In this study, Follansbee et al. (1997) found that students in the experimental classrooms received higher scores in all nine of the established learning measures. Out of the nine measures, five of the higher scores were found to be statistically significant including being more effective in their ability to, "present their work, state a civil rights issue, present a full picture (who, what, when, where, why, how) bring together different points of view, and produce a complete project"(p. 18).

In research on educational technology and software, an IESD study unequivocally proclaims, "educational technology has demonstrated a significant positive effect on achievement. Positive effects have been found for all major subject areas, in preschool through higher education and for both regular education and special needs students" (1999, p. 3).

In a related summary of current research findings regarding technology in education, Cradler (1994, p. 1) found research that shows technology:

- Increases performance when interactivity is prominent
- Improves attitude and confidence, especially for "at-risk" students
- Can increase opportunities for student-constructed learning
- Increases student collaboration on projects
- Significantly improves problem-solving skills of learning handicap students
- Improves writing skills and attitudes about writing for urban LEP students

Student performance is the catalyst for change. One study cited reports that the project group of students “routinely employed inquiry, collaborative, technological, and problem-solving skills uncommon to graduates of traditional high school programs” (Sandholtz, et al 1997). In another study, researchers investigated the impact of project-based learning using multimedia (Penuel, Golan, Means, & Korbak, 2000). Project classrooms in this study were much more student-centered than non-project classrooms, and were “organized around the collaborative construction of complex products” (Penuel et al., 2000. p. 109).

Using technology in a constructivist environment either in individual student-centered projects or in collaborative group-work is powerful, as summarized by Means: “Student motivation is enhanced through online collaborative research that includes online communication with peers and experts in other states and countries” (Means et al., 1997). Cradler agrees. “Students and teachers reported a positive change in student motivation for class assignments when the use of multimedia was incorporated into classroom instruction” (Cradler & Cradler, 1999).

Von Secker (2002) reports that inquiry-based learning has been shown to increase both academic outcomes and equity. Computers function as extremely powerful tools for self-directed learning and are particularly well suited for enabling the objectives of constructivist principles (Jonassen & Reeves, 1996). Marzano, Pickering and Pollock add that through constructing their own meaning around authentic issues, students acquire the sophisticated thinking skills needed to live and work in the 21st century (2001). This in itself requires innovative strategies in the teaching/learning process.

Our technology committee has concluded that for technology to make a lasting impact educators must use a variety of teaching and learning approaches when utilizing technology in their classrooms. Time and again, the research comes back to the teacher as the most influential component of a successful technology program. Teachers must be given the time and resources to attend professional development opportunities on utilizing technology in the classroom. Schools should make the most of teachers who are "resident experts" that can offer on-site development opportunities and be used as one-on-one tutors for other faculty members. Our plan addresses this issue in several places, calling for planning time, development of units of practice

that integrate technology as a learning tool, development of technology experts through training opportunities like ILAST and others, etc.

Data-driven Decision Making

Several sources we studied addressed the importance of using technology to assist administrators, teachers, parents and students make decisions about teaching, learning and program development based on data. Goals should include:

- Establishment of a foundational understanding of data collection
- Make connections to existing data collections
- Identify relevancy of data to school improvement efforts

The National School District has made great progress in establishing a data management system for the purpose of facilitating the use of data to make quality decisions about instructional programs. This will continue to be a major focus of the plan during the next five years.

Research has shown that with computer-aided instruction, student academic achievement improves. Underwood and Brown have shown a correlation between computer-based instruction and student motivation for learning. The ease of error correction, a semi-private environment, active control, and ability to work at one's own pace all increase student motivation. (1997). Cotton adds, "computer assisted instruction resulted in improved student attitudes in a variety of areas. These areas included improved attitudes towards themselves as learners, the use of computers in education, course subject matter, quality of instruction, and school in general" (1992).

9B. Using Technology to Expand Access to Curriculum

Our 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 online resources, cloud computing, 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 K12 High Speed Network. We will continue to work with CTAP Region 2 and the Butte County Office of Education to explore use of the K12 High Speed Network to deliver rigorous academic curriculum online to our students.

Bibliography

Archer, J. (1998). The link to higher test scores. Education Week, 18 (5), 10-21.

Bare, J., and Meek, A. (1998). *Internet Access in Public Schools* (NCES 98–031). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Bradshaw, L. (2002). "Technology for Teaching and Learning: Strategies for Staff Development and Follow-Up Support." Journal of Technology and Teacher Education 10(1): 131-150.

Cattagni, A., and Farris, E. (2001). Internet Access in U.S. Public Schools and Classrooms: 1994– 2000 (NCES 2001–071). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Cohen, D. K. and D. L. Ball (1999). Instruction, Capacity and Improvement. Consortium for Policy Research in Education. Philadelphia, PA, University of Pennsylvania.

