

# **Nevada Joint Union High School District Technology Plan**

## **2012-2015**

**Nevada Joint Union High School District  
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# Nevada Joint Union High School District Technology Plan

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**July 1, 2012 – June 30, 2015**

**DISTRICT OVERVIEW**

Nevada Joint Union High School District is located in Western Nevada County, California. The mission of NJUHSD is to provide all students with the educational opportunities that will empower them to reach their full potential and prepare them for work and lifelong learning. As of the 2011-2012 school year, NJUHSD is comprised of two comprehensive high schools (Nevada Union and Bear River), four necessary small continuation high schools (Silver Springs, Sierra Foothill, Nevada Union Technical, and Pioneer), one early college high school (Ghidotti), and one alternative independent study high school (Sierra Mountain). NJUHSD also manages two court/community high schools (Earle Jamieson and Nevada County Academy of Learning), and a juvenile hall program (Sugarloaf Mountain) for the COE. Nevada Joint Union High School District also includes an adult literacy program in its Nevada Union Adult Education school.

**Demographic Data (2010-2011 Dataquest):**

Student population (district): 3436

Student minorities (district):

AmInd/Alaskan:	2.6%	Asian:	1.6%
Black:	1.2%	Filipino:	0.4%
Hisp/Latino:	6.3%	Pacific Islander:	0.6%
White:	93.1%		

Students eligible for national school lunch program: 889 or 25.9%

English Learners: 0.4% Fluent-English-Proficient: 0.8% Redesignated FEP: 0.5%

Special Education (district): 326 or 9.5%

Bear River student population: 850

Earle Jamieson student population: 22

Nevada Union student population: 2087

Nevada Union Technical student population: 43

Pioneer student population: 17

Sierra Foothill student population: 17

Sierra Mountain student population: 62

Silver Springs student population: 138

Ghidotti Early College student population: 176

Sugarloaf student population: 15

Nevada County Academy of Learning student population: 9

Teachers: 158 fte      Class size average: 30      Pupil/Teacher ratio: 21.7:1

Classified Employees: 160

## **1. PLAN DURATION CRITERION**

This revised EdTech Plan encompasses three years, from July 1, 2012 through June 30, 2015, replacing the previous plan that expires on June 30, 2012. The purpose of this document is to describe the overall district Strategic Technology Vision. It will serve as the primary tool to guide the district's procurement, support, and assimilation of technology while outlining a path for achieving the district's technologic goals and objectives. Our goals and objectives were instituted to meet the identified necessity of assimilating technology to improve student learning, providing equitable technology access and support, providing secure and timely information flow between home, school, and community. It also serves as both the "Enhancing Education Through Technology" (EETT) education technology plan and the E-rate technology plan for the District. This plan will be reviewed annually by our District Technology Committee to monitor all components and objectives set forth in this plan. At the third year, we will revise and update the plan in accordance with E-RATE requirements.

## **2. STAKEHOLDERS CRITERION**

### **Technology Planning Team:**

Name	Position	Organization
Marianne Cartan**	Superintendent	NJUHSD
Curtis Smith* **	Director Technology Services	NJUHSD
Karen Suenram*	Asst. Superintendent of Business	NJUHSD
Trisha Dellis**	Asst. Superintendent of Student Services	NJUHSD
Jeanine Atkins*	Network and Systems Coordinator	NJUHSD
Donna Nies*	System Analyst	NJUHSD
Craig Garner	Technology Services Technician	NJUHSD
Cathy Hannah	Technology Services Technician	NJUHSD
Rose Roth*	Technology Services Technician	NJUHSD
Miguel Lopez	Technology Help Desk Technician	NJUHSD
Mike Blake**	Principal	Nevada Union High School
Dan Frisella**	Asst. Principal, DDT Facilitator	Nevada Union High School
Chris Buti**	Teacher	Nevada Union High School
Jim Nieto**	Principal, DDT Facilitator	Bear River High School
Michael Hughes**	Teacher	Bear River High School
Melissa Madigan**	Principal	Ghidotti Early College High School
Anita Bagwell	Principal	McCourtney Road Alternative Education Site
Marty Mathiesen**	Principal	Park Ave. Alternative Education Site

\*Technology Committee

\*\*District Data Team

The Technology Committee team includes site and district staff members who are involved in developing technology advancement for each of the high school sites. The Technology Committee is responsible for planning, implementation and ongoing assessment and refinements of technology based curriculum. They meet on a regular basis throughout the school year to discuss ways technology can better support the growing technology needs of the student population. They also address the technology concerns of teachers and other staff members.

Our community includes several technology based companies and many of their employees were members of our planning teams or served as consultants to the individual team members. The District Curriculum Committee members, which include parents and community members, provide input as to what technology needs should be addressed. The district and school Site Council members, who include parents, students and community members, also provide input. The Technology planning team represented all layers of the schools' communities. CTAP region 3 provides training, guidance and assistance through the Sacramento County Office of Education.

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The Technology Committee addressed many fundamental questions including:

- What information-age education will best prepare students for the future?
- What kinds of technological skills do students need to meet the challenges of a rapidly changing world?
- How can technology tools empower students and staff?

### **District Vision for Technology Use:**

This district plan is envisioned to guide the school/district for the next three years. As a result we anticipate that by June of 2015:

- Every student has access to a computer with online capability at school and most will have access to online resources at home that will connect them to school resources;
- Students use technology tools to master California Content Standards in the core curriculum;
- Students will have computer skills that are commensurate with the expectations of their future employers and institutions of higher education or vocational training;
- School-based computers, software, and networking function reliably with timely assistance from trained computer and network personnel as needed;
- Students use online resources wisely after receiving training in the Big 6 and similar programs.

### **Expected student outcomes in 3 years as a result of technology use:**

- Increased student use of computers and curriculum-specific support software in classrooms, libraries, and computers labs will improve student mastery of California Content Standards as measured by CST and local assessments;
- Students will apply technology skills to classroom projects and products in all areas of the curriculum;
- Students will increase their use of the Internet for research purposes relevant to curriculum activities.
- Training in the Big 6 and library resources will allow students safe, responsible and wise use of technological learning resources;
- Students will develop positive attitudes toward technology uses and functional computer skills that support lifelong learning, collaboration, personal pursuits, and productivity and are transferable to the work environment.

### **Expected staff outcomes in 3 years as a result of technology use:**

- Teachers will use technology resources to support instruction, classroom management, data analysis, and personal growth.
- Teachers will use technology to organize, teach, and assess student learning in California Content Standards.
- Staff will model the use of technologies for students.
- Teachers will use on-line grading and attendance reporting and other record keeping processes.
- Teachers will design web pages to better facilitate the communication of classroom expectations to students and their guardians.
- Administrators will use technology to improve communications, data analysis, management, and leadership roles.

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- All staff will use technology for communications, management, documentation, and data collection/analysis.
- All teachers will begin to meet Technology Proficiency Standards set by the California Commission on Teacher Credentialing.

### **Expected technology outcomes; infrastructure, hardware, tech support and software:**

- The district will continue to upgrade outdated computers and network devices.
- Our goal is to maintain a student to computer ratio of at least 3:1 throughout the district, with at least one computer lab per comprehensive high school supported by a full-time computer tech aide, at least one teacher and one student workstation in each classroom, and from at least two to twelve computers in each library.
- The district will develop a plan to deploy a 1:1 laptop/tablet program, building on our tablet pilot program and incorporating a “Bring Your Own Device” (BYOD) to empower our students with 21<sup>st</sup> Century digital learning tools.
- NJUHSD will continue to demo the available web portals to our staff with the goal of adopting the portal that best fits our academic environment.
- The district will migrate from a locally installed Office productivity software model to the cloud based Live@EDU Office Web Application environment for both students and staff.
- The district will encourage the adoption of Clicker student response systems at all sites as a complement to our other active learning approaches in improving learning outcomes.
- The district will enhance network performance, reliability and efficiency by adding additional memory and hard drive space to its servers, replacing old servers and adding new virtual servers.
- The district will provide advanced training in basic networking, workstation maintenance, software applications, and online resources to all computer tech aides.
- The district/school will have developed and adopted a hardware acquisition plan that includes 1) a review of all technology purchases by district IT staff, 2) a database to track all existing technology equipment and maintenance procedures, and to recommend replacement according to district guidelines.
- The district will maintain or improve its ability to connect users to the student and financial systems throughout the district and county network, including increasing bandwidth via a Gigabit connection to the Internet.
- The district will continue to subscribe to online services which support student learning in California Content Standards.
- The district will continue to provide an Internet filtering system to filter out objectionable material, shield it from destructive viruses/users.
- All schools will be equipped with a 10gig fiber optic backbone with category 6 wiring throughout the wings, including the Library and Administration offices and extending this network to all instructional areas.
- The NJUHSD Network Operating Center will continue to be connected and maintained by the CENIC Digital California Project K-20 High Speed Network which is the operational center for all western Nevada County K-12 Schools.
- NJUHSD will extend wireless coverage for teachers and students while adding wireless services for community members and the BYOD program at all high school locations.



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- The district will provide technical support for the use of curriculum based software in the classrooms and computer labs and explore more ways to integrate technology and curriculum.
- The district will coordinate technology and maintenance support services through the use of a district “Help Desk” and associated technology staff.

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

- Technology curriculum, professional development, software, books, and Internet access are supported by the District’s General Fund, SIP, Title I, Title II, Title III, Title V, GATE, API, AP Challenge Grant, EIA, EEFT, Perkins III, Ag Incentive grant, district instructional materials and library entitlements, site and district block grants, state lottery funds, and PAR funds.

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

- Annual increases in teachers’ technology proficiencies per the ED TECH PROFILE Assessment.
- Annual increases in teachers’ use of technology to enhance curriculum and communication.
- Annual increases in staff use of technology to monitor student achievement.
- Students’ progress in mastering the California Content Standards in the core curriculum.
- Students’ progress in acquiring information literacy skills.
- Annual maintenance and infrastructure upgrade activities are reviewed and adjustments made as indicated.

### **3. CURRICULUM COMPONENT CRITERION**

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

##### **Staff:**

All teachers have laptop computers along with a growing minority that also have Android Tablets. All teacher laptops/tablets are networked with 24/7 access to the student information system for attendance and grade reporting, Internet, digital lockers, e-mail on the district's server and teacher web pages. They also have word processing, spreadsheet, and presentation software installed on their computers. Many have publication software installed as well. The laptops are leased for a period of three years with an option to purchase or replace at the end of the lease agreement. The end of the lease agreement will occur in the summer of 2013 at which time the district plans to replace the currently leased laptops with new systems. All teachers have access to a printer located either in their wing or classroom.

All of the sites have at least one or more LCD projectors to which the teachers have shared access. At NUHS, our largest comprehensive high school, over half of the classrooms (56%) have dedicated classroom LCD projectors. There are also interactive whiteboards in several classrooms and the Social Studies dept. is piloting a classroom response system ("clickers"). Additionally, almost all teachers have televisions in their classrooms for media presentation which will also be used for school-wide broadcasts of daily bulletins which will be produced by the TV Productions/Communications Arts classes.

##### **Students:**

Students have access to computers throughout the day and after-school in hourly programs, extended library hours or as arranged with staff. Our high schools have benefited from both the Digital High School (DHS) and AB2882 funds in providing a student to computer ratio in classrooms of 2.7:1 district wide. Most classroom wings and computer labs have a laser printer and at least three networked workstations. The ratio is smaller in the small continuation schools than in the large comprehensive high schools. Most classrooms have at least one computer workstation intended for student use that is connected to the Internet. Each student computer has Microsoft Office Pro 2000 or 2003, Internet Explorer v7.0 or v8.0, Accelerated Reader, Star Reading, Skills Tutor, LightSpeed Security Agent, Deep Freeze and Geneva Logic's Vision Client software. With the end of our lease agreement with Dell in the summer of 2010 we moved to purchasing recent off-lease systems to replace our aging student computers. This has effectively eliminated all of our Windows 98 student systems in the district.

All school sites each have at least one general use whole class computer lab supported by district and/or site technology staff in addition to library media center labs. At the comprehensive high schools, library media centers are staffed by a credentialed librarian and a classified assistant. Each library has multiple student workstations networked to the Follett library management program. The library is open before school for 15 minutes and after school each day for 2 hours. All computers in all labs have CD-ROMs, Internet and printing capabilities

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The following chart shows per school ratios of students to instructional computers according to the 2011 CBEDS-ORA data.

School	Student Enrollment	Total Computers	Student Computer Ratio
Bear River	850	233	3.65:1
Earle Jamison	22	24	.92:1
Nevada Union	2087	744	2.81:1
Nevada Union Tech	43	11	3.91:1
Pioneer	17	6	2.83:1
Sierra Foothill	17	21	.81:1
Sierra Mountain	62	52	1.19:1
Silver Springs	138	85	1.62:1
Ghidotti Early College	176	59	2.98:1
Sugarloaf	15	16	.94:1
NCAL	9	5	1.80:1
<b>District Totals</b>	<b>3436</b>	<b>1268</b>	<b>2.71:1</b>

Currently there are 190 leased student Android Tablet systems being piloted by the Partnership Academy on the NUHS campus.

All sites offer courses in computer use. ROP courses in both computer use and maintenance are also available at all sites.

Students with special needs, categorical students and English Language Learners utilize computers in the classrooms and computer labs. SDC and RSP teachers at all district schools have at least one computer which is networked to obtain Internet and online resources. In advanced classes in the core areas and in the visual and performing arts, there are typically more computers available than in other.

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

#### **District Use:**

School World has been added to the district’s list of available technology resources. School World utilizes ‘Content Management’ technology. This technology offers simple to use text boxes that work similar to any word processing package. It empowers administrators, staff, and teachers to quickly update information on their website without any special knowledge of web programming. This allows teachers to create web based calendars, provide online resources, email students and parents, and gives them a place to post assignments, therefore, enhancing communication among teachers, students and parents. The district continues to use eSchoolPlus, a web based student information system that allows teachers to take attendance online.

#### **Staff Use:**

Teachers use an integrated SIS grade book to do online grades. They use a district issued laptop or tablet to access the web based student system. The Home Access Center allows parents and

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students internet access to student records on attendance, grades, records, etc. A growing number of teachers are using technology to communicate with parents or students. All teachers use technology for student grade books, to communicate with colleagues and parents, to gather information for planning lessons, to create instructional materials for developing standards based lessons and assessments and for monitoring student progress on these assessments.

Teachers have access to DATAWISE, a web based tool that allows them to track student performance on state standards. It enables teachers to view results of state wide exams so they can differentiate instruction in their classroom. Teachers can create benchmark exams aligned to the standards and receive immediate results as to whether the student has mastered the standards. The integration of the DATAWISE technology gives teachers the ability to make decisions about student instruction based on real performance data.

### **Student Use:**

The use of technology in the areas of reading/language arts varies from 2-5 days a week to monthly; the use of technology in mathematics varies from 2-5 days a week to less than monthly; the use of technology in science from 2-5 days weekly to less than monthly; and the use of technology in the area of history/social science varied from 2-5 days weekly to monthly.

Teachers and students currently use technology for one or more of the following purposes as appropriate to a particular academic, vocational or enrichment course:

USE	FREQUENCY
Preparing materials with word processing or desktop publishing software	Daily
Developing multimedia presentations	Weekly
Finding, evaluating and using Internet resources (projects requiring information literacy skills)	Daily
Storing, modifying and sharing research, homework and class files	Daily
Use curriculum specific software for instruction and/or assessment	Daily
Communication with staff, students, parents, and community members through email, web pages and forums	Daily
DATAWISE is provided for assessment	Ongoing Daily
Use technology to improve communications, data analysis, management, and leadership roles.	Ongoing Daily

### **Home/School Communication:**

As a means for further advancement in technology and communication between parents and teachers, the district uses eSchoolPlus Home Access Center. The Home Access Center gives parents and students a way to check a student's schedule, attendance, classwork and report cards online.

All site administrative staff utilizes the SchoolMessenger system to connect with parents, students and staff through voice, SMS text, email and social media.

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The district's 9-12 curriculum is fully aligned to California State Standards in English/language arts, math, science and history/social science. Teachers have access to DATAWISE which allows teachers to view disaggregated data from CST and CAHSEE. Use of this software will provide a clear connection between standards and learning activities.

Each school site has implemented READ 180, a computer based K-12 reading program, approved by the California Department of Education which provides remediation for students with reading difficulties. Each site has also adopted Star Reading to assess basic reading skills. This is used in conjunction with the Accelerated Reader program. Each site also uses one or more of the following software programs: Accelerated Math, Star Math, and Skills Tutor for instruction, practice and assessment of basic mathematics. These software programs help students master the state standards, and the California High School Exit Exam (CAHSEE). Holt Literature and Language Arts program has also been adopted by the district which provides technological tools and applications for instructors. Holt includes:

- One-Stop Planner with editable lesson plans, transparencies, handouts, calendars, etc.
- An assessment website
- A student resource web site
- Exam View Pro, which is a test generator

Students in English and Social Science do "I Search" papers and other forms of research based writing assignments using technology based resources. Students in math and science use technology to do simulations, collect, analyze and represent data. Visual and performing arts students use technology to enhance their knowledge and to create art projects of their own. Students in vocational education classes such as agriculture and industrial technology use technology in numerous ways to complete projects and acquire an understanding of the expectations of the work place.

