1 **Sierra-Plumas Joint Unified School District & Sierra County Office of Education**
2 **Technology Plan**
3 **July 2007 – June 2010**
4
5 **District Overview:**
6 In rural Sierra County, Sierra-Plumas Joint Unified School District and the Sierra County Office
7 of Education serve the entire student population of the county, approximately **526 students,** in
8 grades K-12. The county is extremely rural, not well funded, and sparsely populated. The
9 economy is based on cattle, timber, and the recreation industries. It is not uncommon for students
10 to spend between one and two hours daily in transit to and from school. The chart below
11 indicates the district schools with respective student population and number of certificated
12 teachers (CBEDS 2006).

School	Students Pop.	Staff Certificated	School	Students Pop.	Staff Certificated
Loyalton High	144	12			
Loyalton Middle	104	8	Downieville K-6	26	2
Loyalton Elem	173	11	Downieville 7-12	55	7
Sierra Crest Ind St	14	1	Sierra Pass Cont.	4	1

13
14 According to DataQuest 2003, 1.9% are Asian, 6.9% are Hispanic/Latino, 87.3% are white, 2.7%
15 are American Indian, and 1.0% are African American. Class size averages 15.4 students.
16 English learners constitute 0.7% of the school's population. We have computers in the library
17 and in classrooms for student use, and the District-wide ratio of students to computers is 2.5:1.
18
19 **County Overview:**
20 In rural Sierra County, the Sierra County Office of Education serves the entire student population
21 of SDC and other special needs students, approximately **8 students,** in grades K-12. The county
22 is extremely rural, not well funded, and sparsely populated. The economy is based on cattle,
23 timber, and the recreation industries. It is not uncommon for students to spend between one and
24 two hours daily in transit to and from school. **All SCOE students are integrated into the**
25 **single District (Sierra-Plumas JUSD) school sites.** The following plan was jointly developed
26 by both the Sierra County office of Education and the Sierra-Plumas Jt Unified School District
27 due to the tightly integrated nature of this one county, one district LEA. County certificated staff
28 are held to the same standards and offered opportunities as District certificated staff. County
29 classroom technology is funded separately, but all students are able to access any school student
30 computer. The technology coordinator is a full time County employee but serves the District as
31 well.
32 The chart below indicates the district schools with respective SCOE students and certificated
33 teachers.

School	SCOE Students Pop.	SCOE Staff Certificated	School	SCOE Students Pop.	SCOE Staff Certificated
Loyalton High	2	1	Downieville K-12	2	1
Loyalton Middle	2	0.5	Sierra Pass	0	0
Loyalton Elem	3	0.5			
Sierra Crest Ind St	0	0			

1
2
3 **Technology Planning Team and Stakeholders**:
4 The Technology Planning Team includes the Technology Coordinator, the Curriculum
5 Coordinator, three principals and one site tech. This plan was reviewed by the Curriculum
6 Council which is made up of the County and District superintendents, site principals, three
7 teachers and the curriculum coordinator. Input from the community/parents was received via
8 each site's Site Council and through the Board adoption process.
9
10 **District Vision for Technology Use:**
11 This district plan is envisioned as a guide for the next three years. As a result, we anticipate that
12 by June of 2010:
13   Every student has access to a computer with online connectivity during and beyond school
14   hours;
15   Students use technology tools to master California Content Standards in the core curriculum;
16   School-based computers, software, and connectivity function correctly 100% of the time;
17   Information literacy proficiencies allow students to discern truth and relevance from a flood
18   of information.
19
20 **Expected student outcomes in 3 years as a result of technology use:**
21   Increased student access to technology learning resources will improve their mastery of
22   California Content Standards as measured by STAR and local assessments;
23   Students will be proficient in essential computer skills and applications;
24   Students will significantly increase their use of the Internet for research purposes.
25   Proficient information literacy skills will allow students safe and relevant use of
26   technological learning resources accessed through the Internet;
27   Students will utilize technology tools to present and share information and experiences.
28
29 **Expected staff outcomes in 3 years as a result of technology use:**
30   Teachers will significantly increase their use of technological learning resources to organize,
31   teach, and assess student learning in California Content Standards.
32   School staff will electronically track each child's school-based data and his/her progress in
33   mastery of California Content Standards.
34   All teachers will meet Technology Proficiency Standards set by the California Commission
35   on Teacher Credentialing.
36
37 **Expected technology outcomes; infrastructure, hardware, tech support and software:**
38   Our target is to maintain our low computers to student ratio with up-to-date software and
39   hardware.
40   The District will upgrade and continue to maintain the local and wide area networks to
41   improve connectivity.
42   The County/District will increase its support of the County Technology Coordinator.
43   The County/District will redeveloped and adopt a hardware acquisition plan that includes 1)
44   equipment specifications to guide future purchases and 2) a technology specific database to
45   prevent equipment loss and track replacement timelines.
46   Additional software applications supporting student learning in California Content Standards

1   will be acquired and existing software will be upgraded.

2

3   **Expected funding/budget outcomes in 3 years:**

4   Technology curriculum, professional development, software, books, and Internet access are

5   supported by the District's General Fund, REAP funds, and the Small Rural School

6   Achievement (SRSA) grant.

7   Funding of productivity software, staff development and infrastructural improvements will

8   also be funded by the Microsoft Voucher funds anticipated for the period of this plan.

9   General district revenue and categorical funds supported initial computer purchases. Internet

10   connectivity, and ongoing connection to our wide-area network and Internet service provider,

11   the Digital California Project with node sites at two District locations maintained by County

12   staff.

13   Funding for local site techs will be from the SRSA grant.

14

15   **Expected monitoring and assessment outcomes in 3 years:**

16   Annual increases in teachers' technology proficiencies per the CTAP[2] iAssessment.

17   Annual increases in teachers' use of technology to enhance curriculum.

18   Students' progress in mastering the California Content Standards in the core curriculum.

19   Students' progress in acquiring information literacy skills.

20   Annual maintenance and infrastructure upgrade activities are reviewed and adjustments made

21   as indicated.

22

23

24   Expense Type/ Funding Source – Key

25

Code	Description
A	Administration and Management
B	Building and Facilities
C	Categorical District Ed Tech Funds
CH	Classroom Hardware
CS	Classroom Software
F	SPJUSD General Fund
G	Grants and other Outside Funds
IH	Infrastructure Hardware
IS	Infrastructure Software
L	LAN Budget
M	Maintenance and Support
T	Training (PAR and Fed CSR)
W	WAN Budget (TIS)

26

CURRICULUM COMPONENT

Data from the District Technology Survey:

3.a. Staff and student access to technology
Students have access to computers throughout the day, and after-school as arranged with staff. The overall student to computer ratio **in classrooms** is 2.4:1 in K-6, 2.7:1 in 7-8, and 2.1:1 in 9-12. Each classroom has at least one computer connected to the Internet. Each school's computers and peripheral devices are from one to six years old, vary in configuration and platform, but generally run current software and tend to function dependably. All of the computers have been upgraded with memory and operating systems to keep up with current demands. However, over the course of the next 3 years the current computer inventory will age beyond it's useful life and will need to be replaced. There is a small library at each site that is equipped with at least one computer and all are connected to the Internet. The site libraries serve as both resource learning centers and traditional collections. Students have come to rely on the Internet as an important research resource since local public libraries have even fewer offerings. The closest university libraries are at least 50 miles away. Students with advanced learning needs access a variety of AP courses through the University of California Office of the President (UCOP). AP classes are held in varying locations from site to site. All high school sites have student laptop computers on a wireless network for AP course access if needed. Loyalton High students use the ROP computer lab. Downieville students use various locations throughout the school based on the supervising teacher.
All teachers have been issued a laptop computer for their immediate use as a tool to manage their classroom and curriculum.
Students with special needs and English Language Learners utilize computers in the classrooms as well as one computer in the resource rooms.