Cotton, K. (1992). Computer-assisted instruction. Northwest Regional Educational Labratory. Retrieved October 26, 2001, from http://www.nwrel.org/scpd/sirs/5/cu10.html

Cradler, J., & Cradler, R. (1999). Just in time: A new model for multimedia training. Evaluation report for 1999. Washington DC: US Office of Education.

Cradler, J., M. McNabb, et al. (2002). "How Does Technology Influence Student Learning?" Learning and Leading With Technology 29(8): 46-50.

Cradler, J. (1994). Summary of current research and evaluation findings on technology in education. San Francisco, CA: Far West Laboratory.

Cradler, J., & Bridgforth, E. (1996). Recent research on the effects of technology on teaching and learning. Policy Brief. San Francisco, CA: WestEd Regional Educational Laboratory.

Critical issue: Using technology to improve student achievement. (1999). Retrieved December 14, 2002, from North Central Regional Educational Laboratory Web site: http://www.ncrel.org/sdrs/areas/issues/methods/technlgy/te800.htm

Culp, K., Hawkins, J., & Honey, M. (1999). *Review paper on education technology research and development*. New York: Education Development Center, Center for Children and Technology.

Department of Education, National Center for Education Statistics. Washington, DC: U.S.

Government Printing Office. Special Education Regulation, 34 C.F.R. Sec. 300.26 (2001).

Education, I. S. f. T. i. (2000). National Educational Technology Standards for Students: Connecting Curriculum and Technology. Eugene, OR, International Society for Technology in Education.

Follansbee, S., Hughes, R., Pisha, B., & Stahl, S. (1997). Can online communications improve student perfor-mance? Results of a controlled study. ERS Spectrum, 15 (1), 15-26.

Guhlin, M. (2002). "Teachers Must Push Technology's Tidal Wave." Journal of Staff Development 1(Winter): 40-41.

Heaviside, S., and Farris, E. (1997). Advanced Telecommunications in U.S. Private Schools, K–12, Fall 1995 (NCES 97–394). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

Heaviside, S., Farris, E., and Malitz, G. (1995). Advanced Telecommunications in U.S. Public Schools,

K–12 (NCES 95–731). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Heaviside, S., Farris, E., and Malitz, G. (1996). Advanced Telecommunications in U.S. Public Elementary and Secondary Schools, 1995 (NCES 96–854). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Heaviside, S., Riggins, T., and Farris, E. (1997). Advanced Telecommunications in U.S. Public Elementary and Secondary Schools, Fall 1996 (NCES 97–944). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Heaviside, S., Rowand, C., Hurst, D., and McArthur, E. (2000). What Are the Barriers to the Use of Advanced Telecommunications for Students With Disabilities in Public Schools? (NCES 2000– 042). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Hennessy, S. et al. (1995). A classroom intervention using a computer-augmented curriculum for mechanics. International Journal of Science Education, 17(2), 189-206.

Honey, M., & Henriquez, A. (1996). Union city interactive multimedia education trial: 1993-1995 summary report. CCT Reports, Issue No. 3. New York, NY: Center for Children & Technology.

Hord, S. M. and Association for Supervision and Curriculum Development. (1987). Taking charge of change. Alexandria, Va., Association for Supervision and Curriculum Development.

Interactive Educational Systems Design, Inc. (IESD). (1999). 1999 Research report on the effectiveness of technology in schools: Executive summary 6th edition. Report commissioned by the Software & Information Industry Association. Washington, DC: Software Publishers Association.

James, R., & Lamb, C. (2000). Integrating science, mathematics, and technology in middle school technology-rich environments: A study of implementation and change. School Science & Mathematics, 100 (1), 27-36.

Jerald, C. D. and G. F. Orlafsky (1999). "Across the Nation: Raising the Bar on School Technology." Education Week 19(4): 58-108.

Kulik, J. (1994). Meta-analytic studies of findings on computer-based instruction. In E. L. Baker and H. F. O'Neil, Jr. (Eds.). Technology assessment in education and training. Hillsdale, NJ: Lawrence Erlbaum.

Lampert, L. (1998). Building Leadership Capacity in Schools. Alexandria, VA, Association for Supervision and Curriculum Development.

Lanahan, L. (2002). Beyond School-Level Internet Access: Support for Instructional Use of Technology (NCES 2002–029). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Levin, D., Hurst, D., and Burns, S. (2000). Computer and Internet Access in U.S. Private Schools and Classrooms: 1995 and 1998 (NCES 2000–044). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

National Middle School Association (1995). This we believe: Developmentally responsive middle level schools. Columbus, OH: Author.

Newburger, E. (2001). Home Computers and Internet Use in the United States: August 2000. U.S. Census Bureau, Current Population Reports, August 2000.

North Central Regional Educational Laboratory (1999). Hands-on, minds-on learning. ParenTech: Parenting in a Digital Age. Oak Brook, IL: NCREL.