### **3.c. Summary of the district's curricular goals and academic content standards in various district and site comprehensive planning documents.**

Each site has a Single School Plan for Student Achievement and a WASC action plan within it to set goals and implement activities to improve achievement in these areas. The Local Education Agency Plan (LEAP) incorporates those plans and the district's strategic plan to form a coherent process to achieve our student achievement improvement goals. District and site goals which guide this plan include;

1. It is the goal of the Nevada Joint Union High School District to align instruction in all classrooms throughout the district with the new Common Core State Standards, with a focus on language arts and mathematics.
2. The district will satisfy all conditions of all state and federal mandates for accountability.
3. LEAP Goals:
  - a. All students will reach high standards, at a minimum attaining "proficiency" or better, in reading and mathematics, by 2014-2015.

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- b. All limited-English-proficient students will become proficient in English and reach high academic standards, at a minimum attaining proficiency or better, in reading/language arts and mathematics.
- c. All students will be taught by highly qualified teachers.
- d. All students will be educated in learning environments that are safe, drug-free, and conducive to learning.
- e. All students will graduate from high school.

Nevada Joint Union High School District students have made modest achievement gains in core subject areas as revealed in CST data over the past three years as illustrated in the graphs in Appendix A. Our greatest concern and focus for improvement is in the area of English Language Arts and Math. There is also a concentration on Limited English Proficient Students (LEPS). Since reading ability affects learning ability in general, we are committed to improving literacy levels for all students. In addition, the district is committed to enhancing technology in the areas of Social Studies and Science.

Results for students in the continuation schools are much lower than the district average. Those students must receive more remedial instruction to improve their chances for success as adults. Currently all graduating classes must pass the CAHSEE in order to receive a high school diploma. At the present time, 90% of the students in the cohort class of 2012 have passed both portions of the exam. The passage rates of our English Learners, Special Education, and Economically Disadvantaged students are much lower than the average. Our primary goal is to do everything within our power as educators to see that each of our students passes that exam.

### **3.d. List of clear goals and a specific implementation plan for using technology to improve teaching and learning by supporting the district curricular goals and academic content standards.**

Literacy skills found in the English Language Arts standards will be our primary focus for the next three years with secondary emphasis on Math, followed by Science and Social Science. All teachers received literacy strategy training, within the context of their lessons across the curriculum.

**3.d. Goal statements:** All teachers will integrate technology into the curriculum as integral components of lessons to improve student literacy and assist students in grades 9-12 in achieving grade level CA Content Standards and CAHSEE Content Standards in language and mathematics. DATAWISE will be used as a tool to monitor student achievement.

**3d.1 Objective 1:** By June of 2015, 80% of students will be using technology integrated into English Language Arts, Mathematics, History/Social Studies, and Science classes to learn curricular concepts.

June, '12	The new cloud-based Skills Tutor for Science and Social Studies is purchased and configured.
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June, '13	Skills Tutor, CAHSEE Tutor, and or Read 180, Star Reading, and Accelerated Reader will be integrated into all English Language Arts classes, core academic Pre-Algebra and Algebra I classes, History/Social Studies classes, and Science classes, to provide differentiated instruction, and remediation when appropriate, with an emphasis on use by students who have not yet passed the CAHSEE and/or are scoring below Basic on their grade level California Standards Test.
June, '13	60% of students will be using applicable technology in core classes to achieve grade level appropriate CA Content Standards and CAHSEE Content Standards scores
June, '14	70% of students will be using applicable technology in core classes to achieve grade level appropriate CA Content Standards and CAHSEE Content Standards scores.
June, '15	80% of students will be using applicable technology in core classes to achieve grade level appropriate CA Content Standards and CAHSEE Content Standards scores.

**i & 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	Student CST and CAHSEE test scores evaluated; strategies developed to improve results	Staff & Admin.	Sept., '12	F	Results presented to staff, community, school board
3.d.1	Staff collects data for identification of students who are two or more years below grade level in reading and schedules them for appropriate reading courses for the following year.	Staff & Admin.	June, '13	F,C	Master schedule reflects section allocations and staffing assignments
3.d.1	DATAWISE is used during the school year to monitor student achievement		Sept., '12 – June, '13	F,C	DATAWISE student reports
3.d.1	Staff collaboration to support Reading and Math software.	Staff &Admin.	June, '13	T, F, C	Department collaboration sessions
3.d.1	Staff Development is provided to teachers using the new instructional software in Science and Social Studies	Staff &Admin.	June, '14	T, F, C	Session evaluation forms
3.d.1	Samples of student work in core courses are collected at appropriate grade levels & evaluated – DATAWISE reports evaluated	Staff & Admin.	June, '13	F,T	Departmental evaluation results are shared in collaboration sessions
3.d.1	Science and Social Studies software is purchased and installed.	Tech. Support Staff	June, '13	F, C, IMF	Software installed and configured Computers functional
3.d.1	Staff development in using classroom data to improve student achievement	Staff & Admin.	Sept '12 & ongoing	T, F, C	Reports from Team DATAWISE.
*Cycle is repeated for years 2014 and 2015 assuring completion of benchmarks appropriate to that year and/or changes resulting from evaluation results.					

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**3.d.2 Objective 2.** 80% of all students in traditional core classes will utilize online research resources expanding their research options used in producing multi-media projects demonstrating mastery of state content standards.

**BENCHMARKS:**

June, '13	<input type="checkbox"/> 60% of teachers in traditional core courses will require students to use online resources where appropriate to expand options for research and learning. <input type="checkbox"/> 60% of teachers in traditional core courses will assign multi-media projects through which students can demonstrate mastery of state content standards.
June, '14	<input type="checkbox"/> 70% of teachers in traditional core courses will require students to use online resources where appropriate to expand options for research and learning. <input type="checkbox"/> 70% of teachers in traditional core courses will assign multi-media projects through which students can demonstrate mastery of state content standards.
June, '15	<input type="checkbox"/> 80% of teachers in traditional core courses will require students to use online resources where appropriate to expand options for research and learning. <input type="checkbox"/> 80% of teachers in traditional core courses will assign multi-media projects through which students can demonstrate mastery of state content standards.

**i & 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.2	Teachers assign multi-media projects incorporating online research appropriate to core academic content.	Teachers	June, '13	F	EdTech Profile
3.d.2	Samples of student multi-media work in core courses are collected at appropriate grade levels & evaluated.	Staff & Admin.	June, '13	F,T	Departmental evaluation results are shared in collaboration sessions
3.d.2	The new cloud-based SkillsTutor for Science and Social Studies is purchased and implemented.	Tech. Support Staff	June, '13	F, C, IMF	Software installed and configured Computers functional
3.d.2	Staff development is provided for teachers according to their technology skill levels related to multi-media lessons and learning plans.	Staff & Admin.	June, '14	D, T,TF	Certificates of completion; lesson and unit plans developed within workshops
*Cycle is repeated for years 2014 and 2015 assuring completion of benchmarks appropriate to that year and/or changes resulting from evaluation results.					

**3.e. List of clear goals and a specific implementation plan as to how and when students will acquire technology skills and information literacy skills needed to succeed in the classroom and the workplace.**

**Information Literacy Skills**



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Students acquire information literacy skills through their freshman English classes. Teachers of freshmen English classes sign up their classes for Library orientation and training in the use of Library technology information resources and Big 6 skills provided by Library Media teachers. English and History/Social Science teachers assign projects requiring research and presentation skills at each grade level that require students to learn and demonstrate increased research skills per grade level.

**Technology Literacy Skills**

By working with our feeder districts through the development of our technology plans, we have been able to articulate somewhat the scope and sequence of technology skill development. Currently students are required to demonstrate computer literacy competencies as a graduation requirement.

We anticipate that by June of 2015 students will begin to demonstrate these skills, per Addendum B.

**3.e. Goal statement** All students in grades 9-12 will acquire 21<sup>st</sup> Century technology skills, which are transferable to the work environment, prepare them for college and careers, and support lifelong learning, collaboration, and personal pursuits.

**3.e.1 Objective 1:** By June 2015, all Nevada Joint Union High School District students will understand and apply Big 6 information literacy skills to increase their use of Internet resources for research in at least two or three of the core content areas.

**BENCHMARKS:**

June, '13	All students will demonstrate Big 6 information literacy skills by completing research in a core content area in each grade 9-12
June, '14	All students will demonstrate Big 6 information literacy skills by completing a research in at least two of the core content areas in each grade 9-12
June, '15	All students will demonstrate Big 6 information literacy skills by completing a research project in at least two or three of the core content areas in each grade 9-12 when appropriate (collaborative projects included)

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

Goal	Implementation Activities	Resp. Position	Timeline	Budget	Evidence of Activities
3.e.1	Professional development focuses on how to integrate information literacy and computer proficiency curriculum model into core curriculum and assess student proficiencies. Addendum B	Admin. Staff	August '12	F, T, TA	Professional development agenda and attendance sheet
3.e.1	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	Staff	August '12	F, T	Lesson Plans and other curriculum documents; student work
3.e.1	EdTech Profile to evaluate technology	Technology	August	F, T,	Survey results reviewed

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	integration instruction and practices.	Committee	'12	TA	
3.e.1	Results of the integration of computer & information literacy proficiency skills survey is tallied and distributed to staff with discussions at faculty/department meetings for needed staff development.	Admin. Staff	June '13 Sept. '13 Oct. '13	F	Faculty meeting agendas
3.e.1	Teachers evaluate the quality and effectiveness of 9-12 information literacy; modifying it for implementation of '13 benchmark	Admin. Staff	Jan '14	F, T, TA	As above
3.e.1	Teachers support each other in full implementation of technology proficiency and information literacy curriculum.	Staff	Feb. '13- June '13 and thereafter	F	Teacher evaluation includes a strand relating to the integration of computer proficiencies in core curriculum.
Cycle is repeated for years 2014 and 2015 assuring completion of benchmarks or modifications from evaluation results.					

**3.e.2 Objective 2:** 100% of all graduating students will demonstrate mastery of the information literacy and technology proficiency skills as a graduation requirement for the class of 2015. Addendum B will be used as a guide through this process.

**BENCHMARKS:**

June, '13	60% of all students will meet the computer literacy competency standard requirements. Curriculum adjustments in appropriate courses will have been made to reflect the higher district standard for computer literacy.
June, '14	80% of all students will meet revised district computer literacy competency requirements.
June, '15	100% of all students will meet revised district computer literacy competency requirements.

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

Goal	Implementation Activities	Resp. Position	Timeline	Budget	Evidence of Activities
3.e.2	Professional development focuses on how to integrate information literacy and computer proficiency curriculum model into core curriculum and assess student proficiencies. Addendum A	Admin. Staff	August '12	F, T, TA	Professional development agenda and attendance sheet
3.e.2	All teachers pilot at least one component of the computer proficiency curriculum integrated into their core instruction and assessment practices.	Staff	August '12	F	Lesson Plans and other curriculum documents; student work
3.e.2	EdTech Profile results used to evaluate technology integration instruction and practices.	Technology Committee	August '12	F, T, TA	Profile results reviewed
3.e.2	Results of the integration of computer & information literacy proficiency skills	Admin. Staff	June '13 Sept. '13	F	Faculty meeting agendas

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	survey is tallied and distributed to staff with discussions at faculty/department meetings for needed staff development.		Oct. '13		
3.e.2	Teachers evaluate the effectiveness of the computer proficiency pilot 3.e.2, modifying it for implementation next year to the '13 benchmark	Admin. Staff	Jan '14	F	Survey regarding the effectiveness of the model piloted – presentation of findings to faculty – modifications as indicated by data.
3.e.2	Teachers support each other in full implementation of technology proficiency and information literacy curriculum.	Staff	Feb. '13- June '13 and thereafter	F	Teacher evaluation includes a strand relating to the integration of computer proficiencies in core curriculum.
Cycle is repeated for years 2014 and 2015 assuring completion of benchmarks or modifications from evaluation results.					

**3.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 can distinguish lawful from unlawful use of copyright and fair use; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; and avoiding plagiarism.**

**3.f.1 Objective 1:** By June 2015 all students and staff will receive instruction regarding the appropriate, ethical use of technology including copyright and fair use, lawful and unlawful downloading, and avoiding plagiarism as outlined in the Student Instructional Technology Acceptable Use and Internet Safety Policy.

**BENCHMARKS:**

June, '13	80% of all students will receive instruction regarding the ethical use of technology including appropriate methods of distinguishing lawful from unlawful downloading and peer-to-peer file sharing as well as copyright laws pertaining to plagiarism.
June, '14	90% of all students will receive instruction regarding the ethical use of technology including appropriate methods of distinguishing lawful from unlawful downloading and peer-to-peer file sharing as well as copyright laws pertaining to plagiarism.
June, '15	100% of all students will receive instruction regarding the ethical use of technology including appropriate methods of distinguishing lawful from unlawful downloading and peer-to-peer file sharing as well as copyright laws pertaining to plagiarism.

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

Goal	Implementation Activities	Resp. Position	Timeline	Budget	Evidence of Activities
3.f.1	Staff will receive training on copyright and fair use based on CyberSmart Common Sense Media's Digital Literacy and Citizenship curriculum.	Tech Staff & Site Tech Mentors	August '12	F	Professional development agenda and attendance sheet.
3.f.1	All students and staff will have a completed Acceptable Use Policy on file at their school site.	Admin Staff	September '12	No cost	Report from SIS

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3.f.1	Assist teachers in applying their training and integrating the ethical use of technology curriculum into the classroom lessons.	Site Tech Mentors	September '12	F	Lesson Plans and other curriculum documents
3.f.1	Develop policy to address discipline for un-ethical use of technology	Admin Staff	August '12	F, T, TA	SIS Discipline Incident List Report, AUP Adoption
3.f.1	Students will participate in lessons from the selected curriculum covering appropriate methods of distinguishing lawful and unlawful downloading and peer-to-peer file sharing as well as copyright laws pertaining to plagiarism.	Teaching Staff	October '12	F	Lesson Plans and other curriculum documents; student work.
3.f.1	A survey will be created to give to the students each year to test their level of understanding related to appropriate and ethical use of technology	Tech Committee	January '13	F, T, TA	Technology Committee agendas and attendance sheet
3.f.1	A survey will be given to students each year beginning June '13	Admin. Staff	June '13	F	Presentation of findings to faculty
3.f.1	The Technology Committee will meet once during the school year to discuss the results and progress of this goal	Technology Committee	August '13	F	Technology Committee agendas and attendance sheet
Cycle is repeated for years 2014 and 2015 assuring completion of benchmarks or modifications from evaluation results.					

**3.f.2 Objective 2:** By June 2015 all English Language Arts and History/Social Studies teachers will be using plagiarism software.

### BENCHMARKS:

June, '13	80% of teachers in the English Language Arts and History/Social Studies core courses will require their students to submit essay assignments through TurnItIn or other plagiarism scanner, where appropriate, to further educate students in lawful use of information technology.
June, '14	90% of teachers in the English Language Arts and History/Social Studies core courses will require their students to submit essay assignments through TurnItIn or other plagiarism scanner, where appropriate, to further educate students in lawful use of information technology.
June, '15	100% of teachers in the English Language Arts and History/Social Studies core courses will require their students to submit essay assignments through TurnItIn or other plagiarism scanner, where appropriate, to further educate students in lawful use of information technology.

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

Goal	Implementation Activities	Resp. Position	Timeline	Budget	Evidence of Activities
3.f.2	Anti-plagiarism software is purchased	Tech. Support Staff	June, '12	F, C, IMF	Software installed and configured or made accessible
3.f.2	Staff development is provided for teachers	Staff &	Oct, '12	D, T, TF	Certificates of

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	during teacher collaboration with peer-to-peer training.	Admin.			completion; lesson and unit plans developed within workshops
3.f.2	Student papers will be submitted for plagiarism review	Teachers	Oct '12	F	Lesson plans, student work and other curriculum documents
3.f.2	The Technology Committee will meet once during the school year to discuss the results and progress of this goal	Technology Committee	August '13	F	Technology Committee agendas and attendance sheet
Cycle is repeated for years 2014 and 2015 assuring completion of benchmarks or modifications from evaluation results.					

**3.g. List of clear goals on how the district will address Internet safety, including how to protect online privacy and avoid online predators.**

**3.g.1 Objective 1:** By June 2015 all students will receive Internet Safety instruction that includes cyberbullying and social networking safety components and provides the skills necessary to protect their online privacy, avoid online predators, and to avoid Internet sites that contain inappropriate content. Classroom instruction, based on both the iSafe curriculum (iSafe.org) and the OLWEUS Bullying Prevention Program (olweus.org), will be delivered in the classroom as well as in district presentations open to students, staff, parents and community members.