Site	Number of Computers	Platforms	Student:Comp Ratios	Library Computers
Loyalton High	65	Mac OS8, OS9, Windows 9x, Win 2k, Win XP	2.7:1	5
Loyalton Middle	39	MacOSX	2.7:1	5
Loyalton Elem	65	Mac OSX	2.7:1	2
Sierra Crest Ind	5	Mac, OS9		0
Downieville K-6	30	MacOS9, OSX		7
Downieville 7-12	51	MacOSX, Win 2k, Win XP	1:1	12
Sierra Pass	7	MacOSX	2:1	0

3.b. District's current use of hardware and software to support teaching and learning
Due to the District's geographic isolation, technology has become an important educational tool. Because SPJUSD provides standards-based instruction K-12, technology must be integrated into all core areas. Our secondary schools utilize Internet services to provide core, AP courses and elective courses that would otherwise be unavailable due to the lack of fully qualified teachers. School libraries District-wide have limited print resources; therefore, online access and software purchases allow students much better research opportunities.

Through a variety of enrichment and remediation software programs (STAR Math, Accelerated Reader), teachers can do regular assessments and provide focused interventions. Students in grades K-12 regularly use the technology resources for enrichment, skills development, and performance-based assessments. Special needs students benefit through purchases of textbooks/novels on CD. Students 2 -12 receive training in the use of computers and attendant software beginning in the second grade. English/language arts students have word processing standards beginning in grade 6. Science, beginning in 5th grade, has investigation and experimentation standards requiring technology use. Information literacy skills are integrated into History/Social Studies through research reports and projects beginning as early as the 4th grade. However, more emphasis is needed in all areas: in the arts; painting, drawing, movie production, music production, in the sciences; data management project presentations, in the technology classes; programming, web page production at all grade levels.

Teachers participate in staff development using technology. CTAP region 3 technology academies were offered in 2005 designed help teachers develop digital photography and web development skills to integrate technology in the curriculum. Our current LEA Plan designates RISE (Reading In Secondary Education) as the next step. The program incorporates technology as a strategy through the use of online teacher training modules.

The staffs at all sites are fully committed to using Powerschool student information system for attendance, grades and disciplinary management. The District has also recently decided on Edusoft, a student performance management tool which is in the process of implementation.

3.c. District's curricular goals

The Sierra-Plumas JUSD curricular documents emphasize the need for every student to achieve at his/her fullest potential. All curricular materials are purchased aligned to California State Content Standards. Annually the district reviews student achievement scores and reviews progress and emerging trends in student achievement. Students have made significant gains in their reading skills. However, review of recent testing data noted a need for increased attention to Math and Science. As a result Sierra-Plumas Joint Unified School District has targeted math and science as the core subjects to be emphasized for improvement. CST (California Standards Test) scores in grades 9-11 in math and science show the smallest number of proficient students of the core subjects. A review of the of our current curricular materials in the socials sciences (K12) has indicated that some materials are not aligned with California State standards and the new state approved curricular materials will be reviewed and acquired. Improves will be made to our tech infrastructure so that our District will participate in distance learning to program that support and enhance the social science curriculum. In addition, writing continues to be identified as the skill focus for all students K-12.

3.d. **curriculum integration to improve teaching and learning**
As a small district with extremely limited resources, there is a need to prioritize according to areas of greatest need. This educational technology plan will emphasis the academic areas of math, science, social science and writing as indicated by review of student test scores.

3.d. Goal statements

3.d.1All students K-12 will use technology resources to achieve CA Content Standards in science and math.

BENCHMARKS:

June, '08	Technology will be integrated into all core subjects for 9-12 grade classrooms
June, '09	Technology will be integrated into all core subjects for 6-8 grade classrooms
June, '09	Technology will be integrated into all core subjects for K-5 grade classrooms

3.d.2 Students in grades K-12 will utilize technology resources to improve their writing proficiencies.
Technology resources will be integrated into 9-12 classrooms to improve writing proficiency.
BENCHMARKS:

June, '08	Content specific software (such as MS Office Suite) will be integrated into 7-12 grade classrooms
June, '09	Content specific software (web design and presentation applications) will be integrated into 6-8 grade classrooms
June, '10	Content specific software (Accelerated Reader and Math Steps) will be integrated into K-12 grade classrooms.

i. and j. List of activities and a timeline for implementing planned strategies and activities

Goal #	Implementation Plan/Activities	Responsible Position	Timeline	Budget Source*	Monitoring and Evaluation activities
3.d.1	Staff collect examples of student work & identifies current use of technology in classrooms for 9-12 grades	Staff & Admin.	June 2008	NA	Student technology work is reviewed and assessed by staff and admin.
3.d.13.d.2	Appropriate teachers research technology resources in science, math and writing.	Staff	June 2008	NA	Presentation of findings to staff and recommendations for adoption
3.d.1 3.d.2	Software and hardware for distance learning purchased	Admin.	August 2008	REAP SRSA	Installed
3.d.1	Staff development is provided for 9-12 teachers in core areas	Staff & Admin.	Fall 2007	REAP SRSA	Certificates of completion; lesson and unit plans developed
3.d.2	Staff development is provided for 9-12 grade in teaching writing process and integrating technology	Staff & Admin.	Fall 2007	REAP SRSA	Certificates of completion; lesson and unit plans developed
3.d.1 3.d.2	Samples of student work are collected at appropriate grade levels & evaluated	Staff & Admin.	June 2007	N/A	Evaluation results are shared with the entire staff for input on improvement
3.d.1 3.d.2	Student STAR test scores evaluated; strategies developed to improve results	Staff & Admin.	Fall 2007	N/A	Results presented to staff, community, school board
******Cycle is repeated for years 2008 and 2009 assuring completion of benchmarks or changes resulting from evaluation results.					

3.e. Student acquisition of technological and information literacy skills.

The use of information literacy as a research process needs to be implemented across the grade levels to enhance students' safe and effective use of the Internet for research purposes. SPJUSD recognizes the need to adopt a continuum of technology proficiencies to guide and assess the introduction and development of technology proficiencies for all students. Staff will continue to develop their own skills with the Big 6 and Big 3 processes and effective strategies for integration into the curriculum.

Staff will look at a variety of technology proficiency continuums and begin the process of adopting a continuum for developing and assessing technology proficiencies that is appropriate for SPJUSD students. It is anticipated that the research and adoption process will last through June of 2008. We anticipate that the development of an implementation plan and grade level appropriate strategies will take through January of 2008. Implementation will continue with the appropriate grade levels.

3.e. Goal statement
3.e.1 SPJUSD students will understand and apply information literacy skills to increase their use of Internet resources for research in the core content areas.

BENCHMARKS:

June, '08	Students will demonstrate Big 6 information literacy skills by completing a research project in at least two of the core content areas in grades 9-12.
June, '09	Students will demonstrate Big 6 information literacy skills by completing a research project in at least one of the core content areas in grades 6-8.
June, '10	Students will demonstrate Super 3 information literacy skills by completing a project in one of the core content areas in grades K-5.

3.e.2. SPJUSD will adopt and implement a continuum of information literacy and technology proficiency skills, which will allow students safe and relevant use of technological learning resources.

BENCHMARKS:

August 2007	SPJUSD will review the adopted continuum of technology proficiency skills.
Jan 2008	At least one component of the continuum will be piloted in grades 9-12.
June 2008	At least two components of the continuum will be piloted in grades 6-12.
June 2009	The continuum will be fully reviewed in grades K-12.

i. And j. List of activities and a timeline for implementing planned strategies and activities.

