



Education Technology Plan

July 1, 2015-2018

1. PLAN BACKGROUND CRITERIA: The plan should guide the LEA's use of education technology for the next three years.

1a. Provide a brief overview of the LEA, its location and demographics and/or share a link to the LEA's website.

Bennett Valley Union School District serves students from preschool to grade six in its two schools, Strawberry and Yulupa. Our fundamental purpose is to educate young people with the highest possible quality instruction; to nurture students' intellectual, physical, and social growth, helping each to achieve to his/her highest potential. The district's schools are located in Southeast Santa Rosa in quiet, residential neighborhoods combining the best of rural and suburban settings.

The Bennett Valley Union School District is a school community where the state of the arts in teaching and learning meld with the past, teaching children of their roots, while providing them wings for tomorrow. Within a learning climate that encourages innovation and creativity, children are nurtured to learn a broad-based academic and extended curriculum necessary for their continuing education and future success. Parent involvement, a hallmark of our district, is vitally important to our overall educational program. Parents and educators work together in an ever-evolving partnership for the children of Bennett Valley.

Vision for Technology: The Bennett Valley Union School District will provide technological resources and experiences for its students, parents, faculty, staff, and administration in preparation for the workplace and life long learning in the twenty-first century. Our vision is to utilize computers and other educational technology as a natural and integral part of learning and teaching, and as a part of student performance data analysis, communication with parents, staff and all stakeholders. To that end, each classroom is equipped with a data projector, digital camera, sound system, teacher laptop, wireless teacher microphone, and student computers. The Computer Labs are fully staffed and have full class sets of high quality computers for students for their use during their weekly curriculum-integrated technology lessons and at other times during the school week. Both libraries also have computers for book searches, research, and to take Accelerated Reader tests.

PLAN DURATION: July 1, 2015 June 30, 2018

The goals and time lines in the Bennett Valley Union School District Technology Plan will guide the District's use of technology, from July 1, 2015 through June 30, 2018. Many of the efforts described in this plan are already underway, but the District recognizes the need to continue to provide effective and efficient responses to student needs and to determine how new opportunities to improve technology integration will supplement and enhance the current program. The plan needs to be open, goal oriented and flexible. Due to changing technologies and funding issues at the federal, state, and local levels, the BVUSD Technology Plan is subject to review, modifications and budget revisions. BVUSD is focused on continuing to find new avenues of implementing in class technology and programs to develop student skills and knowledge. Thus, the technology-related goals identified in this plan, as well as their implementation, will be reviewed and modified, as necessary.

1b. Describe how a variety of stakeholders from within the LEA and the community-at-large participated in the planning process.

The stakeholders of this plan represent individuals within the school district and the community. The school's technology committee is the primary team responsible for implementing this technology plan. The process used to update this plan included information-gathering at Technology Committee meetings and input from staff revolving around the adoption of the Common Core State Standards, the implementation of the CASSPP, and the development of the Local Control Accountability Plan. Because the use of technology is intertwined with curriculum, the goals and objectives identified here are tightly aligned with instruction and include feedback generated through the LCAP process. Groups providing input via meetings and/or surveys included District Technology Committee, Leadership Committee, Principals and input from teachers via google forms. The long-term goal of the Technology Committee is to create a system of integrating technology into the classroom and throughout the district. Once the plan is approved and in place, it can be tested, modified, and re-evaluated to ensure the goals and objectives are being accomplished. BVUSD considers involvement of district support staff, administrators, community, teachers, parents, and students as essential partners for the success of all educational programs. The district strongly believes that students' accomplishments rely on the collaboration between home and school community.

1c. Summarize the relevant research and describe how it supports the plan's curricular and professional development goals.

The BVUSD Technology Plan describes how the district will use research-based strategies to address the needs of all students to support students in meeting or exceeding California state-standards by using technology to complement and enhance the academic curriculum.

Research tells us that integrating technology into the curriculum raises student outcomes. Students on average, who have access to computer-based instruction, integrated learning systems, technology projected-based strategies, simulations, and higher order thinking software, score higher on achievement tests as compared to students who did not have access to these resources. Students learn more in less time with technology integrated instruction, which helps to foster positive student attitudes toward these types of classes. Our goal is to increase student use of technology as a learning tool in the classroom to support student achievement. BVUSD strives to give all students access to technology and information literacy skills.