**BENCHMARKS:**

June, '13	80% of all students (based on the California Healthy Kids Survey) will have received classroom instruction on Internet Safety, Cyberbullying, Social Networking and how to avoid dangerous, inappropriate, or unlawful online behavior.
June, '14	90% of all students (based on the California Healthy Kids Survey) will have received classroom instruction on Internet Safety, Cyberbullying, Social Networking and how to avoid dangerous, inappropriate, or unlawful online behavior.
June, '15	100% of all students (based on the California Healthy Kids Survey) will have received classroom instruction on Internet Safety, Cyberbullying, Social Networking and how to avoid dangerous, inappropriate, or unlawful online behavior.

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

Goal	Implementation Activities	Resp. Position	Timeline	Bud get	Evidence of Activities
3.g.1	Sites will collaborate to discuss the iSafe resources regarding Internet safety, cyberbullying prevention and safe social networking for use in classroom instruction.	Admin. Staff & Technology Committee	August '12	F, T, TA	Technology Committee agendas and attendance sheet
3.g.1	Staff will receive training for implementing lessons which promote Internet safety	Admin. Staff	June '13	F	Staff meetings and collaboration

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	Students will participate in lessons from the selected curriculum covering Internet safety, cyberbullying prevention and safe social networking	Teaching Staff	October '12	F	Lesson Plans and other curriculum documents; student work.
3.g.1	Student, staff, parent and community forums on Internet Safety, Social Networking and Cyberbullying will continue to be presented	Admin. Staff	Annually	No Cost	Sign in sheet
3.g.1	Students will demonstrate their understanding of internet safety, Social Networking and Cyberbullying based on the end of year California Healthy Kids Survey.	Admin. Staff and Technology Committee	Annually	No Cost	California Healthy Kids Survey results collected
3.g.1	Review of Internet safety implementation and goal achievement	Admin. Staff and Technology Committee	June '13	F	Technology Committee agendas and attendance sheet
Cycle is repeated for years 2014 and 2015 assuring completion of benchmarks or modifications from evaluation results.					

**3.h. List of clear goals and a specific implementation plan for programs and methods of utilizing technology that ensure equitable technology access for all students.**

All Nevada Joint Union High School District 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. Students have access to advanced placement courses that are accepted by the University of California. 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. Computer assisted instruction is in use in both reading and math throughout the district.

**3.h. Goal Statement:** Students – including ELL, GATE, and those with special needs - will have increased access to software or online services in their classrooms, libraries and/or labs.

**3.h.1 Objective 1:** By June 2015, all students will have wireless access to the internet on campus and have the ability to access their digital locker 24/7 from the web.

**3.h.2 Objective 2:** By June 2015, all students, including Title I students in the (9<sup>th</sup> and 10<sup>th</sup>) grades will use content specific software to assist with remediation and enrichment of their Reading/LA Skills and Math CAHSEE proficiencies.

**3.h.3. Objective 3:** By June 2015, all students, including Title I students in the (9<sup>th</sup> and 10<sup>th</sup>) grades will use content specific software to assist with remediation and enrichment of all core academic subjects and CAHSEE proficiencies.

**BENCHMARKS:**

June, '13	READ 180 will be maintained and remain functional at all district sites for all Title I and ELL students in grades 9 – 10.
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June, '13	Staff who will be providing specific instruction in reading to Title I eligible and ELL students will be trained in the use of READ 180.
June, '13	Math teachers district wide will define their use of research based software to support students in acquiring foundation skills needed to learn Algebra I and pass the mathematics portion of the CAHSEE. Skills Tutor to be integrated into Math curriculum to support Title I students to enhance academic performance and increase test scores.
June, '14	50% of Title I students who have taken a course which is supported by READ 180 will pass the language portion of the CAHSEE on their first attempt.
June, '14	40% of Title I students who have taken a course which is supported by instructional software will pass the math portion of the CAHSEE on their first attempt.
June, '15	60% of students using Read180 will gain at least two grade levels of growth in reading through their experience in courses using READ 180
June, '15	Each site will have a sufficient number of computers in classrooms or labs to support computer assisted instruction in all courses preparing students to meet all core academic subjects and CAHSEE standards.
June, '15	All students will have a digital locker so that they can access their work from any computer on the campus.
June, '15	All students will have wireless access to the internet from any location within the district.

**i & 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.h.1	Maintaining and improving software allowing student access to digital lockers from all locations.	Tech Staff	Aug '12	F	Tech Work Logs, Software maintenance contracts.
3.h.1	Staff trained to show students how to use digital lockers.	Tech Staff Site tech mentors	Aug. '12 and annually	F, T	Training Agendas
3.h.2	With the assistance of technical representatives from Scholastic, district technology personnel will maintain the READ180 student data.	Tech Staff	Aug, '12 and annually	F	Program functions at all sites
3.h.2	Teachers receive training in the use of READ 180 as an instructional tool.	Staff	Aug, '12 and ongoing	F, C, T, TA	Training sign in records
3.h.3	The district Math Task Force will adopt Skills Tutor to support Algebra I instruction and CAHSEE preparation	Admin.	Aug, '12	F, T, C	Meeting agendas and sign in records
3.h.3	Professional development focuses on how to integrate technology into math instruction using Skills Tutor	Admin. Staff	Sept., '12 and ongoing	F, T, C	Professional development agenda and attendance sheet
3.h.2	READ 180 in use in all reading classes	Staff & Admin.	Sept, '12 and ongoing	F, G	Lesson and unit plans developed
3.h.1	Digital lockers will be maintained and functional.	IT Staff	Aug, '12 and ongoing	F	IT work logs

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3.h.1	Training for staff in the appropriate student use of digital lockers.	IT Staff and Admin.	Aug., '12 and ongoing	F	Training sign in sheets
3.h.2 3.h.3	Samples of student work and Title I progress are collected & evaluated	Staff & Admin.	Jan., '13- June, '13	F,G	Evaluation results are shared with the entire staff for input on improvement
3.h.2 3.f.3	Student test scores evaluated; strategies developed to improve results using DATAWISE.	Staff & Admin.	Aug., '12	F	Results presented to staff, community, school board
Cycle is repeated for years 2014 and 2015 assuring completion of benchmarks or changes resulting from evaluation results.					

**3.i. List of clear goals and a specific implementation plan to utilize technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs.**

Teachers currently use the SunGard eSchoolPlus student information system online Attendance and Gradebook modules for grading. The district has also purchased DATAWISE, an online database software program that disaggregates student test data supplied by the state (CST and CAHSEE) by student and by teacher. Ongoing training will be provided to ensure the efficient utilization these programs.

**3.i. Goal statement** - Teachers will use multiple means of record keeping and student data analysis to improve student achievement.

**3.i.1 Objective 1:** By June 2015, 100% all teachers in the core academic areas will use data to evaluate student achievement on the California Standards Tests and the California High School Exit Exam to differentiate their instruction and improve student performance leading to mastery of California Content Standards.

**BENCHMARKS:**

Aug. '12	All teachers in core content areas will receive and evaluate reports concerning student scores (past and present) on the related California Standards test from the 2011 administration.
Nov. '12	80% of teachers in core content areas will develop interim assessments of learning in three to five content standards where student achievement was lowest during the 2011 administration and concentrate their efforts in approving performance in those areas.
Aug. '13	60% of teachers in core content areas will use Common Assessments results to adjust their instruction and improve student performance leading to mastery of California Content Standards.
Aug. '13	100% of teachers in core content areas will develop interim assessments of learning in three to five content standards where student achievement was lowest during the 2011 administration and concentrate their efforts in approving performance in those areas.



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Aug. '14	80% of teachers in core content areas will use Common Assessments results to adjust their instruction and improve student performance leading to mastery of California Content Standards.
Aug. '15	100% of teachers in core content areas will use Common Assessments results to adjust their instruction and improve student performance leading to mastery of California Content Standards.

**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.i. 1	DATAWISE is purchased and district staff updates rosters	Tech Coordinator	Aug, '12	F	Results are shared with core department members
3.i. 1	Teacher collaboration for staff in core content areas focuses on how to interpret and use student data results.	Admin. Staff	August '12	F; T	Collaboration day agenda and attendance sheet
3.i. 1	Team DATAWISE pilots use of data to develop benchmark exams, instructional resources and interim assessments to track students through mastery of California Content Standards.	Staff & Admin.	Sept., '12	F, C, T	Team DATAWISE meeting notes and agendas.
3.i. 1	Core teachers use the DATAWISE data to develop interim assessments to track students through mastery of California Content Standards.	Staff & Admin.	Nov. '12	C, F, T	DATAWISE interim assessments
3.i. 1	Core teachers use Common Assessments results to adjust their instruction and improve student performance leading to mastery of California Content Standards.	Staff & Admin.	Aug. '13	C, F, T	DATAWISE Common Assessments
3.i. 1	Progress is evaluated through examination of '12 scores, discussion of issues and accomplishments	Staff & Admin	Sept. '13	C, F, T	Evaluation results are shared with core department members for input on improvement
Cycle is repeated for years 2014 and 2015 assuring completion of benchmarks or changes resulting from evaluation results.					

**3.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.**

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Nevada Joint Union High School District has a new district website and each school has its own website. Many teachers have created class websites as well. The district has implemented a parent home access center through our student information system, eSchoolPlus, that allows parents to view student attendance in all classes as well as system information such as current grades, report cards, progress reports, emergency contact information, CST test results, transcript records and enrollment information. Each staff member has a district email account which is published on the website that enables further communication with parents and staff.

**3.j. Goal Statement** – Teachers and Administrators will be more accessible to parents through the use of Internet resources.

**3.j.1. Objective 1:** By June 2015, 90% of teachers will have developed websites which include their district email addresses in order to enhance home/school communication.

**BENCHMARKS:**

June, '13	70% of teachers will have developed a website to post classroom assignments, news, home/school communications options and class events to.
June, '14	80% of teachers will have developed a website to post classroom assignments, news, home/school communications options and class events to.
June, '15	90% of teachers will have developed a website to post classroom assignments, news, home/school communications options and class events to.

**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.j.1	District technology staff setup teacher webpages as requested	Tech Staff	On going	F	Help Desk logs
3.j.1	District and school website information updated and maintained	Staff and support staff	On going	D	Websites current
3.j.1	Staff collaborate on website development	Tech support and staff	On going	F; D	Collaboration day agenda and attendance sheet
3.j.1	Teachers use website to communicate expectations to students and parents	Teachers and staff	Aug. '12 Ongoing	F	School World Teacher Page statistics report
Cycle is repeated for years 2014 and 2015 assuring continued access to parents or changes resulting from evaluation results.					

**3.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.**

The implementation of district curriculum goals regarding technology instruction will be overseen by the Superintendent and the District Curriculum Committee. The gathering and discussion of relevant data regarding the implementation of above goals will be conducted together with site administrators, the district Director of Technology, the Network Administrator, and the District Data Team. This data will be reviewed every May and submitted to the Superintendent and the NJUHSD Admin Council. Recommendations and changes are then made where appropriate.

## **4. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA**

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

The Nevada Joint Union High School District teachers and administrators annually take the EdTech Profile survey to determine their technology needs. According to the ED TECH PROFILE iAssessment, 60% of all teachers surveyed believed they were proficient/intermediate users of technology. 94% of all the teachers surveyed have integrated technology into their curriculum. 47% of those consider themselves proficient/intermediate in technology integration skills. Most are proficient in word processing. All have some general computer knowledge, some familiarity with the Internet, e-mail, and publishing. A minority have expertise in databases, spreadsheets, presentation software, and instructional technology.

All teachers have received training and most teachers are using technology to create and deliver multimedia presentations. Online resources, department collaboration, online courses, and personal training are all available to staff. Highest on the survey are trainings requested for personal and professional proficiency, especially Outlook. Because of the time and expense involved in out of district travel, most teachers prefer to take trainings in computer labs at district schools. Some have taken advantage of CTAP online training opportunities offered in the past.

The administrators use technology for at least one of the following:

- Accessing and updating student records
- communicating with staff and parents via email
- preparing presentations, reports and written communications
- producing staff evaluation document
- accessing and analyzing student achievement data

The teachers use technology for at least one of the following:

- Taking attendance online
- Using a grade book program
- Computer-assisted data collection and analysis
- Making teacher-prepared materials with word processing or desktop publishing software
- Developing multi-media presentations for instruction
- Finding, evaluating, and using internet resources
- Using technology to access model lesson plans and best practices
- Implementing student, collaborative, email or web-based projects
- Curriculum-specific software for student review or practice
- Implementing student projects requiring use of internet and/or computer applications
- Exchanging email with other teachers and with administrators, District-wide
- Teaching computer skills to their students
- Developing Teacher Web Pages to communicate assignments to students

The Nevada Joint Union High School District offers various means of support for teachers to integrate technology into the curriculum. During the school year, teachers are given the opportunity to collaborate during staff collaboration days; technology staff members are

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available for topic instructions when necessary. Online resources are regularly provided for interested teachers to learn software that promotes technology integration including: *Word*, *PowerPoint*, *Outlook*, *eSchoolPlus*, and many others via the NJUHSD Technology website. In addition, the district provides on-site help from technology experts to assist teachers with curriculum integration planning and implementation. Our teachers have also taken advantage of regional technology training. Some have taken advantage of on-line CTAP trainings and have then supported their colleagues and students in the use of technology specific to curriculum.

Higher priority is placed on curriculum alignment with California Content Standards and standards-based instructional strategies that do not depend necessarily on technology. As such, staff time has been dedicated district-wide for several years on the alignment of all course outlines to content standards. There have been opportunities for staff to earn buy-back time or extra hourly pay to improve their technology skills and applications, and some at each site have taken advantage of these, especially since almost all staff has been provided with either laptops or tablets.

### **Long-term professional development goals:**

Teachers will be trained in technology skills that will improve student achievement, communication, standards-based instruction, assist with data-driven decision-making, and motivate teachers to seek and effectively use technology resources to meet student needs. Sites and the district will develop technology standards for teachers and the subsequent staff development to support those standards. Administrators will be trained in technology skills that will enhance their leadership capabilities, improve efficiency and communication, as well as assist data-driven decision-making, evaluation and planning. The district will establish technology standards for administrators and the subsequent professional development to support these standards. Classified personnel will have opportunities to be trained in technology skills that will enhance efficiency, assist with data-driven decision-making, help them make better use of District systems, and aid in communication, evaluation and planning.

Teachers will continue to receive district provided training on eSchoolPlus for attendance and grade book accounting. Trainings will be provided to new teachers and/or teachers requiring further assistance after their first session of instruction. Furthermore, technology staff will be available via the technology helpdesk, email and phone to continue to support teachers using eSchool.

On-line opportunities such as CTAP will also continue to be made available. Incentives will be provided for technology professional development participants. These may include release time, conference/workshop attendance, new software, hardware upgrades, and/or professional expert pay. Motivation to attend technology skills training is critical, and as such administrators, management, teacher leaders, and other key people in the district will actively encourage their colleagues to advance their technology proficiency levels.

Interviews with staff indicated that most 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,

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

**4.b. Goal Statement:** Staff will have the technology proficiency to utilize hardware and software to organize, teach, and assess student learning in California Content Standards.

**4.b.1 Objective 1:** By June 2015, 85% of the district’s teachers will be at “intermediate” or “proficient” in all seven ED TECH PROFILE skill areas.

**BENCHMARKS:**

June, ‘13	65% of teachers will be at “intermediate” or “proficient” in all seven ED TECH PROFILE skill areas.
June, ‘14	75% of teachers will be at “intermediate” or “proficient” in all seven ED TECH PROFILE skill areas.
June, ‘15	85% of teachers will be at “intermediate” or “proficient” in all seven ED TECH PROFILE skill areas.

**4.b.2 Objective 2:** By June 2015, 80% of staff will demonstrate increased use of technological learning resources to organize, teach and assess student learning in California Content Standards by integrating at least two activities per year into their lesson plans that incorporate using online resources in building multi-media projects.

**BENCHMARKS:**

June, ‘13	60% of teachers in traditional core courses will integrate at least two activities per year into their lesson plans that incorporate using online resources in building multi-media projects through which students can demonstrate mastery of state content standards.
June, ‘14	70% of teachers in traditional core courses will integrate at least two activities per year into their lesson plans that incorporate using online resources in building multi-media projects through which students can demonstrate mastery of state content standards.
June, ‘15	80% of teachers in traditional core courses will integrate at least two activities per year into their lesson plans that incorporate using online resources in building multi-media projects through which students can demonstrate mastery of state content standards.

**4.b.3 Objective 3:** All NJUHSD administration will use technology appropriately to improve instruction, management, and student performance.