Goal	Implementation Activities	Responsibility	Timeline	Budget	Evidence of Activities
3.e.1 3.e.2	The Technology Coordinator and site principals research and identify a computer proficiency curriculum model for grades K-12	Staff	Fall 2007	REAP SRSA	Model continuums presented Drafts of developing continuum for SPJUSD
3.e.1 3.e.2	The team presents a recommended model to Curriculum Council	Staff	Fall 2007	NA	Council minutes
3.e.1	Superintendent takes the model to the	Admin.	August 2007	NA	Board agendas

3.e.2	Board for adoption				
3.e.1 3.e.2	Professional development focuses on how to integrate information literacy and computer proficiency curriculum model into core curriculum and assess student proficiencies.	Admin. Staff	August 2007	NA	Professional development agenda and attendance sheet
3.e.1	Following Board adoption, Students will demonstrate Big 6 information literacy skills by completing a research project in at least two of the core content areas in grades 6 through 8	Staff	2008	NA	Lesson Plans and other curriculum documents; student work
3.e.2	Following Board adoption, all teachers pilot at least one component of the computer proficiency curriculum integrated into their core instruction and assessment practices	Staff	2008	F	Lesson Plans and other curriculum documents; student work
3.e.1 3.e.2	Results of the integration of computer & information literacy proficiency skills is discussed at faculty meetings	Admin. Staff	2008	F	Faculty meeting agendas
3.e.2	Teachers evaluate the effectiveness of the pilot, modifying it for implementation next year to the '09 benchmark	Admin. Staff	August 2008	F	Survey regarding the effectiveness of the model piloted – presentation of findings to faculty – modifications as indicated by data.
Cycle is repeated for years 2008 and 2009 assuring completion of benchmarks or modifications from evaluation results.					

3.f. Utilization of technology to ensure appropriate access for students.

All SPJUSD students have access throughout the school day to computers in the classroom and library. They are comfortable with requesting additional computer time before and after school and during lunch, as staff is available. There are currently no students in need of adaptive technology, however student needs regarding adaptive technology are assessed at time of enrollment and the district works with the local SELPA or other appropriate agencies to provide appropriate access to technology. Test scores indicate that our Title 1 students as a subgroup need additional remediation and enrichment software. The district will research additional software to provide assistance for Title 1 students.

3.f. Goal statement

3.f.1 Title I students will use content specific software to assist with remediation and enrichment of their math and science skills and writing proficiencies.

BENCHMARKS:

August 2007	Review and renew appropriate Title I software will be identified for student use.
January 2008	Review and renew appropriate Title I software will be purchased and staff trained in its use.

i. and j. List of activities and a timeline for implementing planned strategies and activities.

Goal #	Implementation Plan/Activities	Resp. Position	Time line	Budget Source*	Monitoring and Evaluation activities
3.f.1	The Technology Coordinator and site teachers will identify software.	Staff	August 2007	NA	Model programs presented
3.f.1	Team recommends software to Curriculum Council	Staff	Fall 2007	NA	Meeting agenda
3.f.1	Superintendent takes the model to the Board of Education for adoption	Admin.	Winter 2007	NA	Board agendas
3.f.1	Professional development focuses on how to integrate Title I program and assess student proficiencies.	Admin. Staff	Fall 2007	REAP SRSA	Professional development agenda and attendance sheet; Certificates of completion
3.f.1	Title I program is piloted	Staff & Admin.	Fall 2007	NA	Lesson and unit plans developed
3.f.1	Samples of student work and Title I progress are collected & evaluated	Staff & Admin.	2007-2008	N/A	Evaluation results are shared with the entire staff for input on improvement
3.f.1	Student test scores evaluated; strategies developed to improve results	Staff & Admin.	Fall 2008	N/A	Results presented to staff, community, school board -
Cycle is repeated for years 2008 and 2009 assuring completion of benchmarks or changes resulting from evaluation results.					

3.g. utilize technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs.
SPJUSD has recently purchased a database [Edusoft] to analyze assessment data, provide easy access for instructors, and provide timely and continuous information, which will facilitate teachers' efforts to meet individual student academic needs.

3.g. Goal statement
By June 2008, 100% of teachers will be trained in the use of Edusoft system and use it to track students' progress through mastery of California Content Standards.

BENCHMARKS:

Fall 2007	50% of teachers will use the Edusoft system to track students' progress through mastery of California Content Standards.
Fall 2008	100% of teachers will use the Edusoft to track students' progress through mastery of California Content Standards.

i. and j. List of activities and a timeline for implementing and evaluating planned strategies and activities.

Goal #	Implementation Plan/Activities	Resp. Position	Time line	Budget Source*	Monitoring and Evaluation activities
3.g.1	The Technology Coordinator will configure and populate the Edusoft system..	Staff	August 2007	NA	Report to Curriculum Council
3.g.1	Professional development focuses on how to integrate student data software.	Admin. Staff	FAll 2007	REAP SRSA	Professional development agenda and attendance sheet; Certificates of completion
3.g.1	50% of teachers pilot use Edusoftt system to track students' progress through mastery of California Content Standards.	Staff & Admin.	Fall 2007	F; G	Lesson and unit plans developed
3.g.1	Progress is evaluated through staff survey, discussion of issues and	Staff & Admin.	Jan 2008		Evaluation results are shared with the entire staff for input on

	accomplishments				improvement
3.g.1	Strategies for implementation of Edusoft system at the next level are developed.	Staff & Admin.	August 2008		Results presented to staff, community, school board
	Cycle is repeated for 2008-2009 assuring completion of benchmarks or changes resulting from evaluation results.				

3.h. utilize technology to make teachers and administrators more accessible to parents.

As a result of the small size of the community, there is currently very close communication between faculty and home. The district has worked to develop a website that will provide parents and the community with information. The district/school will collaborate with parents to develop and initiate a plan to utilize additional technology communication strategies as appropriate to need and resource availability. While not measured, a large number of students and parents have indicated their access to the internet from home. While internet access is limited, nearly all families have a telephone. The District will purchase a home phone dialer system to notify parents of school events and emergency events.

3.h. Goal Statement
3.h.1. By Fall 2007, all SPJUSD schools will have websites that allow families to access information regarding the schools activities, state standardized assessment data, and student assignments. By August 2007 the District will have fully implemented a home phone dialer system.

BENCHMARKS:

Fall 2007	Staff and parents will be notified of school emergencies and events via telephone.
Fall 2007	Websites will be posted for community use with school activities and data.
Fall 2007	Websites are completed and includes individual student assignments and performance.

i. List of benchmarks and a timeline for implementing planned strategies and activities.

Goal #	Implementation Plan/Activities	Resp. Position	Time line	Budget Source *	Monitoring and Evaluation activities
3.h.1.	Site Councils evaluate websites and determine needs	Staff	Fall 2007	N/A	Meeting minutes
3.h.1.	Committees recommend format and content to school staff, student, parents	Staff	Fall 2007	NA	Faculty meeting agenda discussion PTA meetings notes Classroom discussion notes
3.h.1.	Basic website is posted – contains school activities and school directories	Admin. Staff	June 2008	N/A	
3.h.1.	Staff receives training in use of website to post student assignments	Tech	Ongoing	N/A	Sign in sheets; staff mtg. notes
3.h.1.	Parents and students comment on site; All 7-12 staff post student assignments to website	Staff & Admin.	Fall 2007	N/A	Survey of parents/students regarding use and accessibility of website.
3.h.1.	Website is completed and includes students' assignments by grade level.	Staff & Admin.	June 2009	N/A	Results presented to staff, community, school board
3.h.1.	Phone dialer system is researched purchased	Tech	Fall 2007	Safety	Report to Admin council
3.h.1.	Phone dialer system is configured and implemented	Tech	Fall 2007	N/A	Report to Admin council.

| 3.h.1 | Principals are trained on the system to issue school specific messages | Tech | Fall 2007 | N/A | Report to Admin Council |

3.i utilize technology to enhance the student class offerings district wide..