Mann, D., Shakeshaft, C., Becker, J., & Kottkamp, R. (1999). West Virginia's basic skills/computer education program: An analysis of student achievement. Santa Monica, CA: Milken Family Foundation.

Marzano, R., D. Pickering, et al. (2001). Classroom Instruction that Works: Research-based Strategies for Increasing Student Achievement. Alexandria, VA, Association for Supervision and Curriculum Development.

Means, B. (1994). *Technology and education reform: The reality behind the promise.* San Francisco: Jossey Bass.Oxford, UK: Heinemann/NCET.

Means, B., Coleman, E., Klewis, A., Quellamlz, E., Marder, C., & Valdes, K. (1997). Globe Year 2 Evaluation. Menlo Park, CA: SRI International.

Middleton, B., & Murray, R. (1999). The impact of instructional technology on student academic achievement in reading and mathematics. International Journal of Instructional Media, 26 (1), 109- 117.

Munger, L. and K. Pensick (2002). Cross-Case Analysis: Six Technology Innovation Challenge Grants from Five Western Cluster Sites. Arvada, CO, National Staff Development Council: 1-166.

Parsad, B., Skinner, R., and Farris, E. (2001). Advanced Telecommunications in U.S. Private Schools:

1998-99 (NCES 2001–037). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office. President's Committee of Advisors on Science and Technology, Panel on Educational Technology. (1997).

Penuel, B., Golan, S., Means, B., & Korbak, C. (2000*). Silicon Valley Challenge 2000: Year 4 Report*. Menlo Park, CA: SRI International.

Report to the President on the Use of Technology to Strengthen K–12 Education in the United States. Available: http://www.ostp.gov/PCAST/k-12ed.html.

Ross, John D., Burdette, Krista J (2001). Toward an Effective Use of Technology in Education: A Summary of Research. Appalachia Educational Laboratory, Incorporated.

Rowand, C. (1999). Internet Access in Public Schools and Classrooms: 1994–98 (NCES 1999–017). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

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

Schrum, Lynne. (Jan. 2000). *Let's Put Pedogogy First: Technology as a Tool to Support Instruction*. Retrieved Jan. 6. 2003, for Education World Website: http://www.educationworld.com/a_tech/tech004.shmtl.

Secretary's Commission on Achieving Necessary Skills. (1991). *What work requires of schools: A SCANS report for America 2000*. Washington, DC: US Department of Labor.

Sivin-Kachala, J. (1998). Report on the effectiveness of technology in schools, 1990-1997. Washington, DC: Software Publisher's Association.

Smerdon, B., Cronen, S., Lanahan, L., Anderson, J., Iannotti, N., and Angeles, J. (2000). Teachers' Tools for the 21st Century: A Report on Teachers' Use of Technology (NCES 2000–102). U.S.

Thornberg, David. (2002). *The New Basics: Education and the Future of Work in the Telematic Age*. Alexandria, Virginia: ASCD.

Underwood, J., & Brown, J. (Eds.). (1997). Integrated learning systems: Potential into practice. Oxford, UK: Heinemann/NCET.

Von Secker, C. (2002). "Effects of Inquiry-Based Teacher Practices on Science Excellence and Equity." The Journal of Educational Research 95(3): 151-60.

Wade, H. H. (2002). "Data Inquiry and Analysis for Educational Reform." ERIC Digest: Office of Educational Research and Improvement 153.

Weller, H. (1996). Assessing the impact of computer-based learning in science. Journal of Research on Computing in Education, 28(4), 461-486.

Wenglinsky, H. (1998). Does it compute? The relationship between educational technology and student achievement in mathematics. Princeton, NJ: ETS Policy Information Center-Research Division.

Williams, C. (2000). Internet Access in Public Schools and Classrooms: 1994–99, (NCES 2000–086). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Yocam, K. a. W., F. (1998). Creating an Alternative context for Teacher Development: ACOT's Two-Year Pilot Project. Cupertino, CA, Apple Computer.

APPENDIX

Appendix C – Criteria for EETT Technology Plans

1. **PLAN DURATION CRITERION**	**Page in District Plan**	**Example of Adequately Addressed**	**Example of Not Adequately Addressed**
The plan should guide the county office'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)	**6**	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 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.	**7-8**	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.*	**9-13**	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.*	**13-14**	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.*	**15-16**	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.*	**16-20**	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.*	**20-21**	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.*	**21-22**	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.*	**21-22**	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.*	**22-24**	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.*	**23-24**	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.*	**24-25**	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.*	**25-27**	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.	**25-26**	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.	**26-31**	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.	**32-42**	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.*	**32-40**	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.*	**40-42**	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.*	**42-44**	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.*	**44**	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.*	**44-45**	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.*	**45-47**	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.*	**47**	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.*	**47**	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.	**48**	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.	**48-49**	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.	**48-49**	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.)*	**49**	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.*	**49-54**	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.*	**54**	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.