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**BENCHMARKS:**

June, '13	80% of all school site administrative staff will be trained in the Administrator Training Program (ATP) areas listed below
June, '14	90% of all school site administrative staff will be trained in the Administrator Training Program (ATP) areas listed below
June, '15	100% of all school site administrative staff will be trained in the Administrator Training Program (ATP) areas listed below

The Governor's Principal Training Act established by Assembly Bill 430 (AB430, Steinberg), will provide guidelines for all of California's school site administrators in critical leadership skills. Each administrator in the Nevada Joint Union High School District has participated in AB 430 training facilitated by the Pulliam Group.

School site administrative staff trainings will be focused on:

1. School financial and personnel management;
2. Core academic content standards;
3. Curriculum Frameworks and instructional materials aligned to the state academic standards;
4. The use of student assessment instruments, specific strategies to master the use of CST assessment data,
5. School management technology to improve student performance; and instructional leadership and management strategies regarding the use of instructional technology to improve student performance.

**4.b.4. Objective 4:** Development and implementation of a Technology Coaching position (Teachers on Special Assignment) at each of the five high school sites.

**BENCHMARK**

Sept. '12	Five "Technology Coaches" (Teachers on Special Assignment) are identified for two comprehensive sites, two continuation sites and the early college site.
Jan. '13 ongoing	Technology Coaches meet with small groups who require additional technology training.
June '13	Additional Tech Coaches added for the two comprehensive sites as needed

**4.b.5. Objective 5:** By June 2015 all certificated staff will receive instruction regarding the safe, appropriate, and ethical use of technology including copyright, fair use and plagiarism, Internet Safety, Cyberbullying, Social Networking and how to avoid dangerous, or unlawful online behavior..

**BENCHMARKS:**

June, '13	80% of all certificated staff will receive instruction regarding the ethical use of technology including peer-to-peer file sharing, and copyright laws pertaining to plagiarism as well as Internet Safety, Cyberbullying, Social Networking and how to avoid dangerous, or unlawful online behavior.
June, '14	90% of all certificated staff will receive instruction regarding the ethical use of technology including peer-to-peer file sharing, and copyright laws pertaining to plagiarism as well as Internet Safety, Cyberbullying, Social Networking and how to avoid dangerous, or unlawful online behavior.

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June, '15	100% of all certificated staff will receive instruction regarding the ethical use of technology including peer-to-peer file sharing, and copyright laws pertaining to plagiarism as well as Internet Safety, Cyberbullying, Social Networking and how to avoid dangerous, or unlawful online behavior.
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**4.b.6. Objective 6:** By June 2015, 100% of teachers will know how to communicate student assessment, achievement and class information to parents using a variety of methods including eSchoolPlus Parent Access Center, their School World Teacher Page and email.

**BENCHMARKS:**

June, '13	80% of all certificated staff will be trained in the use of eSchoolPlus Parent Access Center, their School World Teacher Page and email.
June, '14	90% of all certificated staff will be trained in the use of eSchoolPlus Parent Access Center, their School World Teacher Page and email.
June, '15	100% of all certificated staff will be trained in the use of eSchoolPlus Parent Access Center, their School World Teacher Page and email.

Goal #	Implementation Plan/Activities	Responsible Position	Timeline	Budget Source *	Monitoring and Evaluation activities
4.b.1 4.b.2 4.b.4 4.b.5 4.b.6	Technology Team develops technology coaching process for increased support at each campus site.	IT Dept.	June '12	T	Tech Work Logs,
4.b.1 4.b.2 4.b.4 4.b.5 4.b.6	“Technology Coach” (Teachers on Special Assignment) will be identified to support faculty growth in use of technological learning resources.	Principals	Sept. '12	T	Curriculum documents illustrating the integration of technology learning resources;
4.b.1 4.b.2 4.b.5 4.b.6	Faculty will take advantage of online technology in-service, such as CTAP Online and the Educational Technology Academy via individual professional development plans derived from ED TECH PROFILE and other resources.	Tech Mentor	October '12 and annually	F; D; G; T;	Teacher’s individual professional development plans; certificates of completion;
4.b.1 4.b.2 4.b.4 4.b.5 4.b.6	Staff Development and training is provided to Technology Coaches at each site	Superintendent	Dec. '12	T	Tech Work Logs, Training agenda
4.b.1 4.b.2 4.b.4 4.b.5 4.b.6	Technology Coaches meet with small groups who require additional technology training.	Director of Tech.	Jan. '13 ongoing	T, F	Training sign in sheets
4.b.1 4.b.5 4.b.6	Staff takes ED TECH PROFILE assessment and develops individual plans to increase their competency.	Principals	May '13	F	Principals and Superintendent meets with and reviews staff technology goals.

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4.b.1 4.b.2 4.b.5 4.b.6	A menu of opportunities for staff development based on the ED TECH PROFILE survey are researched and presented to staff. On site workshops will be featured	Principals IT Director	May/June '13 - annually	T	Handouts, lists, district bulletin, posted on website, notes from staff meetings
4.b.1 4.b.2	Staff will model the use of technologies in their lessons, as observed by students and evaluators.	Principals	November '12 – June '13	T	Lesson plans, observations, evaluations
4.b.1 4.b.2	Staff & stakeholder meeting to review effectiveness of Staff Development plan and make recommendations for new additions / strategies / formats	Principals Tech Mentor	May '13	F,T	Notes from staff meeting; recommendations; review of results from ED TECH PROFILE survey
4.b.3	100% of all school site administrative staff will be trained in the areas noted in AB 430	Asst. Supt	June '13	T	Certificates of completion
Cycle is repeated for years 2014 and 2015 assuring completion of benchmarks or changes resulting from evaluation results.					

**4.b.7 Objective 7:** By June 2015, 100% of teachers will know how to obtain student assessment information concerning student achievement relative to the California Content Standards using DATAWISE and will be able to use that information to guide instruction. 100% of teachers will be trained in the use of the existing student management system eSchoolPlus to access information on attendance, grades, demographics, test history and discipline.

**BENCHMARKS:**

Annually as needed	The district will provide staff development for new users of eSchoolPlus and DATAWISE
June, '13	80% of staff will use eSchoolPlus and DATAWISE
June, '14	90% of staff will use eSchoolPlus and DATAWISE
June, '15	100% of Staff will use eSchoolPlus and DATAWISE

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

Goal	Implementation Activities	Responsible Position	Timeline	Budget Source	Monitoring Plan
4.b.7	IT department will be trained at the district level to use DATAWISE.	IT Director	Feb. '13	F	IT department job log
4.b.7	Department Chairs will be trained in the use of DATAWISE	IT Director	June '13	F	IT department log
4.b.7	IT Department will train new staff in the use of eSchoolPlus	IT Staff	Aug. '12	F	IT department job log
4.b.5	Staff will be trained in the use and Interpretation of DATAWISE and eSchoolPlus data	IT Staff, Asst. Supt.	August '12; ongoing	T	Training agenda
4.b.5	Staff will use DATAWISE data to review student progress annually and	Teachers, Admin.	Sept. '12 and ongoing	F,G,T	Instructional team meeting notes



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	strategize how to improve student mastery of specific standards				
Cycle is repeated for years 2014 and 2015 assuring completion of benchmarks or changes resulting from evaluation results.					

**4.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.**

**Process for Monitoring:**

Weekly eSchoolPlus reports will be used to monitor teacher’s use of the attendance and grade program. The principals at each site will be responsible for ensuring the continual use of the program. Collaboration agendas will be used to ensure that teachers in the district are trained in interpreting data and using DATAWISE. DATAWISE will help us frequently monitor student achievement to close the achievement gap.

The implementation of District staff development regarding technology instruction will be overseen by the Superintendent and with the District Technology Committee. Success of trainings will be monitored by annual EDTECH PROFILE i-assessments given to over 90% of certificated staff and measured against each sites’ technology plan objectives. This data will be reviewed every May by the district technology committee. A report and recommendations will be submitted to the Assistant Superintendent of Educational Services and the NJUSD Admin Council.

**Resources and budget required to implement these goals.**

- Subscription to CTAP services for information on good learning software and for needed teacher in-service. Professional development activities will include CTAP Online, the Educational Technology Academy, and other capacity building professional development opportunities provided by CTAP3. We will also look to CTAP to identify appropriate technology learning resources through the SCORE web sites and their various curriculum links.
- Funding for teachers to visit other school sites identified by CTAP as demonstrating exemplary use of technology to support the academic core curriculum.
- Funding for the continued use of DATAWISE
- Funding for training time and training needs for teachers and administrators.
- Funding for a variety of resources needed to support technology professional development: projectors, scanners, digital cameras, printers, video equipment, additional computers, television and VCR, and tablets or other handheld computers, as well as miscellaneous software.

**Benefits from professional development based on staff needs assessment.**

Most teachers and administrators want to apply technology tools to improve student learning in California’s core academic content areas and in the elective and/or vocational curriculum areas. The goal is to improve all indicators of student achievement including test scores, attendance, graduation rates, participation in rigorous curriculum, employment in satisfying careers and

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ability to continue training at post-secondary institutions without the need for remediation. Benefits of professional development related to managing and integrating technology into core curriculum areas include:

- Opportunities to replicate exemplary programs found in other schools and districts,
- Opportunity to assess technology competencies of each teacher according to CTAP standards,
- Opportunity to increase technology competencies of each teacher.
- Opportunity to learn new and existing software and online services to help improve student learning and produce higher levels of student achievement.
- Opportunities to provide remedial instruction differentiated to meet individual student needs,
- Opportunities to manage information about student achievement efficiently and to interpret and use that information effectively.

**5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT**

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

**Hardware:**

Sites	Infrastructure Perm. Connect.*	Computers 2011/12			Tech Support FTE ***	
		Current	CBEDS**	Qty.*	Ratio	Current
Nevada Union	Yes	2087	744	2.81:1	1.9	0
NU Tech.	Yes	43	11	3.91:1	.1	0
Bear River	Yes	850	233	3.65:1	.9	0
Pioneer	Yes	17	6	2.83:1	.1	0
Silver Springs	Yes	138	85	1.62:1	.3	0
Sierra Mountain	Yes	62	52	1.19:1	.2	0
Sierra Foothill	Yes	17	21	.81:1	.2	0
Sugar Loaf Mt.	Yes	15	16	.94:1	.1	0
Ghidotti Early College	Yes	176	59	2.98:1	.1	0
Earle Jamieson	Yes	22	24	.92:1	.1	0
NCAL	Yes	9	5	1.80:1	.1	0
N.J.U.H.S.D.	Yes	3436	1268	2.71:1	4.9	0

\* Estimates based on physical inventory, \*\* CBEDS-ORA 2011/2012, \*\*\* Projections based on computer qty., number of site users, & use of software applications to support curriculum programs.

**Network and Internet Access State/County:**

The Nevada Joint Union High School Districts WAN serving Nevada, Sierra, and Placer Counties, starts with an AT&T GigaMAN connection from the California State CENIC, Digital California Project, K – 20 High Speed Network (<http://www.cenic.org>). This high-speed fiber optic service is distributed through a Cisco 7500 router, 1000 Mb/s Ethernet fiber port. This WAN connection for Nevada County is located at Nevada Union High School, in the Nevada Joint Union High School District. It has become the network operations center for western Nevada County K-12 Schools.

A Cisco “ASA” firewall takes the output of the primary router, limits unauthorized access to “Network Resources” throughout Nevada County, and forwards appropriate traffic on to a “LightSpeed” internet filter. A Cisco 7206 router is interconnected through a 1000 Mb/s Ethernet fiber port, serving the Nevada County RAN. This 45 Mb/s connection allows the CENIC/Digital California Project, “conditioned” Internet bandwidth to be distributed across elementary and high school campuses; serving over 14,000 students and staff. This ubiquitous connection allows the k-12 districts access to a centralized HP3000/Pertain server located at the Nevada County Office of Education for county wide financial services and data reporting.

CENIC, together with its private sector partner The Central Valley Independent Network, have developed the Central Valley Next Generation Broadband Infrastructure Project to improve the

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availability of broadband networking infrastructures for 18 counties – one of which is Nevada County. This project will provide NJUHSD with resources to connect more schools using a higher bandwidth capacity link.

### **Network and Internet Access District:**

From the Nevada Joint Union High School District Network Operating Center, eleven high school programs are served through Point to Point T1 or fiber router interconnections. The district network provides for DNS, NAT, RAS, Web, Mail (IMAP/Web), FTP, Xyθος Web Storage, Archived Student Records (Pertain, Student 3000), Current Student Records (eSchool Plus), CSIS state reporting, ASA Firewall, “LightSpeed” Internet filter, “KACE” Tech. /Maint. Help Desk, “COGNOS” data structuring/reporting, teacher/student forum for online discussions (Snitz Communication Forum), Vision Classroom Management software, online library catalogs for each comprehensive site library (Follett), “LaserFiche” document storage/retrieval, InterMapper and Fluke “Optiview” network reporting/diagnostics, and multiple application services.

The district maintains the network connectivity, network services and network security. First response of all district and site technology issues is through the “Help Desk”, located in the district office annex. The Help Desk is a service provided by the Nevada Joint Union High School District to help all faculty, staff and students solve their computer related problems. The Nevada Joint Union High School District Technology staff is trained to answer questions about both hardware and software, and in many cases the response is immediate. In the event that further research and follow-up is necessary, the response to users is within 24 hours.

### **Network and Internet Access Schools:**

Most campus LAN’s have been implemented with two physically separate network segments, “Student” and “Administrative,” to provide for additional security of administrative data. All school networks provide for a minimum of 100 Mb/s of full duplex network bandwidth to individual classroom computers. Digital High School grants have allowed for the construction of uniform network access on all campuses and program locations. All classrooms have a minimum of two student network drops. A large percentage of core curriculum classes have between four and eight drops for students and instructors, with computers and laser printer in the classroom. All eleven high schools within the district have at least one computer lab available for whole class instruction on a sign-up basis. At the two comprehensive high schools, Nevada Union and Bear River, up to six labs are available, and students may also access the Media Center and the Media Center Library for individual work before, during and after school. Labs are located in individual department classrooms which include Title 1 Reading, Mathematics, Science, Social Science, Business, Agriculture, Special Education, etc. The average district student to computer ratio was calculated at 2.71:1 using 2011 CBEDS-ORA reporting data.

**Technical support** for existing computers and network devices is provided by district and site technology staff. Additional technical assistance for computers is available from Insight Systems Exchange and Dell Computer, for computers still under their three year extended onsite warrantee. Some network assistance is outsourced to SBC/PacBell for router issues and network device replacements. The Nevada Joint Union High School District also provides technical

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support for the County Office of Education and Elementary Districts. A combination of the district general fund budget, prorated annual connection/support fees, and indirect cost covers the salary of the director and staff of technology and information systems. The district technology budget covers networking and maintenance services throughout the district. School sites are responsible for the maintenance, upgrade and replacement of equipment and software. The two comprehensive sites, Nevada Union and Bear River, have technology support staff that is dedicated to their sites. The McCourtney Road Education Site, Park Avenue Alternative Education Site, and Sugarloaf Mountain share one dedicated technology support staff member.

A number of software applications have been integrated into the tool set used by the District's minimal technology staff to troubleshoot and maintain the large number of computers spread across Nevada County. As the majority of computer systems have been acquired through Digital High School and AB2882 technology grants, the uniform model configurations purchased through Gateway and Dell Computers allow for the "Imaging" and "Redeployment" of a system's hard drive through the "Kace" client and server software, for storage on local campus servers. Through the use of this tool, support technicians can locally or remotely "push" a standard system image from the application server across the campus LAN.

This standard or "Golden" image will take the place of any damaged or modified system files, and returns the computer to full operation. In many instances, this can be done without physical intervention by the technology staff. This tool results in many hours of saved travel time associated with service response to the remote High School campuses of Nevada County. In combination with the Kace software, computer images have the "Deep Freeze" boot-back security software loaded. All site computer labs are equipped with this labor saving application that stores a local "Golden" image of the operating system files deep in the computer hard drive. Every time the computer is turned on, or restarted, a clean operating system image is initiated, and all corrupted, missing, or damaged files are replaced. This single software application has provided a much greater level of computer availability for students use than having several dedicated site technicians rebuilding computer hard drives.

### **Software and online services available:**

NJUHSD has standardized on the Microsoft "Windows Server 2008" operating system for servers as we transition from Microsoft Windows Server 2003 running on physical servers to a VMware Infrastructure environment running Server 2008. At present there are no fully deployed "Apple" servers. For both the PC and Apple desktop and laptop computers, the Microsoft "Office 2000/2003" suite of productivity applications has been installed on virtually all workstations. Desktop and laptop operating systems are again based on either the Microsoft OS or Apple OS. All district tablets are the Android OS. Microsoft's Internet Explorer, with Outlook as the e-mail client, is supported as our standard; however, a wide variety of alternatives will be supported by our plan. Anti-virus software is installed on all employee and student computers. NJUHSD also provides web based e-mail for staff and digital lockers for both staff and students. "LightSpeed" URL filtering software is used to monitor the acceptable use policy for the Internet by staff and students. This allows the NJUHSD to be fully compliant with the federal "CIPA," Children's Internet Protection Act of Dec. 21, 2000. We currently use Exchange 2007 as our e-mail software which allows our teachers and staff the ability to share calendars for better time management. In addition, an e-mail spam and virus filter scans the contents of all e-mails sent and received via the NJUHSD mail server. As we install the next level of core network

equipment, network management software such as “Optivity” by Nortel and ProximVision ES by Proxim will be deployed to supplement InterMapper, our current management tool.