Due to the shrinking student population base there has been a following loss of fully qualified staff in the core subjects (small school funding model). In order to provide all the core/A-G classes needed for SPJUSD students to qualify for college admission, a supplemental program must be provided. To meet this need the SPJUSD is investigating the potential use of video conferencing and distance learning technologies. This can be from sources outside the District or from within. The District currently offers online classes through the University of California College Prep Initiative. There are several online classes through various colleges and private companies too. The District is also investigating the use of video conferencing form site to site, using qualified teachers from one site to help out at another in the District.

3.i. Goal Statement
3.i.1. By June 2008, all SPJUSD schools will have access to distance learning resources either live video (live) or via web based streaming. The District will continue to provided online classes via University of California College Prep Initiative (UCCP).

BENCHMARKS:

June 2007	The District maintain online classes through the University of California College Prep Initiative.
June 2008	Video conferencing equipment will be installed at the 9-12 sites.
June 2008	Contracts with distance learning providers will be approved by school board.

i. List of benchmarks and a timeline for implementing planned strategies and activities.

Goal #	Implementation Plan/Activities	Resp. Position	Time line	Budget Source *	Monitoring and Evaluation activities
3.i.1.	Curriculum Council evaluate course schedules and determine needs	Staff	Fall 2007	N/A	Meeting minutes
3.i.1.	Curriculum coordinator recommend format and content to school staff, student, parents	Curriculum coordinator	Fall 2007	NA	Meeting minutes of recommendation to curriculum council
3.i.1.	Superintendent takes the recommendations to the Board of Education for adoption	Admin.	April 2008	NA	Board agendas
3.i.1.	Staff receives training in use of distance learning equipment.	Tech	August 2008	REAP SRSA	Sign in sheets; staff mtg. notes
3.i.1.	Parents and students comment on site and quality of instruction	Staff & Admin.	January 2009	N/A	Survey of parents/students regarding use and accessibility of distance learning facilities..
3.i.1.	Adjustments to program made on staff, student and parent input..	Staff & Admin.	Jan 2009	N/A	Results presented to staff, community, school board

Resources and budget required to implement Curriculum Component. Resources required include
- Additional software applications supporting student learning in California Content Standards,
- Professional development for teachers who will need to
    1. keep up with emerging applications relevant to California Content Standards,
    2. increase their proficiency with multi-media and presentation applications,
    3. develop an information literacy curriculum integrated with the core curriculum;
- New and fully functioning computers to enable students to meet our benchmarks;

Acquisition and purchase of video conferencing equipment and distance learning programs.

Benefits from curriculum integration:

- Increased ability of teachers to individualize curriculum to meet the needs of students;
- Increased capacity to assess student progress in mastery of California Content Standards;
- Increased capacity of students to utilize higher order thinking skills as they develop information literacy skills;
- Increased proficiency of students in managing multi-media and presentation applications to demonstrate their knowledge and skills;
- A computer competency curriculum will ensure that all students master essential computer applications
- Extension of exiting curriculum to meet UC/CSU, A-G requirements.

PROFESSIONAL DEVELOPMENT COMPONENT

4.a. Data from the District Technology Survey:
As SPJUSD is a remote rural district, professional development usually takes place in other locations such as Sacramento or through the Sierra County Office of Education. This usually precludes the full staff from attending, especially when professional development activities are held in the late afternoons. When teachers were surveyed regarding their technology professional development needs, their universal request was that the activities happen at their site with their equipment. A review of EdTech Profile data indicated that 35% of teachers were comfortable with word processing and Internet search skills. There is a strong need for training in spreadsheets and data bases and instructional technology. Administrators are included within this data since all of them also teach regular classes at their site.

Teacher and administrator's current technology skills and needs for professional development.

The Tech Plan Committee identified "Instructional Technology" as the highest priority for professional development.

While staff is aware of regional California Technology Assistance Project (CTAP) offerings, few have taken advantage of CTAP Online courses (noting that they have trouble with the online connection) or the Educational Technology Academy. While some teachers are proficient in specific areas and are taking graduate level courses as part of their personal development, there is currently no school-wide strategy to advance technology proficiencies of the total staff. Higher priority is placed on curriculum alignment with California Content Standards and instructional strategies that do not depend necessarily on technology. There is currently no local professional development opportunities available to teach curriculum integration of technology applications, nor are there formal plans for the evaluation, modification or refinement of technology training for staff. The District has joined an association with the Placer County office of Education to provide for our professional development for new teachers and to provide staff development in accordance with our current staff development plan. All administrators are part time teachers and for the purposes of this plan all administrators are considered staff.

Interviews with staff indicated that all would like to use more technology resources in teaching, but they felt limited by a several factors:
- Insufficient **on-site training time** to acquire needed knowledge and skills, and to do the planning required to integrate technology into current curriculum,
- Insufficient knowledge of software applications and websites specifically related to teaching California Content Standards,
- An overwhelming emphasis on teaching academic content and raising test scores.

4.b and c. Goals and benchmarks for professional development:
4.b.1 By June 2008, staff will demonstrate increased use of technological learning resources to organize, teach and assess student learning in California Content Standards

BENCHMARKS:

June, '08	60% of staff integrate at least two lessons incorporating technology learning resources in their teaching.
June, '09	80% of staff integrate at least two lessons incorporating technology learning resources in their teaching.
June, '10	90% of staff integrate at least four lessons incorporating technology learning resources in their teaching; adding at least one technological learning resource to their teaching repertoire annually thereafter.

c. and d. Timeline for implementing and evaluating planned strategies and activities

Goal #	Implementation Plan/Activities	Responsible Position	Timeline	Budget Source *	Monitoring and Evaluation activities
4.b.1	Site reps will be identified to support faculty growth in use of technological learning resources.	Principal / Supt.	Dec 2007	SRSA	Curriculum documents illustrating the integration of technology learning resources;
4.b.1	A menu of opportunities* for staff development based on the EdTech Profile survey are researched and presented to staff. On site workshops will be featured *At least 15 hrs/annually	Tech Coord.	Annually each spring for summer / school year. implementation	N/A	Handouts, lists, notes from staff meetings
4.b.1	Faculty will take advantage of online technology inservice, such as CTAP Online and the Educational Technology Academy via individual professional development plans derived from EdTech Profile and other resources.	Tech Coord.	Annually per above	Title II if available	Teacher's individual professional development plans; certificates of completion;
4.b.1	Teachers will be allowed to use one day of professional development to visit schools identified by CTAP that demonstrate exemplary use of technology to support the academic core curriculum. Each teacher will report to a faculty meeting on the program visited and how it might be utilized at SPJUSD	Curriculum Council	Annually per above	Title II	Travel documents and faculty meeting notes
	Staff & stakeholder meeting to review effectiveness of Staff Development plan and make recommendations for new additions / strategies / formats	Curriculum Council	May '08	N/A	Notes from staff meeting; recommendations; review of results from CTAP2 survey

4.b.2 By Fall 2007, 100% of staff (teachers & administrators) will be trained in the use of the Edusoft System, and use it to track students' progress through mastery of California Content Standards.