- Collins, Allan, and Richard Halverson. **Rethinking Education in the Age of Technology: The Digital Revolution and Schooling in America.** New York: Teachers College, 2009. Print.
- "Teachers Talking Technology." Teachers Talking Technology. Web. 19 May 2015. <https://teachertech.blog.gustavus.edu/>
- "ITSE Standards for Students." <http://www.iste.org/standards/iste-standards/standards-for-students>
- "BrightBytes" <https://clarity.brightbytes.net>

2. CURRICULUM COMPONENT CRITERIA: The Plan must establish clear goals and realistic strategy for using telecommunications and information technology to improve education services.

Students and staff should view technology as a tool for information access, record keeping, communication, and productive creativity. Technology enables students to have a "classroom without walls," giving them access to ideas, research, and resources to help them become lifelong learners.

2a. Describe teachers' current access to instructional technology and current use of digital tools.

Classrooms at all grade levels are equipped with projection systems, document cameras, and student computers. Teachers are all provided an instructional laptop for instruction and a laptop for attendance, website development, grades, access to district resources and administrative and instructional uses. Teachers use these technology tools to display lessons, enter assessment data and lesson planning. Teachers use a variety of tools in the classrooms including document cameras, projectors, California Treasures digital resources, Scott Foresman digital resources and our new adoption of Eureka math will be added to the teachers' digital resources in the 2015 – 2016 school year. Lessons are interactive, and students are actively involved in the learning process. Teachers use available digital resources to connect curriculum with a variety of available multimedia resources. Most common use of student technology in the classroom is (in order of frequency according to our survey):

1. Accelerated Reader program
2. Research
3. Document creation
4. Drill & Practice

Teacher most common use of technology:

1. Lesson preparation and display
2. Multimedia Display of curriculum connected media
3. Classroom administrative duties

2b. Describe students' current access to instructional technology and current use of digital tools. Include a description about the LEA policy, practices, and/or replacement policy that ensures equitable technology access for all students.

Every classroom is equipped with student computers, both sites have libraries with several multimedia/research stations and each site has a computer lab where students are scheduled with their class for weekly sessions. Tablets are utilized at both sites. Tablets are used at Strawberry for a behavior program as well as research. At Yulupa, tablets are used for skill reinforcement, research and collaborative document creation. Both site libraries have access outside of school hours. Strawberry computer lab is open during student recess for project completion, research and academic programs. Strawberry offers several GATE classes which include a Video Production Class, Coding, and Lego Robotics class. Yulupa offers a Technology Club open to 3rd graders and a few 2nd graders before school.

2c. Describe goals and an implementation plan, with annual activities, for using technology to improve teaching and learning. Describe how these goals align to the LEA's curricular goals that are supported by other plans. Describe how the LEA's budget/Local Control and Accountability Plan (LCAP) supports these goals, and whether future funding proposals or partnerships may be needed for successful implementation.

Our LCAP recommends that BVUSD will improve 2 percentage points in the area of access to technology, digital citizenship and foundational skills. Teachers will continue to use and analyze Diebels data to determine needs for full common core implementation. The BVUSD LCAP calls for continued improvement/upgrade of school technology and with the reorganization of our technology department, the goal is to provide equitable and consistent support and maintenance to all district sites. The process of monitoring and evaluating the effectiveness of the Curriculum Component of this technology plan is important because of its impact on student learning. Objectives in the Curriculum Component of this plan includes a Monitoring and Evaluation plan. BVUSD's Technology Committee, who collaborated on this

plan, will meet regularly to review technology activities and evaluate its effectiveness and also share successes and new apps/programs being used at both sites. This information will be shared, through meetings, by Superintendent/Principals. Staff will receive an annual report from the technology committee with a survey for input from staff. Bennett Valley will continue to look at all funding/donation/grant opportunities that support our technological growth as well as reviewing our BYOD policy and modifying as needed. Assistive technology will be reviewed as well to make sure that we are utilizing needed technologies and apps.

2d. Describe goals and an implementation plan, with annual activities, for how and when students will acquire the technology skills and information literacy skills needed for college and career readiness.

It is our district curricular goal that all students will acquire technology and information literacy skills needed to succeed in the classroom and in the 21st Century. Bennett Valley Union School District is a member of our County Education 21st Century Team. Students will acquire these skills through their integration with the Common Core State Standards. Technology and information literacy enhance students' ability to learn the standards and provides additional opportunities for all students. The District's technology and information literacy curriculum and standards have been written and will be updated to meet or exceed the Common Core and state standards for technology and information literacy. Lessons, best practices, and strategies will be developed across curricula, and implemented by classroom teachers, computer/technology instructors and library media instructors.