All current and future computer purchases (PC and Apple) are, and will be, configured with the Microsoft Office suite of software applications as the standard for both staff and students. Microsoft Windows XP Professional is the current operating systems for most of our PC’s. As industry vendors commonly dictate the obsolescence of system operational hardware and software, future computer additions will be supplied with current market standards.

Each computer lab maintains a collection of specific software to support the site curriculum requirements. Programs such as Read 180, Accelerated Reader, Star Reading, Accelerated Math, Star Math, Skills Tutor, and Follett are network applications that have been deployed individually on sites or district wide. Lab computers also have Vision classroom management software installed so teachers can stop/start computer usage to focus student attention.

*EBSCO Ultra Online*, an online periodical database which includes 500 full text magazines, 200 newspapers (selected text), Health Source Plus, and ERIC, is available at all sites and for students use at home. *InfoPlease Encyclopedias*, an online route to reliable, authoritative, easy-to-understand information and an array of supplementary search tools and information sources, is available at Bear River and for students use at home. *MSN Encarta* delivers in-depth features on "Historic Events" drawn from the 60-year Facts On File archive. It also brings together complete content from the Facts On File World News Digest since 1980 and selected content from six other core reference databases to answer questions about events, issues, statistics and people of the last 20 years. This database is a great resource for history and science students. Features include: World News 1940-Present, Issues and Controversies, Today's Science, and the World Almanac Database. This resource is also available at all schools and for students at home.

Preventative maintenance software is installed on all district systems. LightSpeed is installed and configured at the time of computer setup and network integration on all student systems. SpySweeper, an anti-spyware/anti-virus program, is installed on all administrative and support staff computers. Deep Freeze is installed on student computers which prevents the installation of spyware through a boot-back process.

**5.b. Describe the technology hardware, electronic learning resources, networking and telecommunication 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.**

**5.b.1. Hardware:**

- To support core curriculum goals on individual sites, the current and future number of newer classroom computers will need to be increased to meet specific instructional requirements. Application software to support instructional programs in the area of Math, English, Reading, Social Science, Science, and Special Education have been moving from a computer resource lab model, to that of increased classroom instruction and

technology access. It is estimated that the district will need to purchase 500 tablets over the course of the next three years to support this model.

- Our goal is to maintain a minimum student to computer ratio of at least 3:1 throughout the district, with at least one resource computer lab per school, at least one instructional and two student network drops in each classroom, and from at least two to twelve computers in each library. A large majority of the student computers on the Nevada Joint Union High School District's campuses are currently running the Windows XP operating system. Many of these computers are also more than six years old. These systems need to be replaced with computers running Windows 7. Obsolete equipment on every campus needs to be replaced over the next three years. It is estimated that the district will need to purchase 300 computers over the course of the next three years to support this goal.
- Currently the Nevada Joint Union High School District provides every teacher with a laptop which enables them to take attendance online. As of the July 2011 these laptops were 2 years old. It is the district's goal to replace these laptops with new leased laptops in 2013 to ensure teachers continue to have reliable access to the online attendance program.
- Although every teacher in the district has a laptop, not all teachers have access to a projector for classroom presentations. Although our goal is to provide every teacher with a dedicated classroom projector, teachers at each of the high school sites need to have, at minimum, at least shared access to a projector. It is estimated that the district will need to purchase an additional 25+ projectors and screens over the course of the next three years to support this goal.

#### **5.b.2. Electronic Learning Resources:**

The district subscribes to various online databases, indexes, search tools, and other information resources to provide reliable, authoritative, easy-to-understand information and enhance student learning. Many of these resources are also available for students at home.

- EBSCO Ultra Online
- United Streaming
- INFOTRAC
- World Book Encyclopedia
- Opposing Viewpoints
- School Web Lockers \
- Health Source Plus
- Facts On File World News Digest
- ERIC
- Read 180
- Accelerated Reader
- Inspiration
- DataWise
- Apex
- CAHSEE
- Microsoft Enrollment for Education Solutions

**5.b.3. Telecommunications infrastructure:**

1. The district will provide and support the necessary network infrastructure to access all electronic learning resources, to increase the quality of instruction, and to promote student achievement through network reliability and performance. New and existing network resources and bandwidth will be purchased, monitored and distributed accordingly to the specific program needs of the campuses.
2. A new phone system was recently installed at the Nevada Union site. However, a new phone system needs to be researched, installed and implemented on each of the remaining high school sites.
3. An open, safe and filtered WiFi network is needed on all sites for use by student devices. The district will need to purchase a Hotspot Gateway, additional wireless access points and power over ethernet switches support this goal.

**5.b.4. Physical Plant Modifications**

Video camera security systems were recently installed at the comprehensive high schools (Nevada Union and Bear River) and one of the continuation school sites (Park Avenue). A new system needs to be installed at the remaining site. Additional cameras need to be added to all sites to extend monitoring to the majority of the campus.

**5.b.5. Technical Support**

Each high school site within the district needs to have a campus “Technology Coach” (Teacher on Special Assignment). This is a teacher or staff member on site who is trained to assist teachers with specific needs and answer questions after the teacher has received staff development training.

**5.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.**

**5.c.1.** Nevada Joint Union High School District will replace all teacher laptops with new leased laptops and upgrade Microsoft Office to Office 2010.

**BENCHMARKS**

July ‘13	A new laptop lease agreement will be arranged by district personnel
July ‘13	New Laptops will be received and configured with software for distribution
Aug ‘13	Teachers will be issued a new laptop

**5.c.2.** Identify, inventory, and develop a replacement and retirement plan and schedule for obsolete student computers.

**BENCHMARKS**



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Sept. '12	Inventory all campus technology equipment by date purchased
June '13	Replace oldest computers on the Nevada Union High School site with leased or purchased systems.
June '14	Replace oldest computers on the Bear River High School site with leased or purchased systems.
June '15	Replace oldest computers on the Park Avenue Alternative Education site with leased or purchased systems.
June '15	Replace oldest computers on the McCourtney Road Education site with leased or purchased systems.

**5.c.3.** Purchase and deploy projectors for classroom presentation with additional staff training.

**BENCHMARKS**

Dec. '12	Needs assessment through classroom survey by Technology Team.
Sept. '13	Purchase or lease equipment for classroom presentation at Bear River site.
Sept. 13 ongoing	Bear River Site - Staff development for presentation software applications including Power Point, use of laptop DVDs, virtual field trips, etc.
Sept. '14	Purchase or lease equipment for classroom presentation at Park Ave site.
Sept. 14 ongoing	Park Ave Site - Staff development for presentation software applications including Power Point, use of laptop DVDs, virtual field trips, etc.
Sept. '14	Purchase or lease equipment for classroom presentation at McCourtney Road site.
Sept. 14 ongoing	McCourtney Road Site - Staff development for presentation software applications including Power Point, use of laptop DVDs, virtual field trips, etc.

**5.c.4.** Increase district wide wireless access for students and the community.

**BENCHMARK**

Jan '12	Purchase Nomadix AG500 Hotspot Gateway
Feb '12	Install Nomadix AG500 Hotspot Gateway
July '13	Purchase additional wireless access points and power over ethernet switches needed for the Nevada Union High School site.
Aug. '13	Install, test and configure wireless access points at the Nevada Union High School site.
July '14	Purchase wireless access points and power over ethernet switches needed for Bear River High School.
Aug '14	Install, test and configure wireless access points at the Bear River High School site.
July '15	Purchase wireless access points and power over ethernet switches needed for the Park Ave. Alternative Education and McCourtney Road Education sites.
Aug '15	Install, test and configure wireless access points at the Park Ave. Alternative Education and McCourtney Road Education sites.

**5.c.5.** Research, develop a replacement strategy, and replace existing telephone systems at all sites excluding Nevada Union High School.

**BENCHMARKS**

July '12	Meet with district "Admin Council" to review plan options and decide on structure.
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July '12	Review current telephone architecture at each site and assess needs for security and backup availability
July '12	Research telephone system currently being marketed and determine which system will best meet our needs.
Sept '12	Support district facilities director with project bid process, support Q&A for bidding contractors.
July '13	Coordinate planning and implementation of Bear River High School phone system and new layout integration.
July '13	Coordinate planning and implementation of Park Ave. Alternative Education phone system and new layout integration.
July '13	Coordinate planning and implementation of McCourtney Road Education site phone system and new layout integration.
July '13	Develop and implement a telephone backup plan for power outages
July '14	Support district facilities director in project review, acceptance, and sign off.

**Implementation**

Goal #	Implementation Activities	Responsible Position	Timeline	Budget Source*	Monitoring Plan
5.c.4	Increase district wide wireless access for students and the community.	Director, Network Coordinator	Jan '12 through Aug '15	F	Budget Item
5.c.5	Research, develop a replacement strategy, and replace existing old telephone systems at school sites.	Director, Network Coordinator	July '12 through July '14	B	Budget Item
5.c.2	Identify, inventory, and develop a replacement and retirement plan and schedule for obsolete equipment.	Network Coordinator Services Tech. II, Comp. Lab Tech.	Sept. '12 through June '15	C, F	Technology Inventory, Budget item
5.c.3	Purchase and deploy projectors for classroom presentation with additional staff training.	Tech. Coord., Network Coord., Services Tech. II, Comp. Lab Tech.	Dec. '12 through Sept '14	C, F	Teacher Survey, Technology Team Meeting notes, Budget item
5.c.1	Replace all teacher laptops with new leased laptops and upgrade Microsoft Office to Office 2010.	Director, Network Coordinator	July '13	F	Expenditure log

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

The Superintendent will review semi annual reports of the progress toward meeting stated goals and benchmarks created by the collaborative efforts of the Network Administrator, school site Administrators, The District Technology Specialist, and the District Technology Committee. This report will be in conjunction with budgetary developments and semi annual district leadership reports. The final report will be presented to the Board and the School Site Councils at regularly scheduled meetings. The information will be used to determine needed changes

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regarding the implementation of the technology plan, and to inform all stakeholders of the progress in the implementation process.

**Benefits from infrastructure.** The Nevada Joint Union High School District is committed to using technology to enhance student learning. Without appropriate equipment, infrastructure and maintenance it cannot attain the following benefits:

- Adequate network security to ensure network reliability,
- Fast, reliable workstations for the instructional benefit of students,
- Multi-media instructional presentations to enhance student instruction,
- Shared and leveraged resources through increased network performance.

**Personnel, resources and budget required to implement this goal:** Adequate district support personnel are in place to implement these goals, though there is need for Technology Coaches (Teachers on Special Assignment) and increased training at the site level. Additional outside funding to replace aging hardware and software, and purchase future classroom equipment will need to be sought by each school site.

**6. FUNDING AND BUDGET COMPONENT CRITERIA**

**6.a.1 Resources (annual)**

**6.a.1 List of established and potential funding sources.**

Code	Description	Existing	Amount	Potential New Sources	Amount
A	Administration /Management	Gen Fund	In Kind		
B	Building and Facilities	Gen Fund	In Kind		
C	Categorical funds	Title 1, EIA	\$425,808		
IMF	Instructional Materials Funds	General Funds	\$216,949	Lottery	\$43,663
F	Dist. General Fund	Gen Fund	\$1,063,635		
T	Training	PAR, Title II, Perkins III	\$182,387		
ER	E-Rate (50% of communications)	E-Rate	\$77,424		

**6.a.2 Process for identifying funding sources.**

Principals at each site stay current with categorical programs and special grants. The Director of Technology researches and applies for operational Federal and State technology assistance grants. The Assistant Superintendents attend workshops to stay current on categorical programs and are responsible for budget development and allocation of funds to implement the goals set by the Board. The district will look to CTAP to provide cost effective staff development, and comparative annual survey data collection. State piggy-back contracts, such as CAMS, and C-SMART will be used to help leverage future purchasing requirements.

**6.b. Estimate annual implementation costs for the term of the plan. 2012-2015**

Support materials, supplies, and equipment	\$92,037
Software & Online Services	624,243
Staffing	2,166,039
Communications (50% ERate)	220,029
Staff Development	12,000
Equipment Replacement	407,733
<b>TOTAL (2012-2015)</b>	<b>\$3,522,081</b>

Nevada Joint Union High School District Technology Plan

**6.b. Annual budget for the term of the plan 2012-2015 (annually by category)**

Categories	2011-2012	2012-2013	2013-2014	Total
1000 certificated salaries	0.00	0.00	0.00	0.00
2000 classified salaries	504,858.00	504,858.00	504,858.00	1,514,574.00
3000 employee benefits	217,155.00	217,155.00	217,155.00	651,465.00
4200 books	100.00	100.00	100.00	300.00
4300 materials, supplies	28,709.00	28,709.00	28,709.00	86,127.00
4400 equipment under \$5,000	1,870.00	1,870.00	1,870.00	5,610.00
5200 travel & conference	4,000.00	4,000.00	4,000.00	12,000.00
5600 rentals & leases	135,911.00	135,911.00	135,911.00	407,733.00
5800 other services	208,081.00	208,081.00	208,081.00	624,243.00
5900 communications (50% E-Rate)	73,343.00	73,343.00	73,343.00	220,029.00
6400 equipment over \$5,000	0.00	0.00	0.00	0.00
	1,174,027.00	1,174,027.00	1,174,027.00	3,522,081.00

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

There is no approved district Replacement Plan currently in effect. Under consideration of TCO (Total Cost of Ownership), development and implementation of such a plan is one of the goals of this Technology Plan. Several plan models that are under consideration include:

- Computer Social Security – A % of equipment purchase price will be held and used for life time repair and disposal.
- Flat Fee Surcharge – A pro-rated surcharge will be established for offset of life time repair and disposal.
- Budget offset – Through the use of outside grants to offset general fund expenses, the savings can be reallocated to needed repair and replacement.
- Lease Options – Equipment is leased for a specific time period then replaced with new equipment at the end of the lease agreement.

We are hopeful that a replacement plan will help to move the obsolete computers out of service each year instead of being handed down to others, a practice that actually creates an increase in needed technology support. The “hand-me-down” occurrence has always been a source of problems, with multiple reallocations of computers causing support issues for data file recovery and reinstallation. Many times additional cost is incurred in upgrading application and system software. The “Ripple Effect” of one new computer, may cause as many as four users to requiring help to move into their new “hand-me-down” computers.

**6.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.**

The Director of Technology will develop an annual Technology and Information Systems budget as part of the annual budget cycle. The Assistant Superintendent of Business Services will cite various sources of funding. The district budget is developed in March/April.

The Director of technology is responsible for monitoring all aspects of the budget. He oversees the day to day budget and plans for the expenditure of the various funds and programs. The Assistant Superintendent of Business Services oversees the preparation of 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**

March/April annually	The Director develops Technology budget and presents it for approval to the District administration.				
June annually	Superintendent presents the Technology budget to the Board.				
Ongoing	Director reviews technology budget expenses, balance, and program status.				
Goal #	Implementation Plan/Activities	Responsible Position	Timeline	Budget Source	Monitoring and Evaluation Activities
6.d.1	Prepare annual Tech budget to implement the Tech Plan goals and activities	Director	March/April annually	No additional cost	Budget document
6.d.2	Present Budget to the Board	Assistant Superintendent	June annually	No additional cost	Minutes of meetings
6.d.3	Review progress of the annual Tech budget, and program status	Director	Ongoing	No additional cost	Minutes of meetings
6.d.3	Update tech funding as new dollars are available	Assistant Superintendent	Ongoing	No additional cost	Budget documents

## **7. MONITORING AND EVALUATION**

The district developed a 3-year technology plan in 2009 which focused on the acquisition of equipment and connectivity, and on the use of technology for teaching and learning. This plan is reviewed with the Technology Committee 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. This new District Technology Plan will be implemented following board approval in June, 2012. Implementation will begin with a meeting of the Technology Committee where the new plan will be discussed and action plans will be activated. Team members will be responsible for sharing the plan with staff at their sites and for coordination of the action plans at those sites. The Assistant Superintendent for Curriculum will meet with the Task Force semi-annually to evaluate and assess the success of implementing the educational benchmarks of the Technology Plan.

The District Technology staff will meet regularly once a month to evaluate and assess the progress of implementing infrastructure benchmarks.

**7.a and b. Describe the process for evaluating the plan’s overall progress and impact on teaching and learning and Schedule for evaluating the effect of plan implementation.**

*Embedded in text of each component of this plan is a description and schedule of how each of the goals and benchmarks 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 ED TECH PROFILE Assessment;
- Annual increases in teachers’ use of technology to enhance curriculum;
- Students’ progress in mastering the California Content Standards in Math and Reading/LA;
- Students’ progress in acquiring technology proficiency and information literacy skills;
- Student access to advanced coursework, including distance/online learning opportunities;
- Annual maintenance and infrastructure upgrade activities;
- Adequacy of Tech Support training;
- Collaboration with Adult Literacy providers;
- Alignment of instructional software and strategies with current research.