BENCHMARKS:

Fall 2007	The district will research and obtain the appropriate system
Fall 2008	50% of staff will use Edusoft software for tracking student data.
Fall 2009	100% of Staff will use Edusoft to review student progress monthly and strategize

	how to improve student mastery of specific standards.

c. and d. Timeline for implementing and evaluating planned strategies and activities

Goal	Implementation Activities	Timeline	Budget	Monitoring Plan
4.b.3	Staff will be trained in the use and maintenance of the Edusoft.	2007-2008	Title II	Training agenda
4.b.3	The Edusoft system will be implemented with appropriate equipment and infrastructure. 50% of staff implement.	Ongoing	SRSA	Purchase documentation
4.b.3	100% of Staff will Edusoft to review student progress monthly and strategize how to improve student mastery of specific standards	Sept. '07 and ongoing	N/A	Instructional team meeting notes

Resources and budget required to implement these goals. In addition to using Title I & II funds, the District will utilize a portion of its Small Rural School Achievement grant and the Microsoft voucher settlement funds over the next three years to fund the plan.

We will depend on Region 3's California Technology Assistance Project, CLRN and State Adoptions for information on California Content Standards aligned software and appropriate staff development opportunities. Professional development activities will include CTAP sponsored activities, the Educational Technology Academy, and other capacity building professional development opportunities provided by CTAP3.

Benefits from professional development based on staff needs assessment. Teachers clearly want to apply technology tools to improve student learning in California's core academic content areas. The goal is to improve test scores as indicators of student learning. Benefits of professional development related to integrating technology into core curriculum areas include
- Time to visit existing exemplary programs and effectively replicate them,
- Time to acquire in-depth knowledge of technological learning resources in order to integrate them into current curriculum,
- More technology-related teaching tools in each teacher's repertoire of instructional strategies, ultimately resulting in improved student learning and higher test scores.

INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT

5.a. and b. EXISTING infrastructure, hardware, technical support and software. Infrastructure, hardware, technical support and software NEEDED to support the implementation of the Curriculum and Professional Development Components.

Infrastructure
Classroom connectivity is via the Digital California Project nodes within the County. The connection speed varies from 45Mb to 1.5Mb depending on the site proximity to the node site. Currently 3 sites, Loyalton Middle, Loyalton Elementary and Downieville K12, are connected via a 45Mb wireless, 11Mb wireless, and fiber optic links respectively. This has provided a long term cost effective access, and has reduced ongoing costs significantly. The 11Mb wireless links need to be upgraded to a higher (at least 54Mb) wireless connection in order to take advantage of the high speed DCP Internet connection.

Most of the network infrastructure has been or is in the process of being upgraded. The original hubs were replaced with faster switches which increased network speed to the desktop. This increase in speed will facilitate video streaming and conferencing, server intense applications (Accelerated Reader, et al.), and decrease server logon times and effort.

Each school library contains 4 – 7 computers (Win and/or Mac). Each library also has a dedicated computer for library management. Each classroom has a TV/VCR and a phone. Classrooms TV/VCRs are cable enables, but the hardware to connect them to a network is not installed nor can they access local TV programs, as is no cable service in our area.

Hardware
The District would like to maintain a ratio of at least one computer for each 5 students and has so far accomplished this goal. Each classroom has at least one computer (most have two or more), and every classroom is connected to the Internet with at least one computer. The entire inventory, including peripherals needs to be re-documented and cataloged. The high school sites have labs that are used by ROP classes and shared by the rest of the site when no ROP classes are being taught. All labs and classrooms are connected to the internet and all students save their work on a designated server. All computers are at one to six years old. Many have 3-year service agreements, which has helped to keep repair costs down. Many of the original configurations of the computers can no longer accommodate newest operating systems and application software. Nearly all systems have received a memory upgrade to extend service life. In addition, many systems have seen wear and tear and require some part replacement, such as mice, keyboards and CDROM drives. There has been a district wide purchase of upgraded printers and scanners for each site, along with LCD projectors.

The chart below projects the number of computers that will need to be replaced within the next 3 years and/or connected to the internet. Peripherals and additional hardware such as printers, scanners and LCD projectors are also included.

Location	Computers *Now*	**Replaced by 2008**	Connected to Internet *now*	**Connected by 2010**	Other hardware *now*	**Other hardware to be acquired by 2008**
Loyalton High	59 PPC Macs, iMacs, Win PIII, 2K&XP	**25**	59	**60**	6 printers 1 scanner 1 barcode reader	Printer replacement Digital cameras
Loyalton Middle	45 eMac, iMac all OS 10.3 or better.	**15**	45	**45**	5 printers	Printer replacement
Loyalton Elem	50 Imac, 10.3 or better	**20**	50	**50**	4 printers 1 scanner 1 LCD projector 1 digital camera	Printer replacement
Downieville K-12	42 mac 10.3	15	42	42	9 printers 1 scanner 1 barcode reader 1 digital camera	Printer replacement Digital camera
Sierra Pass Continuation	7 mac 10.4	0	7	7	1 digital camera 1 scanner	

The table below indicates the timeline and sites for infrastructure upgrades to improve district connectivity. Completion dates are estimates only as they are contingent upon the availability of resources.

Location	Existing Infrastructure of Site Connectivity	Needed Infrastructure Upgrades for Site Connectivity	Estimated Completion
Loyalton High			
Loyalton Middle			
Loyalton Elem	11 Mb wireless bridge	54 Mb wireless bridge	2008
Downieville K-12	Internal wiring faulty	Remake all internal connections	2008
Sierra Pass Continuation	3mb wireless	11mb wireless	Fall 2007

Technical support for an extensive geographic area is difficult. The County office of Education employs the technology coordinator for the both agencies (county and district). Two sites in the District have a local site tech – a stipend position – that provides for the immediate support of site's tech infrastructure. The ability of the site techs ranges from very skilled to basic skills. There is no formal training for the site techs, a goal that will be addressed in this plan. Most teachers know who the site tech is and are able to ask for assistance as necessary. Should the site not be able to fix an issue the Tech coordinator can intervene either remotely or onsite within two days. An online helpdesk has been established to track, log and notify support techs of tech issues. Any teacher or staff person can enter a help call from any computer within the District/County.

Software available is adequate, but operating systems on Macintosh computers are quickly falling behind. Most Macintosh operating systems in the District have been upgraded to 10.3.9. Current systems are now running system 10.4.8. Productivity software to provide word processing, spread sheets, and presentations is available at all sites. Although there is no standard, all sites have either AppleWorks, MS Office or both. All sites K-12 have access to Accelerated Reader, Star Math and Star Reading.

Software Needed
All sites are in need of have current versions of all software, especially productivity suites. A goal of the plan is to purchase a single productivity suite to use at all sites
All sites use PowerSchool for a student information system. section 3.g. Lastly, Edusoft data analysis software was purchased for student progress analysis over the long term.

5.c. Goals and benchmarks for infrastructure, hardware, technical support and software:
5.c.1   Sierra-Plumas/Sierra COE will be connected to the Internet through the Digital California Project (DCP) with a reliable, cost effective connection. All sites proximal to the DCP node sites will have a 54MB or better connection to the DCP node.

BENCHMARKS

June '08	Research and put into place a reliable, cost effective infrastructure to provide higher speed Internet access Loyalton Middle and Loyalton Elem sites.
June '09	Install 54Mb wireless bridges for LAN/WAN and/or fiber optic links.

5.c.2   Each classroom will have a minimum of 2 computers*, in addition to a TV, VCR and telephone.
5.c.3   Computers that do not meet minimum District standards will be taken off the network, hubs and wiring will be replaced with up-to-date units selected based on standardized criteria.

BENCHMARKS

Fall '07	Develop and adopt a process for purchasing hardware as funds become available
Ongoing	Identify sufficient funding to support computer replacement and needed upgrades of infrastructure, hardware and needed applications
June '08	Research and acquire TV and VCR and telephone needs for all classrooms. Replace all hubs at sites with higher speed switches per chart above. Replace/repair wiring as needed. Repair/replace CDROM drives as necessary.