The process to identify the four main areas of focus for the students was developed and reviewed by our district Technology committee which consists of grade level Tech mentors, computer lab instructors, Director of Technology, business manager, site principals and district superintendent. Our district LCAP plan was also used to develop our goals, as well as input from students, staff and parents gathered from a Brightbytes survey. Our survey has given us some excellent guidelines for areas that we need to improve upon.

Common Core State Standards K-6 Technology Skills Scope and Sequence

This Scope and Sequence is to Support the California Common Core State Standards.

The skills identified for each grade level align to the Common Core State Standards (CCSS) for Mathematics and English Language Arts & Literacy in History/Social Studies, Science and Technical Subjects as well as skills required to take the Smarter Balanced Assessment

Consortium's (SBAC) Computer Adaptive Assessments and performance task assessments.

Additional skills identified in this Scope and Sequence are from the National Educational Technology Standards 2007: Creativity and Innovation; Digital Citizenship; and Technology Operations and Concepts.

English Language Arts Anchor Standards	Mathematics Standards
RL - Reading Standards for Literature; RI - Reading Standards for Informational Text; W - Writing; SL - Speaking and Listening; L - Language.	MD - Measurement and Data G - Geometry EE - Expressions and Equations A - Algebra F - Functions SP - Statistics and Probability SMP - Standards of Mathematical Practice

Digital Literacy Categories		Alignment to CCSS/ SBAC	Skills	K	1	2	3	4	5	6
Demonstrate proficiency in the use of computers and applications as well as an understanding of the concepts underlying hardware, software and connectivity.	Basic Operations	SBAC test taking skills	Turn on a computer and login	O	R	M	M	M	M	M
		SBAC test taking skills	Use pointing device such as a mouse to manipulate shapes, icons; click on urls, radio buttons, check boxes; use scroll bar	I	R	M	M	M	M	M
		SBAC test taking skills	Use desktop icons, windows and menus to open applications and documents	I	R	M	M	M	M	M
		SBAC test taking skills	File management – saving documents		O	I	R	M	M	M
		SBAC test taking skills	Explain and use age-appropriate online tools and resources (e.g. tutorial, assessment, web browser)		I	R	R	R	M	M
		W 6	Keyboarding <ul style="list-style-type: none"> Use proper posture and ergonomics Locate and use letter and numbers keys with left and right hand placement. Locate and use correct finger, hand for space bar, return/enter and shift key Gain proficiency and speed in touch typing with speed 		I	R	R	R	R	R
	Word Processing	W 5, W 6, W 10	Use a word processing application to write, edit, print and save simple assignments		I	R	R	R	M	M
		W 5, W 6, W 10	Use menu/tool bar functions (e.g. font/size/style/, line spacing, margins) to format, edit and print a document			I	R	R	M	M
		W.5, W6, W 10	Highlight text, copy and paste text			O	I	R	M	M
		W 5, W 6, W 10	<ul style="list-style-type: none"> Copy and paste images within the document and from outside sources Insert and size a graphic in a document 				I	R	M	M
		L 4	Proofread and edit writing using appropriate resources (e.g. dictionary, spell checker, grammar, and thesaurus).				I	R	R	M
I – Introduce R – Reinforce M – Mastery (ability to teach others) O – Optional for grade level										

Digital Literacy Categories		Alignment to CCSS/ SBAC	Skills	K	1	2	3	4	5	6	
Demonstrate proficiency in the use of computers and applications as well as an understanding of the concepts underlying hardware, software and connectivity.	Spreadsheet (Tables/ Charts and Graphs)	MD , SBAC testing skills	Demonstrate an understanding of the spreadsheet as a tool to record, organize and graph information.				I	R	M	M	
		SBAC testing skills	Identify and explain terms and concepts related to spreadsheets (i.e. cell, column, row, values, labels, chart graph)			O	I	R	M	M	
		MD , SBAC testing skills	Enter/edit data in spreadsheets and perform calculations using formulas			O	I	R	R	M	
		MD , SBAC testing skills	Use mathematical symbols e.g. + add, - minus, *multiply, /divide, ^ exponents				I	R	M	M	
		RI 7	Use spreadsheets and other applications to make predictions, solve problems and draw conclusions.				I	R	R	M	
	Multimedia and Presentation Tools	W 6	Create, edit and format text on a slide				I	R	R	M	M
		W 6	Create a series of slides and organize them to present research or convey an idea				I	R	R	M	M
		W 6, SL 5	Copy and paste or import graphics; change their size and position on a slide				O	I	R	M	M
		W 6, SL 5	Use painting and drawing tools/ applications to create and edit work				I	R	R	M	M
		W 6, RL 7, SBAC testing skills	Watch online videos and use play, pause, rewind and forward buttons while taking notes	O	O		I	R	R	M	M