During their fall meeting with the Assistant Superintendent for Curriculum, the Technology Committee will analyze the data collected as described above. Most of the data will be generated and collected during the previous spring. Based on that analysis, changes and adjustments in the Technology Plan will be made as appropriate.

**7.c. Description of how the information obtained through the monitoring and evaluation will be used.**

## Nevada Joint Union High School District Technology Plan

The IT Director and the Assistant Superintendent will prepare semi-annual reports of the progress toward meeting stated goals and benchmarks. These reports will be in conjunction with the budget development in February-June and the semi annual student achievement report in October. The report will be presented to the Tech Task Force, the Board and the School Site Councils at regularly scheduled meetings. Recommended changes to the NJUHSD Technology Plan will be reviewed and adopted by the board where appropriate, with public input per district adoption process.

October annually	The Assistant Superintendent and the IT Director present data and summary of progress toward meeting goals at Board meeting.
September annually	The Assistant Superintendent and the IT Director gather data and present a status report to the Tech Task Force. Principals pass the information to their staffs and School Site Council.
Ongoing	Modifications of the plan and activities are made based on the data gathered, funding available and changing priorities.



## **8. ADULT LITERACY**

**Adult Literacy Needs:** According to 2010 CST data, 2% of the parents of students served by Nevada Joint Union High School District have not completed high school, 15% have no more than a high school education, and 83% have some type of post-secondary education.

The Nevada Joint Union High School District provides adult education by providing a high school diploma program and GED preparation through the Nevada Union Adult Education program. 49'er 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, resources on the Internet, and Cisco certification.

The Nevada County Library system, the Nevada Union Adult Education program and the Grass Valley Elementary School District provide additional adult literacy services including basic reading instruction and ESL instruction. Sierra Community College offers courses such as “Foundations for Reading and Successful Learning”, “Reading Improvement”, “Reading Fundamentals-Text Structure”, “Survival English Skills”, and “Basic Skill Development” for adults who are still learning to read or in the beginning stages of reading to learn.

**9. EFFECTIVE, RESEARCHED-BASED METHODS, STRATEGIES, AND CRITERIA**

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

Nevada Joint Union High School district reviews staff and student data and demographics when looking at the strategies and methodologies that are research proven to be the most relevant and effective in meeting the needs of district staff and students.

Nevada Joint Union High School District students have returned mixed performance results in the core subject areas as revealed in the 2009 through 2011 California CST data. In the English Language Arts, the ninth grade students have shown a 2.3% decline in their proficiency level scores from 2009 to 2011 while the tenth and eleventh grade students nearly maintained their score levels with 0.6% and 1.0% declines.

In Mathematics, the ninth grade students showed a 6.0% increase in their General Mathematics proficiency level scores from 2009 to 2011. The tenth grade students Geometry scores declined 0.9%, while the eleventh grade students Algebra II scores rose 0.8% during the same time span.

To increase the annual gain in reading, the district decided to provide READ 180 for all students in grades 9-10 who read two or more grades below their own, including special education students. In addition, all staff will continue to be trained to provide literacy strategies across the curriculum for students in every class who must learn to tackle difficult text in order to learn. READ 180 is on the K-8 state adopted list for reading intervention. Our district has purchased the high school version which is research based and proven to be effective with high school students.

Math teachers have a variety of software based remediation tools at their disposal in the district depending upon the site at which they teach. These include Accelerated Math, Khan Academy, CAHSEE Prep, and Skills Tutor. All are advertised to be research based and effective.

To reach the goals, each school has trained appropriate staff users and continues to use and maintain the Read180 program.

Curricular Area	Research Consulted	Annotation
Reading	What Works Clearinghouse, October 2009, Intervention: READ 180.  -----	The WWC reviewed seven studies that met WWC evidence standards with reservations. The seven studies included 10,638 students, ranging from grade 4 to grade 9, who attended elementary, middle, and high schools in Arizona, California, Florida, New York, Ohio, Texas, and Virginia. Based on the seven studies, the WWC found potentially positive effects in comprehension and general literacy achievement for adolescent learners. Students using READ 180 improved their reading comprehension an average of 4 percentile points and general literacy an average of 12 percentile points.  -----

Nevada Joint Union High School District Technology Plan

	<p>Empirical Education Inc. March 2005, Closing the Achievement Gap, High School Effectiveness</p> <p>-----</p> <p>Reading Research Quarterly, September 2008, Effective Reading Programs for Middle and High Schools: A Best-Evidence Synthesis</p>	<p>During the 2004–05 academic year, Anaheim utilized READ 180 as an intervention for below grade-level readers who were not English Language Learners. Empirical Education Inc. evaluated the impact of READ 180 on student reading progress over six months. After six months of READ 180 intervention, students progressed over 2.5 months ahead of the predicted reading growth level and the percentage of Basic and Above readers as measured by the California Standards Test (CST) increased from 45 to 67 percent.</p> <p>-----</p> <p>This article systematically reviews research on the achievement outcomes of four types of approaches to improving the reading of middle and high school students: (1) reading curricula, (2) mixed-method models (methods that combine large and small-group instruction with computer activities), (3) computer-assisted instruction, and (4) instructional-process programs (methods that focus on providing teachers with extensive professional development to implement specific instructional methods). READ 180, a mixed-method approach that uses computers in a broader comprehensive model, demonstrated good evidence of effectiveness.</p>
<p>Mathematics</p>	<p>Maine Education Policy Institute, 2005, Improving Mathematics Performance Using Laptop Technology: The Importance of Professional Development for Success</p> <p>-----</p> <p>Cisco, Cheryl Lemke, Ed Coughlin, Daren Reifsneider, 2009, Technology in Schools: What the Research Says: A 2009 Update</p>	<p>A study of the impact of teacher professional development on student learning in specific areas of mathematics with recommendations for future research and student remediation. Experimental group teachers changed their instructional strategies, and increasingly were integrating the use of laptops into their curriculum and instruction. Support and reinforcement of extensive practice of content specific with technology integrated teaching strategies enables positive change in student performance</p> <p>-----</p> <p>This 2009 update to a 2006 study reviews research on the impact of recent developments in technology on students’ development of basic academic skills, higher level thinking, information and communication skills, collaboration and engagement in learning. The technologies reviewed include engagement devices like interactive white boards and clickers, gaming and modeling technologies, handheld technologies and a variety of instructional technologies to deliver academic content. Student response systems (clickers) have a generally positive effect on learning and student engagement. Mobile devices can considerably enhance student learning by encouraging anywhere, anytime learning, reaching underserved children, improving social interactions such as collaboration and language learning, and enable an individualized learning</p>

Nevada Joint Union High School District Technology Plan

	experience.
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Internal technology reviews, as well as continual curriculum reviews, were conducted in preparation for writing the Nevada Joint Union High School District’s Technology Plan. The results of those reviews led to the goals, benchmarks and timelines of the plan. Implementation of the Tech Plan will rely heavily on California Technology Assistance Project. The research, models and strategies, noted below guided our first technology plan and continue to be the most accessible and reliable research-based and proven information for hardware specifications, standards aligned software, implementation models and instructional strategies. They will continue to guide our use of technology in support of teaching and learning.

<b>Component Reinforcement</b>	<b>Research Source</b>	<b>Research Summary</b>
Core content, including English, Math and Science.	Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies 2009, Barbara Means, Yukie Toyama, Robert Murphy, Marianne Bakia, Karla Jones.	This meta-analysis of published research comparing online and face-to-face learning found improved student performance in online learning conditions compared to face-to-face instruction. Students receiving instruction that blended elements of online and face-to-face instruction performed better than either method alone
Information Literacy Skills, History/Social Studies & Math.	Pockets of Potential: Using Mobile Technologies to Promote Children’s Learning, 2009, Carly Schuler	This report inventories more than 25 handheld learning projects in the U.S. and suggests how mobile devices may help redefine teaching and learning in the future. The author concludes that mobile technologies have enormous untapped educational potential. Mobile devices are becoming ubiquitous, and provide more flexible learning environments than school computer labs.
Science, Language arts, Social science, Math	Palm Education Pioneers Program: Final Evaluation, 2002, Phil Vahey and Valerie Crawford of SRI International	This report documents the results of the Palm Education Pioneers Program, a pilot program to determine teacher perceptions of using handheld computers as an educational tool. More than 80% of teachers reported that handhelds are an effective instructional tool, and have the potential for positive effects on student learning, on teaching practices and on the quality of learning activities. The major benefits cited were increasing students’ proficiency with technology, motivating students and increasing

Nevada Joint Union High School District Technology Plan

		collaboration and cooperation.
Staff Development Core content including English, Math and Science.	National Broadband Plan: National Purposes Update, 2010, FCC Broadband Taskforce	Broadband infrastructure in support of online learning offers great promise in expanding instruction beyond the physical classroom and beyond the traditional school day. Online learning blended with in-person instruction can reduce the time required to learn a subject and increase course completion rates. Some online programs have improved student achievement on standardized tests and helped reduce dropout rates.
Staff Development: Adult Learning Models	Schacter, <i>The impact of education technology on student achievement: What the most current research has to say.</i> 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.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.**

CTAP has been and will continue to be the Nevada Joint Union High School District’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 a high school district, we will have to coordinate with the University of California to ensure students’ advanced coursework is approved for college prep high school credit or college credit.

**Goal:** Increase ability to offer specialized or rigorous academic courses through the use of technology, including distance learning, with an emphasis on Advanced Placement and Honors level courses.

**9.b.1 Objective 1:** By June 2015, students in grades 9 through 12 will be engaged in a variety of projects and course work through the Internet and other distance learning technologies.

**BENCHMARKS:**

Aug, ‘12	Online coaches make presentations to students, staff and parents regarding the availability and advantages of online courses at Nevada Union and Bear River High Schools
Aug. ‘12	Students will have the opportunity to participate in a wide variety of online courses recognized by the University of California. Online coaches enroll students in online

Nevada Joint Union High School District Technology Plan

	classes and in support groups to ensure their success
Sept. '12	Interested teachers and administrators meet to discuss how to increase enrollment in existing online courses and explore the possibility of creating other online opportunities for students.
Jan. '13	Course descriptions for new online course offerings approved by appropriate curriculum committees and submitted to the UC for approval
Feb, '13 and Ongoing	Online coaches make presentations to students, staff and parents regarding the availability and advantages of online courses at Nevada Union, Bear River and Sierra Foothill High Schools.
Aug., '13 and Ongoing	Students will have the opportunity to participate in an expanded offering of online courses recognized by the University of California.

**Activities and timeline for development and utilization of innovative strategies for using technology to deliver rigorous academic courses and curricula, including distance learning technology**

<b>9.b.1 Implementation Plan/Activities</b>	<b>Responsible Position</b>	<b>Timeline</b>	<b>Budget Source*</b>	<b>Monitoring And Evaluation Activities</b>
Staff development in multi-media technology	Site trainers	Ongoing	F,G,T	ED TECH PROFILE records, attendance records of on site training
Staff research Internet resources (simulations, LightSpeed logs, lessons, courses, etc.)	Site Trainers	Ongoing	F,G,T	Lesson plans
Students in grade 9 complete multi-media projects and/or simulations	Teachers	January – June 2013	F	Completed assignments
Students in grade 12 demonstrate acquisition of delineated technology skills	Teachers	January – June 2013	F	Completed Projects/Portfolios
Need and availability of additional distance learning courses is assessed	Admin., Online coaches, teachers	Sept. '13	F, G	Survey results, meeting agendas
Training for Online coaches for new offerings provided	UC Rep	May, '14	G	Training sign in logs
Distance learning offered (Advanced Placement and Honors courses, others as available)	Online coaches	2012-2015	G	Completed courses
**Timeline is repeated for following years 2014 and 2015				

## **NEVADA JOINT UNION HIGH SCHOOL DISTRICT EXECUTIVE SUMMARY**

### Technology Plan

This Technology Plan was developed through the District's Technology Committee. With annual revisions, it is designed to guide the District's acquisition and use of technology-related learning resources through 2015.

### **DISTRICT VISION FOR TECHNOLOGY USE:**

- Every student has access to computer with online connectivity at school and most will have access to online resources at home;
- Students use technology tools to master California Content Standards in the core curriculum;
- Student will have computer skills that are commensurate with the expectations of their future employers.
- School-based computers, network and applications function reliably;
- 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.
- Students in grades 9-12 will utilize technology resources to expand their learning and assessment opportunities.

### **Benchmarks:**

By June, 2015

- 100% of teachers will integrate technology into the curriculum as integral components of lessons to improve student literacy and assist students in grades 9-12 in achieving grade level CA Content Standards and CAHSEE Content Standards in language and mathematics when appropriate.
- Students in grades 9-12 will utilize technology resources to expand their learning and assessment opportunities.
- A computer competency curriculum will be integrated into the core academic curriculum for grades 9-12.
- A curriculum of information literacy skills will be integrated into the core curriculum in grades 9-12.

### **Goals for professional development:**

- Teachers will be at "intermediate" or "proficient" levels of proficiency in all seven ED TECH PROFILE skill areas.
- Teachers will increase use of technological learning resources to organize, teach and assess student learning in California Content Standards;

## Nevada Joint Union High School District Technology Plan

- School staff will use technology based services to track each child's school-based data and his/her progress through mastery of California Content Standards.

### **Benchmarks:** By June 2015,

- All teachers will create a portfolio of five lessons using computer applications in teaching their content area, adding at least one technological learning resource to their teaching repertoire annually thereafter.
- 100% of teachers will be trained in the use of the existing student information system, consistent with the California Longitudinal Pupil Achievement Data System.
- All teachers will use technology to manage student achievement information and communicate with staff and parents.

### **Goals for Infrastructure, Hardware, Technical Support and Software:**

- Immediate replacement for all computers over six years old,
- Provide every classroom with a dedicated classroom LCD projector,
- Increase internet availability for students and community by providing protected wireless hotspot access on all campuses,
- Increase computer and network reliability at all school sites.

### **Benchmarks:** By June 2015, the Nevada Joint Union High School District will:

- Provide training and resources for staff to handle minor workstation, network, and application problems.
- Provide a process for selection, maintaining and upgrading software;
- Identify sufficient funding to support computer replacement and needed upgrades of infrastructure, hardware and needed applications.

### **Goals for funding/budget of technology learning resources:**

- Develop and implement a replacement plan for older computers,
- Develop an annual technology budget,
- Monitor the annual technology budget.

### **Benchmark:** By June 2015, 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,
- Replacement of all computers over six years old,

### **Goal for monitoring and evaluation:**

- Ensure that progress in each component is consistent with the Technology Plan.

### **Benchmark:** Annually beginning in May, 2013, a report will be presented to the Technology Committee and the Board

- In March and September, data will be reviewed and progress toward meeting goals will be reported to the Technology Committee and the Board.