5.c.4   Reduce "Down time" and expedite local repairs.

BENCHMARK

June '08	Improve Technical support by funding a site tech position and provide training for site tech support cadre. Train all District and County personnel on the use of the online help desk.

5.c.5   Put into effect a process and criteria for the selection, purchase, maintenance and upgrading of software for instruction, student record keeping, filtering and electronic communications.

BENCHMARKS

| June '08 | Develop and adopt a process for selecting, maintaining and upgrading software |
| June '09 | Purchase software to support Reading/LA and Math, and Science assessment and intervention. |

5.c.6   Dispose of older/obsolete equipment.

BENCHMARK

| Ongoing | Implement a program model whereby old computers can be recycled or given to community individuals or groups. |

5.c.8   All staff each will complete the CTAP tech assessment online survey annually.

BENCHMARK

| Ongoing | Survey to be completed by each staff by January of each year. |

5.c.9   Maintain annual support contracts to key vendors.

BENCHMARK

| Ongoing | Maintain support contracts for Cisco routers, Student Information System, school library systems, internet content filtering systems, DNS and email server systems. |

5.c.10 Monitor and analyze student progress toward grade level standards..

BENCHMARK

| Ongoing | Use Edusoft to track and analyze student progress towards meeting test and grade level standards. |

5.c.11 Maintain T1 data connections to Sierraville Elementary. Continue to provide internet access and links to purchase order system as well as advanced placement classes using Erate funds.

BENCHMARK

| Ongoing | Maintain a quality T1 connection at minimal cost to District. |

5.c.12 Research and purchase video conferencing equipment to implement distance learning and teacher sharing program.

BENCHMARK

| Fall 2007 | Equipment and training in place to increase student course offerings at each site. |

c. and d. Timeline for implementing and evaluating planned strategies and activities

Sierra-Plumas/Sierra COE District Technology Plan

Goal #	Implementation Activities	Responsible Position	Timeline		Monitoring Plan
5.c.1					
5.c.1	Install 802.11g – 54Mb wireless gear for LES	Tech Coord	June '08	As funds become available	Budget item
5.c.2	Develop a process for selecting hardware	Tech Coord	Fall 2007	No additional cost	Proposal to Board
5.c.2	Research and acquire VCR/TV for all classrooms. Replace computers as needed and funds are available.	Tech Coord	June '10	As funds become available	Budget item
5.c.3	Monitor availability of funding for hardware/infrastructure replacement and upgrade	Tech Coord/ Sup	Ongoing	No additional cost	Meeting notes
5.c.3	Repair or replace wiring as needed.	Tech Coord	Sept. '09 and ongoing	As funds become available	Meeting notes, purchase orders, work orders.
5.c.3					
5.c.3	Funding is acquired to implement the upgrade and replacement plan.	Tech Coord Sup	When available	Unknown costs	Budget and purchase documents
5.c.4	Provide funding for site tech at each site.	Tech Coord	When available		School board minutes
5.c.4	Provide for training of site techs as needed. Consider 4 sessions annually.	Tech Coord	When available		Budget and service documents
5.c.4					
5.c.4					
5.c.5	Develop a process for selecting maintaining and upgrading software	Tech Coord	Fall 2007	No additional cost	Process presented to staff
5.c.5	Purchase software to support Reading/LA, Math and Science.	Tech Coord Sup/Principal	June '08	To be determined	Budget item
5.c.6	Identify criteria and specific computers to surplus, recycle or give to families in community..	Tech Coord	After replacement computers are acquired	No additional cost	Criteria approved by the Board
5.c.7	Provide training for district staff on Edusoft.	Tech Coord	Ongoing	Unknown Cost	Budget Item
5.c.8	All staff participate in CTAP surveys.	Tech Coord Sup/Principal	Annually	No additional cost	Survey Admin records.
5.c.9	Maintain all key support contracts with vendors – Cisco, SIS provider, library, Internet content filtering, DNS, email.	Tech Coord	Annually	6000.00	Budget item
5.c.10					
5.c.11	Maintain T1 data connections to Sierraville Elementary.	Tech Coord	Annually	8000.00	Budget Item
5.c.12	Purchase video conferencing gear	Superintendent	Fall 2007	25000.00	Budget item

* Funding Source Key - See page 3.

Benefits from infrastructure. Sierra-Plumas/Sierra COE is committed to using the tools of technology to enhance student learning. Without appropriate equipment, infrastructure and maintenance we cannot attain the following benefits:
- Appropriate and functioning equipment available to enhance students' classroom learning,
- Appropriate and functioning equipment available to enable our teachers' professional development in using the emerging tools of technology to enhance core curriculum,
- Appropriate and functioning equipment available to manage student data,
- Appropriate and functioning equipment available to enable the school to access Internet resources, e-mail, and electronic data transmission.

Personnel, resources and budget required to implement this goal include our heavy reliance on CTAP Region 3 support. We have limited personnel and funds available to implement these goals currently. Acquiring adequate resources to implement this component will require guidance from CTAP regarding funding and support models available, as well information on model programs that can meet our needs. Our Tech Coordinator will take the lead in connecting with these CTAP resources. Our most critical need will be to identify and acquire the funding to support these goals. The SPJUSD reimburses SCOE for the services of the SCOE technology coordinator.

FUNDING/BUDGET COMPONENT

6.a.1   Resources

General Fund

REAP Grant

ERATE Match 60%

Microsoft Voucher Fund

Categorical Funds

Small Rural School Achievement Grant

6.a.2   Process for identifying funding sources.

As this is a small, rural district, the Superintendent is responsible for budget development and allocation of funds to implement the goals set by the Board. The Superintendent attends workshops to stay current on categorical programs and their uses and consults with the County Office of Education about the state funding levels. He maximizes the use of categorical funds in order to have general funds available for technology purchase and upkeep.

The district will look to CTAP to provide cost effective staff development, advice on hardware and software purchases and to help train our site tech support cadre. CalSave.org is one resource that we have used and will be part of the process we will use to maximize expenditures.

The District is putting together the REAP/LEAP plan with will allocate funding toward the goals set in the technology plan. The use of Microsoft Voucher funds will also be a part of the funding formula. The funding is to be allocated over a three year period and requires the matching goals of the technology plan to implement.

6.b.   Estimated implementation costs for the term of the plan (2007-2010)
The table below is an estimated summary of the total costs for the implementation of this plan.

Tech Items Annual Budget Request		07/'08	08/'09	09/'10	
1000					
Site Tech Stipends (3 Sites)		3000	3000	3000	

Tech Coordinator		61000.00	61000.00	61000.00
Total		64,000.00	64,000.00	64,000.00
2000				
		0	0	0
Total		0	0	0
3000				
Benefit		11000	11000	11000
Total		11000	11000	11000
4000				
Travel & Conference		2000	2000	2000
Switches (All Sites)		250		
Misc repairs and replace		1000	1000	1000
LibraryPro Maintenance		1100	1100	1100
Web Filtering (iPrism) Subscription		1000	1000	1000
PowerSchool Maintenance		1900	1900	1900
Misc. Parts replace/repair		400/site	200-400/site	200-400/site
AVG anti virus software license		600	0	600
Total		8250	8250	8250
5000				
Edusoft - Data Analysis maintenance		5000	5000	5000
T1 Lines (Sville)		3600	3600	3600
MS Office Suite (all student computers		5000	0	0
SmartNet Cisco Router Maintenance		2000	2000	2000
Accelerated Suites Upgrade and Modules and Server		3000	1500	1500
Luisa (email/DNS) Server Maintenance Subscription		2700	2700	2700
Total		20300	14300	14300
6000				
Computer Replacements (all Sites)		25000	25000	25000
Wireless Upgrades (LES) (Up to 802.11g)		0	0	7000

Cisco ASA Firewall with IDS 5510(2) & Cisco Switch Layer3 3750 (2)		18000	1000	1000	
Total		43000	26000	26000	
Overall Total		**145800**	**122800**	**129800**	

6.c. Ongoing District Tech Support

As a small school district, all support is provided by the Sierra County Office of Education . All decisions about budget allocation are made jointly by the recommendation of the Technology Coordinator, the Curriculum Coordinator and the Administrative Council.