Digital Literacy Categories		Alignment to CCSS/ SBAC	Skills	K	1	2	3	4	5	6
Demonstrate the responsible use of technology and an understanding of ethics and safety issues in using electronic media at home, in school and in society.	Acceptable Use, Copyright and Plagiarism	Digital Citizenship	Explain and demonstrate compliance with classroom, school rules (Acceptable Use Policy) regarding responsible use of computers and networks				I	R	M	M
		Digital Citizenship	Explain responsible uses of technology and digital information; describe possible consequences of inappropriate use			O	I	R	M	M
		Digital Citizenship	Explain Fair Use Guidelines for the use of copyrighted materials,(e.g. text, images, music, video in student projects) and giving credit to media creators			O	I	R	M	M
		Digital Citizenship	(e.g. passwords, virus protection software, spam filters, popup blockers) Demonstrate safe email practices, recognition of the potentially public exposure of email and appropriate				I	R	M	M
		Digital Citizenship	email etiquette				I	R	M	M
	Digital Citizenship	Identify cyberbullying and describe strategies to deal with such a situation				I	R	M	M	M
	Digital Citizenship	Recognize and describe the potential risks and dangers associated with various forms of online communications				I	R	R	M	M
I - Introduce R - Reinforce M - Mastery (ability to teach others) O - Optional for grade level										

Digital Literacy Categories		Alignment to CCSS/SBAC	Skills	K	1	2	3	4	5	6
Demonstrate the ability to use technology for research, critical thinking, decision making, communication and collaboration, creativity and innovation.	Research and Gathering Information	RI 5, RI 7	Use age appropriate technologies to locate, collect, organize content from media collection for specific purposes, citing sources			I	R	M	M	M
		RI 5, RI 7	Perform basic searches on databases, (e.g. library, card catalog, encyclopedia) to locate information.			I	R	M	M	M
		RI 5, RI 7	Evaluate teacher-selected or self-selected Internet resources in terms of their usefulness for research			I	R	M	M	M
		RI 7	Use content specific technology tools (e.g. environmental probes, microscopes, sensors, and measuring devices, simulations) to gather and analyze			O	I	R	M	M
		RI 6, RI 7, RI 9	Use Web 2.0 tools (e.g. online discussions, blogs and wikis) to gather and share information			O	I	R	M	M
	RL 7	Identify and analyze the purpose of a media message (to inform, persuade and entertain)	I	R	R	R	R	M	M	
	Communication and Collaboration	W 6	Work collaboratively online with other students under teacher supervision (google docs)			I	R	M	M	M
		W 6, W 10	Use a variety of age-appropriate technologies (e.g. drawing program, presentation software) to communicate and exchange ideas		I	R	M	M	M	M
		W 6, W 10 SL 2, SL 5	Create projects that use text and various forms of graphics, audio, and video, (with proper citations) to communicate ideas.			I	R	R	M	M
		W 6, W 10 SL 3	Use teacher developed guidelines to evaluate multimedia presentations for organization, content, design, presentation and appropriateness of citations.			O	I	R	M	M
W 6, W 10 SL 1		Use district approved Web 2.0 tools for communication and collaboration			O	I	R	M	M	
I - Introduce		R - Reinforce	M - Mastery (ability to teach others)	O - Optional for grade level						

2e. Describe goals and an implementation plan, with annual activities, to address Internet safety and the appropriate and ethical use of technology, including AB 307 and Children’s Internet Protection Act (CIPA) compliance, in the classroom.

Bennett Valley Union School District strives to teach students the meaning of Digital citizenship which can be defined as the norms of appropriate, responsible behavior with regard to technology use. BVUSD will use available resources to teach the importance of student online safety and netiquette and how to partner with parents in this effort.