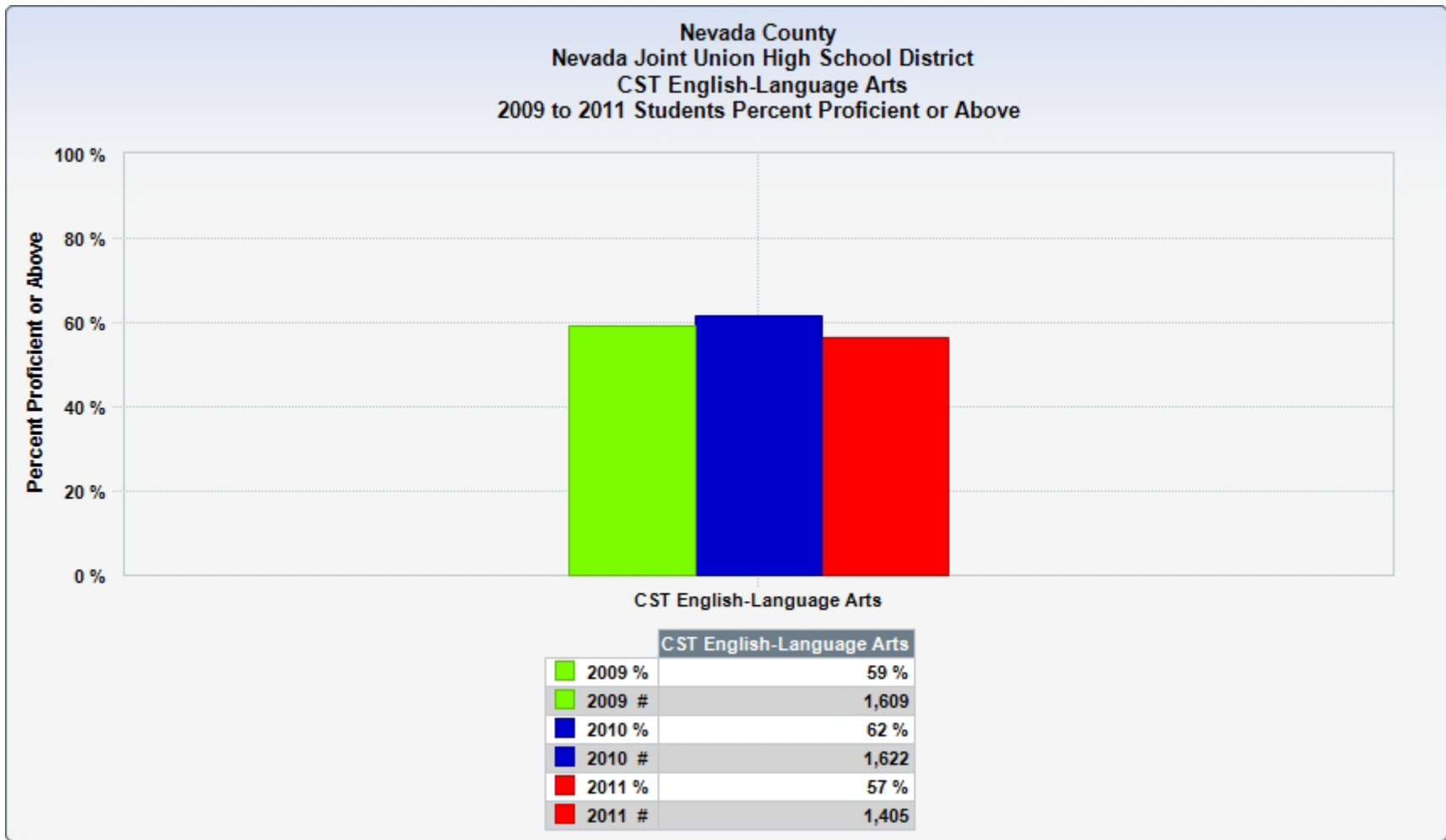


## Nevada Joint Union High School District Technology Plan

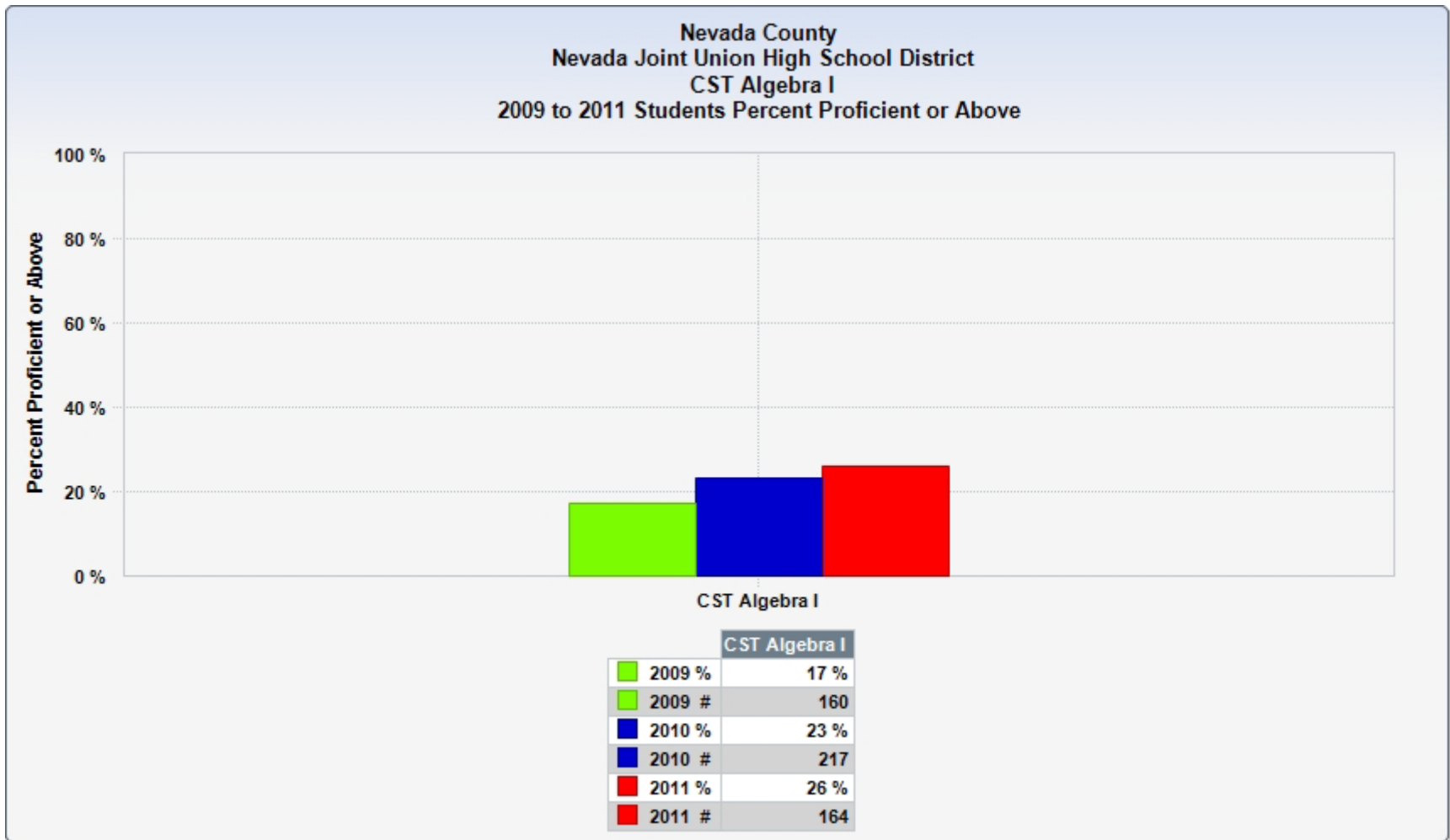
- Technology Plan will be monitored and revised in May annually, as budgets are developed, with Board approvals as necessary.

# Nevada Joint Union High School District Technology Plan

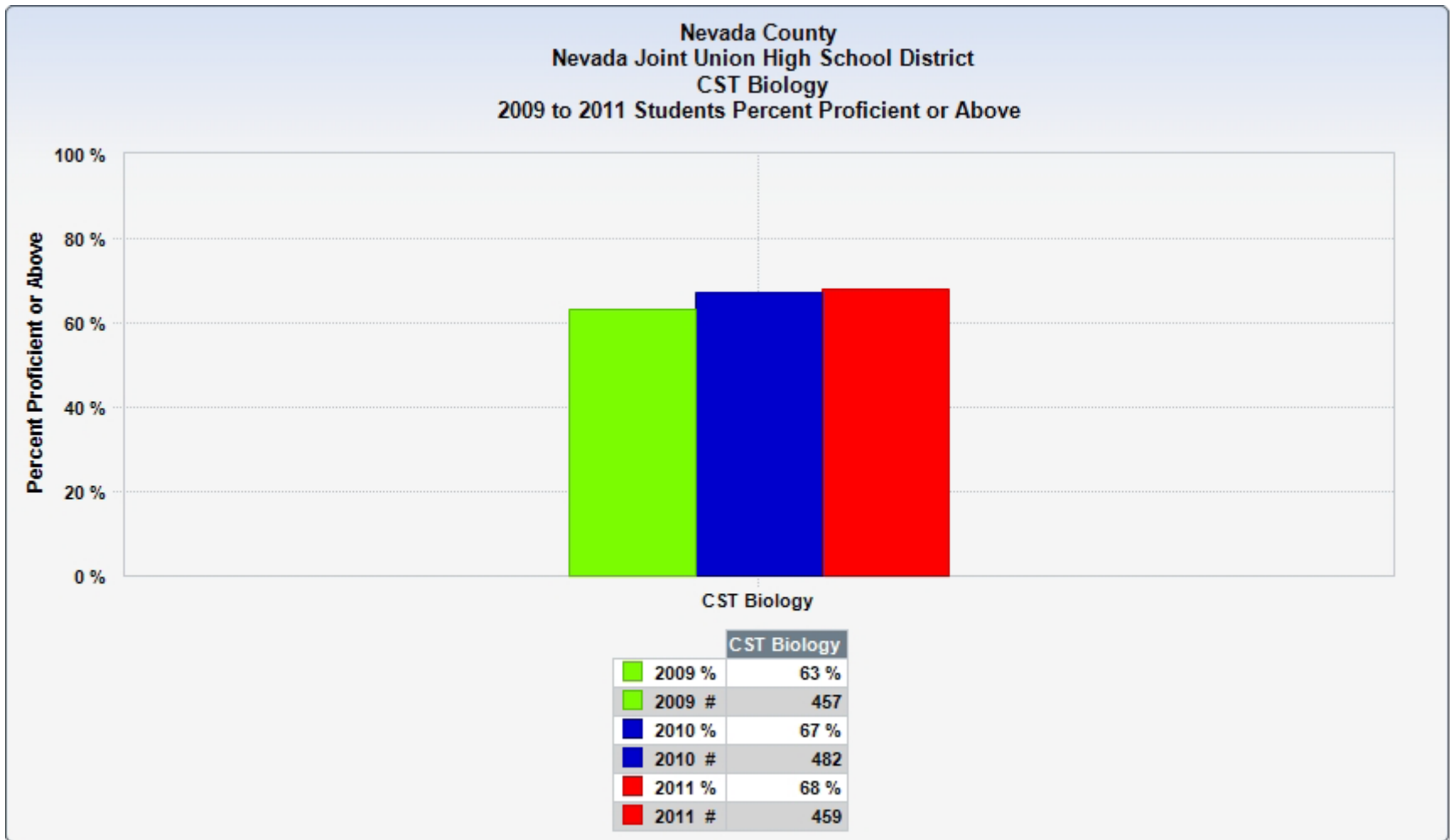
## Appendix A – CST Proficiencies



## Nevada Joint Union High School District Technology Plan



# Nevada Joint Union High School District Technology Plan



## Nevada Joint Union High School District Technology Plan

### Appendix C – Criteria for EETT Technology Plans

(Completed Appendix C is REQUIRED in a technology plan)

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

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

1. PLAN DURATION CRITERION	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
<b>The plan should guide the district’s use of education technology for the next three to five years. (For a new plan, can include technology plan development in the first year)</b>	<b>Page 5</b>	The technology plan describes the districts use of education technology for the next three to five years. (For new plan, description of technology plan development in the first year is acceptable). Specific start and end dates are recorded (7/1/xx to 6/30/xx).	The plan is less than three years or more than five years in length.  Plan duration is 2008-11.
<b>2. STAKEHOLDERS CRITERION</b> Corresponding EETT Requirement(s): 7 and 11 (Appendix D).	Page in District Plan	Example of Adequately Addressed	Not Adequately Addressed
<b>Description of how a variety of stakeholders from within the school district and the community-at-large participated in the planning process.</b>	<b>Pages 5 - 9</b>	The planning team consisted of representatives who will implement the plan. If a variety of stakeholders did not assist with the development of the plan, a description of why they were not involved is included.	Little evidence is included that shows that the district actively sought participation from a variety of stakeholders.
<b>3. CURRICULUM COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 1, 2, 3, 8, 10, and 12 (Appendix D).	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
<b>a. Description of teachers’ and students’ current access to technology tools both during the school day and outside of school hours.</b>	<b>Pages 10 &amp; 11</b>	The plan describes the technology access available in the classrooms, library/media centers, or labs for all students and teachers.	The plan explains technology access in terms of a student-to-computer ratio, but does not explain where access is available, who has access, and when various students and teachers can use the technology.

## Nevada Joint Union High School District Technology Plan

<p><b>b. Description of the district’s current use of hardware and software to support teaching and learning.</b></p>	<p><b>Pages 11 - 13</b></p>	<p>The plan describes the typical frequency and type of use (technology skills/information and literacy integrated into the curriculum).</p>	<p>The plan cites district policy regarding use of technology, but provides no information about its actual use.</p>
<p><b>c. Summary of the district’s curricular goals that are supported by this tech plan.</b></p>	<p><b>Page 13 &amp; 14</b></p>	<p>The plan summarizes the district’s curricular goals that are supported by the plan and referenced in district document(s).</p>	<p>The plan does not summarize district curricular goals.</p>
<p><b>d. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to improve teaching and learning by supporting the district curricular goals.</b></p>	<p><b>Pages 14 - 16</b></p>	<p>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.</p>	<p>The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.</p>
<p><b>e. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire the technology skills and information literacy skills needed to succeed in the classroom and the workplace.</b></p>	<p><b>Pages 16 – 19</b></p>	<p>The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire technology skills and information literacy skills.</p>	<p>The plan suggests how students will acquire technology skills, but is not specific enough to determine what action needs to be taken to accomplish the goals.</p>
<p><b>f. List of goals and an implementation plan that describe how the district will address the appropriate and ethical use of information technology in the classroom so that students and teachers can distinguish lawful from unlawful uses of copyrighted works, including the following topics: the concept and purpose of both copyright and fair use; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; and avoiding plagiarism</b></p>	<p><b>Pages 19 &amp; 21</b></p>	<p>The plan describes or delineates clear goals outlining how students and teachers will learn about the concept, purpose, and significance of the ethical use of information technology including copyright, fair use, plagiarism and the implications of illegal file sharing and/or downloading.</p>	<p>The plan suggests that students and teachers will be educated in the ethical use of the Internet, but is not specific enough to determine what actions will be taken to accomplish the goals.</p>
<p><b>g. List of goals and an implementation plan that describe how the district will address Internet safety, including how students and teachers will be trained to protect online privacy and avoid online predators.</b></p>	<p><b>Pages 21 &amp; 22</b></p>	<p>The plan describes or delineates clear goals outlining how students and teachers will be educated about Internet safety.</p>	<p>The plan suggests Internet safety education but is not specific enough to determine what actions will be taken to accomplish the goals of educating students and teachers about internet safety.</p>

## Nevada Joint Union High School District Technology Plan

<p><b>h. Description of or goals about the district policy or practices that ensure equitable technology access for all students.</b></p>	<p><b>Pages 22 – 24</b></p>	<p>The plan describes the policy or delineates clear goals and measurable objectives about the policy or practices that ensure equitable technology access for all students. The policy or practices clearly support accomplishing the plan’s goals.</p>	<p>The plan does not describe policies or goals that result in equitable technology access for all students. Suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.</p>
<p><b>i. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to make student record keeping and assessment more efficient and supportive of teachers’ efforts to meet individual student academic needs.</b></p>	<p><b>Pages 24 &amp; 25</b></p>	<p>The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to support the district’s student record-keeping and assessment efforts.</p>	<p>The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.</p>
<p><b>j. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to improve two-way communication between home and school.</b></p>	<p><b>Pages 25 &amp; 26</b></p>	<p>The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to improve two-way communication between home and school.</p>	<p>The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.</p>
<p><b>k. Describe the process that will be used to monitor the Curricular Component (Section 3d-3j) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.</b></p>	<p><b>Page 26</b></p>	<p>The monitoring process, roles, and responsibilities are described in sufficient detail.</p>	<p>The monitoring process either is absent, or lacks detail regarding procedures, roles, and responsibilities.</p>
<p><b>4. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 5 and 12 (Appendix D).</p>	<p><b>Page in District Plan</b></p>	<p><b>Example of Adequately Addressed</b></p>	<p><b>Example of Not Adequately Addressed</b></p>
<p><b>a. Summary of the teachers’ and administrators’ current technology proficiency and integration skills and needs for professional development.</b></p>	<p><b>Pages 27 - 29</b></p>	<p>The plan provides a clear summary of the teachers’ and administrators’ current technology proficiency and integration skills and needs for professional development. The findings are summarized in the plan by discrete skills that include Commission on Teacher</p>	<p>Description of current level of staff expertise is too general or relates only to a limited segment of the district’s teachers and administrators</p>

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		Credentialing (CTC) Standard 9 and 16 proficiencies.	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>b. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing professional development opportunities based on your district needs assessment data (4a) and the Curriculum Component objectives (Sections 3d - 3j) of the plan.</b>	<b>Pages 29 - 33</b>	The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing teachers and administrators with sustained, ongoing professional development necessary to reach the Curriculum Component objectives (sections 3d - 3j) of the plan.	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.
<b>c. Describe the process that will be used to monitor the Professional Development (Section 4b) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.</b>	<b>Pages 33 &amp; 34</b>	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.
<b>5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 6 and 12 (Appendix D).	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Example of Not Adequately Addressed</b>
<b>a. Describe the existing hardware, Internet access, electronic learning resources, and technical support already in the district that will be used to support the Curriculum and Professional Development Components (Sections 3 &amp; 4) of the plan.</b>	<b>Pages 35 - 38</b>	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.