A 1.00 FTE will be funded beginning this year by the Sierra County Office of Education to provide tech support. By maintaining and providing additional training to the site tech cadre, we hope to continue providing another level of support to our teachers. We anticipate site techs will be able to do some routine maintenance, load programs, and perform the first levels of trouble shooting under the direction and supervision of the Technology Coordinator.

The County Office of Education provides all tech support and maintenance for the WAN, student information systems, financial systems, advice about networking, and group buy of equipment.

6.d Replacement policy for obsolete equipment.

There is no Replacement Plan currently in effect. Development and implementation of such a plan is one of the goals of this Technology Plan. (See 5.d.3 on page 19).

6.e Monitoring progress and updating funding and budget decisions.

The Superintendent/Principal admin council team will develop an annual technology budget as part of the annual budget cycle, citing various sources of funding. The district budget is developed in Dec/Jan. The business manager will prepare a mid year report in January of each year to update the Tech Committee, the Board, and the Curriculum council on the progress of funding for technology.

The Superintendent and Business Manager are responsible for monitoring all aspects of the budget. They oversee the day to day budget, plans for the expenditure of the various funds and programs, prepares the monthly budget reports as well as the state required semi annual Interim Reports for the Board, develops the budget annually, and in the process advises the Board about state and grant funds available.

BENCHMARKS

June annually	Superintendent/Principal admin council team develops Technology budget as part of the annual budget process
January	Superintendent reports to Board, Tech Committee, SSC on progress of funding

annually	and status of budget

Goal #	Implementation Plan/Activities	Responsible Position	Timeline	Budget Source	Monitoring and Evaluation Activities
6.e.1	Prepare annual Tech budget to implement the Tech Plan goals and activities	Admin council team/ Technology coordinator	May/June annually	No additional cost	Budget document
6.e.2	Report/update progress of the annual Tech budget	Business Manager	January annually	No additional cost	Minutes of meetings
6.e.3	Update tech funding as new dollars are available	Superintendent/ Technology Coordinator	Ongoing	No additional cost	Budget documents

MONITORING AND EVALUATION COMPONENT

While the district developed a 5-year technology plan in 1997, it focused primarily on the acquisition of equipment and connectivity, and secondarily on the use of technology for teaching and learning. The second plan (04-07) established a set of goals and benchmarks that put much more emphasis on curricular and staff development. This plan will be reviewed with staff, the Curriculum Committee and Board of Education each year to determine progress and needs. The current technology planning process needs to address increased use of existing and future technology tools in curriculum, instruction and assessment.

7.a and b   The process and schedule for evaluating technology's impact on student learning and attainment of the plan's goals.

Embedded in text of each component of this plan is a description and schedule of how each the goals and benchmark for each component will be evaluated.

To monitor adequately the school/district's progress in utilizing technology tools for teaching and learning, data will be collected in the following areas:
- Annual increases in teachers' technology proficiencies per the CTAP[2] iAssessment;
- Annual increases in teachers' use of technology to enhance curriculum;
- Students' progress in mastering the California Content Standards in Math and Science;
- Students' progress in acquiring technology proficiency skills.
- Annual maintenance and infrastructure upgrade activities.
- Adequacy of Tech Support.

7.c   How the information obtained through monitoring and evaluation will be used.

The Technology Coordinator and the Superintendent will prepare annual reports of the progress toward meeting stated goals and benchmarks. This report will be in conjunction with the budget development in May/June. The report will be presented to the Tech Committee, the Board and the admin council to at least regularly scheduled meeting.

May annually	The Superintendent and the Technology Coordinator present data and summary of progress toward meeting goals at staff, Admin council and Board meetings.
Ongoing	Modifications of the plan and activities are made based on the data gathered, funding available and changing priorities.

Sierra-Plumas/Sierra County OE
Executive Summary
Technology Plan

This Technology Plan was developed through the District's curriculum committee and a technology/curriculum audit during August 2006 through January 2007. With annual revisions, it is designed to guide the District's acquisition and use of technology-related learning resources through 2010.

DISTRICT VISION FOR TECHNOLOGY USE:
- Every student has access to computer with online connectivity in and beyond school;
- Students use technology tools to master California Content Standards in the core curriculum;
- School-based computers, software and connectivity that function well 100% of the time;
- Information literacy proficiencies allow students to discern truth and relevance from a flood of information.

Curriculum Goals:
- Students use technology to achieve CA Content Standards
- Increased student use of the Internet for research purposes
- Information literacy levels allow students safe and relevant use of technological learning resources.

Benchmarks:
By June, 2009
- 100% of students will use technology in Math and Science in grades 3 through 8.
- K-8 teachers' use of instructional software related to California Content Standards will double.
- A curriculum of information literacy skills will be integrated into the core curriculum in grades 2-8.

Goals for professional development:
- Teachers will be at "intermediate" or "proficient" levels of proficiency in all seven CTC skill areas.
- Teachers will increase use of technological learning resources to organize, teach and assess student learning in California Content Standards;
- School staff will use electronic tracking of each child's school-based data and his/her progress through mastery of California Content Standards.

Benchmarks: By June 2009,
- All teachers will create a portfolio of five lessons using computer applications in teaching reading, language arts and mathematics, adding at least one technological learning resource to their teaching repertoire annually thereafter.
- 100% of teachers will be trained in the use of the Edusoft system and use it to track students' progress through mastery of California Content Standards.

Goals for Infrastructure, Hardware, Technical Support and Software:

- School-based computers, software and connectivity that function well 100% of the time,
- Phased in replacement for all computers over six years old,
- Improving connectivity for each classroom to a LAN and a WAN,
- Acquiring the means to maintain and upgrade network infrastructure, hardware, and software,
- The means to provide needed technical support on site as soon as it is needed.

Benchmarks: By June 2009, Sierra-Plumas/Sierra COE will
- Identify sufficient funding to support computer replacement and needed upgrades of infrastructure, hardware and needed applications.

Goals for funding/budget of technology learning resources:
- Restricted funds will be used first to conserve unrestricted funding for necessary projects,
- Computers and network infrastructure will be replaced as possible and with the use of ERATE and other grants that become available,

Benchmark: By June 2009, we will identify and acquire funding needed to implement currently unfunded goals in our Technology Plan including:
- Adequate maintenance and upgrade of existing technology hardware, software and infrastructure,
- School staff will go another year with out a raise and probably see jobs cut as Federal funding is curtailed in an effort to balance an impossibly deep budget cut.

Goal for monitoring and evaluation:
- Ensure that progress in each component is consistent with the Technology Plan.

Benchmark: Annually beginning in May, 2004, a report will be presented to the staff, SSC and the Board
- In May and January, data will be reviewed and progress toward meeting goals will be reported to staff, Curriculum Council and the Board.
- Technology Plan will be monitored and revised May annually, as budgets are developed, the School Leadership Team, with Board approvals as necessary.

8. EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS COMPONENT

Adult Literacy:
Needs: According to Spring 2002 STAR data, approximately 50% of the parents of students served by Sierra-Plumas/Sierra COE Union School District have no more than a high school education, 22% have some post-secondary education, and 23% have not completed high school.