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<p><b>b. Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed by the district's teachers, students, and administrators to support the activities in the Curriculum and Professional Development components of the plan.</b></p>	<p><b>Pages 38 - 40</b></p>	<p>The plan provides a clear summary and list of the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support the district will need to support the implementation of the district's Curriculum and Professional Development components.</p>	<p>The plan includes a description or list of hardware, infrastructure, and other technology necessary to implement the plan, but there doesn't seem to be any real relationship between the activities in the Curriculum and Professional Development Components and the listed equipment. Future technical support needs have not been addressed or do not relate to the needs of the Curriculum and Professional Development Components.</p>
<p><b>c. List of clear annual benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components identified in Section 5b.</b></p>	<p><b>Pages 40 - 42</b></p>	<p>The annual benchmarks and timeline are specific and realistic. Teachers and administrators implementing the plan can easily discern what needs to be acquired or repurposed, by whom, and when.</p>	<p>The annual benchmarks and timeline are either absent or so vague that it would be difficult to determine what needs to be acquired or repurposed, by whom, and when.</p>
<p><b>d. Describe the process that will be used to monitor Section 5b &amp; the annual benchmarks and timeline of activities including roles and responsibilities.</b></p>	<p><b>Pages 42 &amp; 43</b></p>	<p>The monitoring process, roles, and responsibilities are described in sufficient detail.</p>	<p>The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.</p>
<p><b>6. FUNDING AND BUDGET COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 7 &amp; 13, (Appendix D)</p>	<p><b>Page in District Plan</b></p>	<p><b>Example of Adequately Addressed</b></p>	<p><b>Example of Not Adequately Addressed</b></p>
<p><b>a. List established and potential funding sources.</b></p>	<p><b>Page 44</b></p>	<p>The plan clearly describes resources that are available or could be obtained to implement the plan.</p>	<p>Resources to implement the plan are not clearly identified or are so general as to be useless.</p>
<p><b>b. Estimate annual implementation costs for the term of the plan.</b></p>	<p><b>Pages 44 &amp; 45</b></p>	<p>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.</p>	<p>Cost estimates are unrealistic, lacking, or are not sufficiently detailed to determine if the total cost of ownership is addressed.</p>

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<p><b>c. Describe the district’s replacement policy for obsolete equipment.</b></p>	<p><b>Page 45</b></p>	<p>Plan recognizes that equipment will need to be replaced and outlines a realistic replacement plan that will support the Curriculum and Professional Development Components.</p>	<p>Replacement policy is either missing or vague. It is not clear that the replacement policy could be implemented.</p>
<p><b>d. Describe the process that will be used to monitor Ed Tech funding, implementation costs and new funding opportunities and to adjust budgets as necessary.</b></p>	<p><b>Page 46</b></p>	<p>The monitoring process, roles, and responsibilities are described in sufficient detail.</p>	<p>The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.</p>

<p><b>7. MONITORING AND EVALUATION COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 11 (Appendix D).</p>	<p><b>Page in District Plan</b></p>	<p><b>Example of Adequately Addressed</b></p>	<p><b>Example of Not Adequately Addressed</b></p>
<p><b>a. Describe the process for evaluating the plan’s overall progress and impact on teaching and learning.</b></p>	<p><b>Page 47</b></p>	<p>The plan describes the process for evaluation using the goals and benchmarks of each component as the indicators of success.</p>	<p>No provision for an evaluation is included in the plan. How success is determined is not defined. The evaluation is defined, but the process to conduct the evaluation is missing.</p>
<p><b>b. Schedule for evaluating the effect of plan implementation.</b></p>	<p><b>Page 47</b></p>	<p>Evaluation timeline is specific and realistic.</p>	<p>The evaluation timeline is not included or indicates an expectation of unrealistic results that does not support the continued implementation of the plan.</p>
<p><b>c. Describe the process and frequency of communicating evaluation results to tech plan stakeholders.</b></p>	<p><b>Pages 47 &amp; 48</b></p>	<p>The plan describes the process and frequency of communicating evaluation results to tech plan stakeholders.</p>	<p>The plan does not provide a process for using the monitoring and evaluation results to improve the plan and/or disseminate the findings.</p>
<p><b>8. EFFECTIVE COLLABORATIVE STRATEGIES WITH ADULT LITERACY PROVIDERS TO MAXIMIZE THE USE OF TECHNOLOGY CRITERION</b> Corresponding EETT Requirement(s): 11 (Appendix D).</p>	<p><b>Page in District Plan</b></p>	<p><b>Example of Adequately Addressed</b></p>	<p><b>Example of Not Adequately Addressed</b></p>
<p><b>If the district has identified adult literacy providers, describe how the program will be developed in collaboration with them. (If no adult literacy providers are indicated, describe the process used to identify adult literacy providers or potential future outreach efforts.)</b></p>	<p><b>Page 49</b></p>	<p>The plan explains how the program will be developed in collaboration with adult literacy providers. Planning included or will include consideration of collaborative strategies and other funding resources to maximize the use of technology. If no adult literacy providers are indicated, the plan describes the process used to identify adult literacy providers or potential future outreach efforts.</p>	<p>There is no evidence that the plan has been, or will be developed in collaboration with adult literacy service providers, to maximize the use of technology.</p>

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<b>9. EFFECTIVE, RESEARCHED-BASED METHODS, STRATEGIES, AND CRITERIA</b> Corresponding EETT Requirement(s): 4 and 9 (Appendix D).	<b>Page in District Plan</b>	<b>Example of Adequately Addressed</b>	<b>Not Adequately Addressed</b>
<b>a. Summarize the relevant research and describe how it supports the plan’s curricular and professional development goals.</b>	<b>Pages 50 - 53</b>	The plan describes the relevant research behind the plan’s design for strategies and/or methods selected.	The description of the research behind the plan’s design for strategies and/or methods selected is unclear or missing.
<b>b. Describe the district’s plans to use technology to extend or supplement the district’s curriculum with rigorous academic courses and curricula, including distance-learning technologies.</b>	<b>Pages 53 &amp; 54</b>	The plan describes the process the district will use to extend or supplement the district’s curriculum with rigorous academic courses and curricula, including distance-learning opportunities (particularly in areas that would not otherwise have access to such courses or curricula due to geographical distances or insufficient resources).	There is no plan to use technology to extend or supplement the district’s curriculum offerings.

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### Addendum A

#### Technology Skills Continuum

Technology Skills	K	1	2	3	4	5	6	7	8	9	10	11	12
1. Students use basic technology vocabulary (e.g.: monitor, keyboard, disk drive, printer, etc.	x	x	x	x	x	x	x	x	x	X	X	X	X
2. Students perform basic computer operations (e.g. use of mouse, inserting and removing diskettes, etc.)	x	x	x	x	x	x	x	x	x	X	X	X	X
3. Students develop higher level thinking skills.	x	x	x	x	x	x	x	x	x	X	X	X	X
4. Students use technology devices to accomplish required tasks.	x	x	x	x	x	x	x	x	x	X	X	X	X
5. Students use initiative to resolve difficulties with technological devices.	x	x	x	x	x	x	x	x	x	X	X	X	X
6. Students use paint and draw computer tools.	x	x	x	x	x	x	x	x	x	X	X	X	X
7. Students first learn to type their own names.	x												
8. Students first learn the placement and function of spacebar, return, and arrow keys.	x												
9. Students first learn how to use the mouse to click, double click, and click and drag.	x												
10. Students first learn the placement and function of the delete key.		x											
11. Students first learn how to use the punctuation and shift keys.		x											
12. Students first learn how to use the tab key.			x										
13. Students first learn the “home row”, “bump” keys, space bar, and correct fingering position.				x									
14. Students begin to use a keyboarding program on a regular basis.				x									
15. Students first learn to use correct fingering position when using appropriate keyboarding software.				x									
16. Students use a keyboarding program on a regular basis to learn and maintain the correct fingering of all the alphabet keys.				x	x	x	x	x	x	X	X	X	X
17. Students are encouraged to use appropriate keyboarding skills and proper fingering with both hands while using word processing programs.				x	x	x	x	x	x	X	X	X	X
18. Students strive to improve speed and accuracy when keyboarding.					x	x	x	x	x	X	X	X	X
19. Students use a keyboard cover while using keyboarding tutorial					x	x	x	x	x				

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software.														
20. Students use both shift keys appropriately.							x	x	x	X	X	X	X	
21. Use multimedia software							x	x	x	X	X	X	X	
22. Use desktop publishing techniques									x	X	X	X	X	
23. Use spreadsheet programs							x	x	x	X	X	X	X	
24. Use database programs										X	X	X	X	
25. Use telecommunications/networking programs					x	x	x	x	x	X	X	X	X	
26. Demonstrate basic computer management skills									x	X	X	X	X	
27. Demonstrate appropriate legal/ethical conduct					X	X	X	X	X	X	X	X	X	
28. Demonstrate basic information management skills						X	X	X	X	X	X	X	X	
29. Use library catalog									x	X	X	X	X	
<b>Math</b>	K	1	2	3	4	5	6	7	8	9	10	11	12	
1. Students make hypotheses about geometric relationships by using software to generate and analyze geometric shapes	x	x	x	x										
2. Students practice number fact recall by using self-paced drill and practice software			x	x	x	x	x	x	x	X				
3. Students use the Internet to facilitate problem solving (Lightspan)			x	x	x	x	x	x	x	X	X	X	X	
4. Students use spreadsheet and database to collect data then graph and interpret it.						x	x	x	x	X	X	X	X	
5. Students use interactive tutorial software to extend classroom teaching.						x	x	x	x	X	X	X	X	
6. Students use word processing software to write story problems.						x	x	x	x	X	X	X	X	
7. Students solve algebraic formulas by working with computer generated graphs.									x	X	X	X	X	
<b>Language Arts</b>	K	1	2	3	4	5	6	7	8	9	10	11	12	
1. Students improve reading skills by interacting with computer-based text, which the computer can define and read aloud.	x	x	x	x										
2. Students improve writing skills by using work processing software to compose, edit, and publish writing.	x	x	x	x	x	x	x	x	x	X	X	X	X	
3. Students publish personal projects, compositions, class books.	x	x	x	x	x	x	x	x	x	X	X	X	X	
4. Students improve language arts skills (reading, writing, grammar, spelling) by interacting with computer software.		x	x	x	x	x	x	x	x	X	X	X	X	
5. Students use interactive software to write stories.		x	x	x	x	x	x	x	x	X	X	X	X	

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6. Students create research projects by using electronic information sources.				x	x	x	x	x	x	X	X	X	X
7. Students use the Internet to develop writing, research, and communication.					x	x	x	x	x	X	X	X	X
8. Use desktop publishing techniques								x	x	X	X	X	X
9. Use a word processor in real world contexts									x	X	X	X	X
<b>Science</b>	K	1	2	3	4	5	6	7	8	9	10	11	12
1. Students study, organize, or analyze data using computer software, video, CD-ROM, or the Internet.	x	x	x	x	x	x	x	x	x	X	X	X	X
2. Students access data, collect scientific information, or engage in cooperative research using the Internet.				x	x	x	x	x	x	X	X	X	X
3. Students use computer-based simulations to learn about real-world systems.					x	x	x	x	x	X	X	X	X
4. Use spreadsheet programs						x	x	x	x	X	X	X	X
<b>Social Studies</b>	K	1	2	3	4	5	6	7	8	9	10	11	12
1. Students communicate with students around the country and world by using e-mail.			x	x	x	x	x	x	x	X	X	X	X
2. Students research current and historical events by accessing electronic information sources.				x	x	x	x	x	x	X	X	X	X
3. Students research current and historical events by accessing video, CD-ROM, or the Internet					x	x	x	x	x	X	X	X	X
4. Students communicate with experts, teachers, and students throughout the world using e-mail.					x	x	x	x	x	X	X	X	X
5. Students analyze relationships between geographic, political, and economic facts using electronic information sources (e.g.: spreadsheets, graphing software, Internet).									x	x	X	X	X
<b>Foreign Language</b>	K	1	2	3	4	5	6	7	8	9	10	11	12
1. Students study culture of specific countries using CD-ROM or Internet resources.									x	x	X	X	X
2. Students use the Internet to communicate with students in foreign countries.									x	x	X	X	X
3. Students use interactive programs to gain fluency.									x	x	X	X	X

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<b>Art</b>	K	1	2	3	4	5	6	7	8	9	10	11	12
1. Students create images and art projects using computer software.	x	x	x	x	x	x	x	x	x	X	X	X	X
2. Students study art history by accessing art works stored on video, CD-ROM, or the Internet.	x	x	x	x	x	x	x	x	x	X	X	X	X
<b>Music</b>	K	1	2	3	4	5	6	7	8	9	10	11	12
1. Students are exposed to a variety of music using CD-ROM, CD, tapes, videos, or the Internet.	x	x	x	x	x	x	x	x	x	X	X	X	X
2. Students use CD-ROM or Internet-based resources to study musical instruments, composers, compositions, or music history.					x	x	x	x	x	X	X	X	X
<b>Health and Physical Education</b>	K	1	2	3	4	5	6	7	8	9	10	11	12
1. Students use CD-ROM or Internet-based resources to study nutrition or fitness.					x	x	x	x	x	X	X	X	X
2. Students analyze fitness or health by collecting and graphing data.					x	x	x	x	x	X	X	X	X
3. Students use technological resources to develop a personal fitness and nutrition plan.					x	x	x	x	x	X	X	X	X
4. Students use Internet-based materials to analyze and evaluate sporting events (for students who do not participate in regular physical education activities).					x	x	x	x	x	X	X	X	X

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### Addendum B – Technology Skill

Technology Skill	Technology Skill
<b>I. APPLICATIONS</b>	<b>d. Web Browser</b>
<b>a. Word Processing</b>	i) Describe a browser
i) Create a new document	ii) Understand browser terminology
ii) Switch between document windows	iii) Understand how to use a browser to surf the internet
iii) Enter text in a document	iv) Understand and use browser features
iv) Navigate through a document	<b>2. KEYBOARDING</b>
v) Copy and move text	20 net wpm
vi) Find and replace text	<b>3. OPERATING SYSTEMS</b>
vii) Format fonts and point sizes	a. Moving around the Desktop
viii) Change line spacing and align paragraphs	b. Opening and Closing Windows
ix) Place and format pictures in documents	c. Managing Multiple Windows
x) Check Spelling and Grammar	d. Working with Menus & Dialog Boxes
xi) Print a document	e. Understanding Files and Folders
<b>b. Spreadsheet</b>	f. Accessing Disk Drives
i) Create and navigate through a worksheet	g. Viewing the contents of a Drive or Folder
i) Format columns and rows	h. Finding Files and Folders
ii) Format cells	i. Copying and Moving Files
iii) Insert and delete rows and columns	j. Starting and Closing a Program
iv) Delete, Copy, and Move Data	k. Getting Help
v) Use the Autofill Function	<b>4. RESEARCH SKILLS</b>
vi) Sort Data	a. Define a search engine
vii) Create an arithmetic formula	b. Use a keyword search
viii) Understand Function formulas	c. Use Boolean searching (advanced search)
ix) Use Sum, Maximum, Minimum, & Average formulas	d. Perform an image search
x) Create a chart	e. Use a subject directory
xi) Edit & format a chart	f. Identify criteria for evaluating electronic information
xii) Print a worksheet	<b>5. INFORMATION LITERACY</b>
<b>c. Presentation Software</b>	
i) Create a new presentation from a template	a. Understand the rules of copyright
ii) Create a blank presentation	b. Identify types of computer crimes
iii) Navigate through a presentation	c. Understand viruses and how they are spread
iv) Add and edit text	d. Describe how privacy is invaded because of computer use
v) Delete, copy, and rearrange slides	e. Understand the District's "Student Acceptable Use Agreement"
vi) Insert pictures	<b>6. VOCABULARY</b>
vii) Check spelling, grammar, and formatting	a. Understand and use correctly appropriate terms for hardware and software
viii) Apply animation schemes	
ix) Apply transitions	
x) View media	
xi) Save a presentation	
xii) Print slides, handouts, and notes pages	



## Nevada Joint Union High School District Technology Plan

California Department of Education  
Education Technology Office  
EETT Formula Grant, Request for Application (Rev. 09/02/2008)

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

#### Education Technology Plan Review System (ETPRS) Contact Information

County & District Code: 29 - 66357

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

LEA Name: **Nevada Joint Union High School District**

\*Salutation: **Mr.**

\*First Name: **Curtis**

\*Last Name: **Smith**

\*Job Title: **Director of Technology**

\*Address: **11645 Ridge Road**

\*City: **Grass Valley**

\*Zip Code: **95945**

\*Telephone: **(530) 273-6454** Ext:

Fax: **(530) 273-0793**

\*E-mail: **curtis@njuhsd.com**

Please provide backup contact information.

1st Backup Name: **Jeanine Atkins**

1st Backup E-mail: **jatkins@njuhsd.com**

2nd Backup Name: **Paige Moore**

2nd Backup E-mail: **pmoore@njuhsd.com**

\*Required information in the ETPRS

Enhancing Education Through Technology (EETT) Formula Grant, Request for Application 1