Sierra-Plumas/Sierra COE does not provide adult education courses. Within the boundaries of Sierra-Plumas/Sierra COE area, adult literacy needs are served through a variety of agencies. The area's community college district, provides adult education classes in basic literacy, GED

preparation , and ESL as well as general interest classes. Sierra County ROP offers classes through the high schools in a variety of job and life skills, including technology skills such as basic word processing, home budgeting with spreadsheets and resources on the Internet.

During the spring of 2008, Sierra-Plumas/Sierra COE will consult with local county and community college adult literacy programs and offer to work with them. Such collaboration could include outreach, facilities for classes, and use of equipment.

Edit per Sierra Plumas
9. EFFECTIVE RESEARCH BASED METHODS AND STRATEGIES COMPONENT

9.a Describe how the plan has utilized reliable research behind the model design.

Sierra-Plumas/Sierra COE School students have made significant gains in their core subject areas as revealed in California STAR data. The percentage of students at or above the 50% percentile in **reading/LA has increased from 80% to 82%** in **Math from 82% to 84%** (1997 to 2000). Math is an area of relative strength. However, data showed Title I students are in need of improvement in the areas of reading/LA and Math.
This analysis led the school to set improvement goals in reading/LA, targeting Title I students in particular.

To reach the goals, the school embarked on a rigorous staff development program and adopted new reading texts in grades k-6. The board adopted the Open Court reading text for grades kindergarten through 5 this year. This is one of only two series approved by the state of California that is aligned with the state standards and thoroughly grounded in research proven methods. Two days of staff development will be provided: one in June and one in August.

Curricular Area	Research Consulted	Annotation
Reading	Research includes: Moats, *Educational Leadership,* March 2001 pp 36-39; *Reading/Language Arts Framework for California Public Schools,, Kindergarten Through Grade Twelve.* Chapter 4, pp 98-199, 1999; Fielding and Person, *Educational Leadership*, vol 51, no 5 February 1994, pp 62-68 (see extensive bibliography of research referenced).	Researched-based reading strategies can build a foundation for reading success in students of all ages. These include: • phonological awareness and decoding; reading fluency and word recognition; vocabulary and phrase meanings; teaching comprehension; and including writing response to reading. • Administer measures of assessment and assign students materials and programs that will enable them to read with 90 to 95 percent accuracy. • Teach individually or in small groups as much as possible. • Schedule at least two hours a day for reading instruction for struggling readers. • Monitor progress and adjust instruction and time allocations accordingly.

Staff development in teaching writing has focused on teaching the writing process to all students. This strategy is based on years of research and field-testing first by California teachers, then by teachers across the country.

Curricular Area	Research Consulted	Annotation
Writing	See Gray, Thomas, D'Aoust, Willet and others, in Olson, *Practical Ideas for Teaching writing as a Process at the*	• Children possess the requisite linguistic knowledge to write. • Teachers need to use every possible

Elementary School and Middle School Levels, 1996. See also the bibliography, including referenced research. Shelfelbine and others, *Reading/Language Arts Framework for California Public Schools,* 1999	means to give student confidence in their linguistic knowledge. • Writing is a process and teaching writing is the process of helping students use and perfect their linguistic knowledge and get it on paper. • Academic language must be taught. Four strategies are suggested: reading aloud; instructional discussions; reading by students; writing by students.

9.b. Explain how the plan included thoughtful examination of education technology models and strategies.

A Technology Audit as well as a Curriculum Audit were conducted in preparation for writing Sierra-Plumas/Sierra COE School's Technology Plan. The results of those audits led to the goals, benchmarks and timelines of the grant. Implementation of the Tech Plan will rely heavily on California Technology Assistance Project. Its research, models and strategies are the most accessible and reliable research-based and proven information for hardware specifications, standards aligned software, implementation models and instructional strategies. Examples of the type of research CTAP accesses follow:

Component Reinforcement	Page In Plan	Research Source	Research Summary
Curriculum, Reading and Writing Technology skills,	4, 5, 12, 14, 15	Sandholtz, Ringstaff and Dwyer, in *Teaching with technology; Creating student-centered classrooms,* 1997	"Student engagement remained highest when technology use was integrated into the larger curricular framework, rather than being an "add-on" to an already full curriculum." instruction and time allocations accordingly.
Information Literacy Skills History/Social Studies	4, 5, 12, 14, 15	*Critical Issue: Using technology to improve students achievement,* 1999 NCREL web site	Using technology within the curricular framework can enhance important skills that will be valued in the workplace, such as locating and accessing information, organizing and displaying data,and creating persuasive arguments.
Core content, including Math and Science	4, 5, 12, 14, 15	Sivin-Kachala and Bialo, *2000 research report on the effectiveness of technology in schools,* 2000	Computer-assisted instruction and drill-and-practice software can significantly improve students' scores on standardized achievement tests in all major subject areas.
Integration Strategies to Improve Teaching and Learning	4, 5, 12, 14, 15	Dwyer, *ACOT: History, findings, impact.* 1992	Technologies provided. . . a conceptual environment where children could collect information in multiple formats and then organize, play, visualize, link and eventually construct new ideas about relationships among facts and events. The same technology could then be used . . . by students to communicate

			their ideas to other students.
Staff Development: Adult Learning Models	12	Schacter, *The impact of education technology on student achievement: What the most current research has to say. Milken Family Foundation web site*, 1999	The most important staff-development features include opportunities to explore, reflect, collaborate with peers, work on authentic learning tasks, and engage in hands-on active learning.

9.c. Provide a description of how innovative strategies for the delivery of specialized or rigorous academic courses through the use of technology, including distance learning technologies, will be developed and utilized.

CTAP has been and will continue to be one of Sierra-Plumas/Sierra COE's most important source of information about quantity and quality of instructional technology. All software purchased and used will be CLRN and/or state approved as meeting California content standards and/or aligned to the standards. As an K-12 district, Sierra-Plumas/Sierra COE easily coordinates through to its local high schools to ensure students' advanced coursework is approved for high school credit

Goal: Increase ability to offer specialized or rigorous academic courses through the use of technology, including distance learning.

Objective: By June 2008, students in grades 4 through 12 are engaged in a variety of projects and course work through the Internet and other distance learning technologies.

Benchmarks:
By June of 2008, Students in grades 7 through 12 complete multi-media projects and/or simulations in core academic areas.
By June of 2008, Students in grades 6 through 12 complete multi-media projects and/or simulations in core academic areas.

By June of 2009, students in grades 4 through 8 complete multi-media projects and/or simulations in core academic areas and participate in classroom web based and/or distance learning courses

Implementation Plan/Activities	Responsible Position	Timeline	Budget Source*	Monitoring And Evaluation Activities
Staff development in multi-media technology	Tech Coord	September – January 2008	Staff Dev Funds	CTAP2 records, attendance records of on site training
Staff research Internet resources (simulations, webquests, lessons, courses, etc.)	Tech Coord	September – January 2008	Staff Dev Funds	Lesson plans
Students in grades 7 through 12 complete multi-media projects and/or simulations	Teachers	January – June 2008	N/A	Completed assignments
**Timeline is repeated for following years	**	**	**	**

Distance learning (art, music, languages, etc)	Tech Coord	2007-2008	To be identified	Lesson plans, completed courses
Research Support	**Citation**		**Annotation**	
Students who use computer-based instruction, learn in a tech rich environment, use simulation and other high order thinking technologies learn faster, and achieve higher test scores than those who do not	*Milken Exchange on Education Technology*, 1999 www.Milkenexchange.org		An analysis of the five largest scale studies of education technology to date.	
Educational technology has been found to have positive effects on student attitudes toward learning.	**2000 Research Report on the Effectiveness of Technology in Schools.** www.nitc.state.ne.us/news/00 09EC_2000%Research_Reop		Evidence is the strongest in Language arts, math and science and for telecommunication and video technologies.	