Goal : Promote Internet safety in the classroom by students and staff.		
OBJECTIVES	IMPLEMENTATION PLAN /BENCHMARKS	TIMELINE
<p>Objective 1: Implement structured lessons that deal with Internet safety in the computer labs/classrooms with resources available from Sonoma County Office of Education, Common Sense Media and other internet safety resources.</p> <p>Objective 2: Distribute lessons to teachers and computer lab instructors</p> <p>Objective 3: Develop google form quiz and review data to ensure understanding of digital citizenship.</p>	<p>Director of Technology Services and Site Computer Lab Instructors to review lessons on Internet safety for students. Yearly review of lessons and data collection by Technology Mentors/Committee.</p>	<p>Fall 2015, 2016, 2017</p>
<p>Present information to staff and parents a minimum of 1 time per year about ethical use of technology and their responsibility to monitor their children/students use of the Internet through use of district newsletter and technology corner</p>		<p>Fall 2015, 2016, 2017</p>
<p>Facilitate students’ successful completion of curriculum and technology activities and mastery of objectives.</p>		<p>Fall 2015, 2016, 2017</p>
<p>Conduct yearly surveys to determine effectiveness</p>		

3. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA: The Plan must have a professional development strategy to ensure that staff understands how to use these new technologies to improve education services.

3a. Summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development.

The District has a Google Domain and all teachers are using Google Apps for Education. During the 2013-14 school year, in a large part due to Smarter Balance testing, BVUSD setup and rolled out windows 8.1 notebooks. The District has deployed google docs for students; implemented Google apps district-wide. Teachers are working with students to utilize google docs/apps in the classroom, and have lead students in the creation of collaborative documents and web based educational websites that utilize google accounts (Khan Academy) and we are always looking at other programs as they become available.

Teachers' Current Use of Digital Tools

Teachers are using digital tools in a variety of ways. At the elementary level, teachers are providing in-the-moment experiences where they access resources and images via the Internet to support instruction and create equal access to the content. Teachers are also showing and integrating videos to expand learning and provide background knowledge as well as enrich and remediate beyond the classroom walls. Teachers and computer lab instructors work with students to access and utilize word processing and presentation software to communicate their learning. In a few classrooms, student avatars (like Class Dojo and Class Hero) are being used to create and maintain a classroom incentive/management program. Teachers and students participated with Khan Academy. Students in grades 3 through 5 are also participating in the Smarter Balanced Assessments online, utilizing the windows 8.1 notebooks.

Another use of technology for teachers and administrators is collaboration and professional development. With endless amount of materials available online, documents and resources are shared and recorded in centralized locations.(servers and google docs) The district is using Houghton Mifflin California treasures which contain many online resources for students. The district just adopted Eureka Math and look forward to its implementation in the 2015-16 school year. Some classrooms are looking at creating their own MOODLE course after an excellent project/demonstration by one of our teachers for her Master's project. Sixth grade is looking at a collaborative Moodle. We are moving our beginning of the year mandatory staff training (blood borne pathogens, emergency procedures, etc.) to our district Moodle server thus helping us with accountability and record keeping. The district has implemented Classmaker/Report Card Maker program to manage class placements and record keeping.

Bright Bytes Technology Survey Data collection Jan-Feb	2014 Yulupa	2015 Yulupa	2014 Straw	2015 Straw
Overall Score	1033	1051	1025	1025
Classroom Overall	904	935	924	937
Classroom 4C's	904	936	920	904
Teacher use of 4C's	824	847	864	870
Student use of 4C's	909	951	921	906
Teacher Digital Citizenship	969	1013	941	1025
Student Digital Citizenship	914	946	931	928
Assessment	920	946	948	1031
Access Overall	1206	1201	1195	1176
Teachers at School	1237	1211	1209	1159
Students at School	1157	1153	1133	1111
Teachers at Home	1273	1273	1278	1282
Students at Home	1166	1185	1185	1193
Skills Overall	1102	1111	1109	1109
Teacher Foundational	1215	1203	1212	1200
Student Foundational	1072	1100	1127	1107
Teacher Online Skills	1115	1097	1077	1074
Student Online Skills	1015	1009	1054	1061
Teacher Multimedia Skills	1047	1108	1004	1047
Student Multimedia Skills	1150	1158	1174	1161
Environment Overall	1088	1105	1026	1014
Policies, Procedures, Practices	1009	1076	1033	1038
Tech Support	1153	1161	1004	918
Professional Learning	943	967	882	918
Teacher Beliefs	1247	1215	1184	1182
Student Beliefs	1119	1168	1126	1115

1200's Exemplary; 1100's Advanced; 1000's Proficient; 900's Emerging; 800's Beginning
Goal partially met: Continue technology actions until all areas are proficient

The BrightBytes survey by Clarity has given us next steps and insight to needed areas. We will continue to provide staff/teacher training to improve skills to design learning experiences that emphasize digital collaboration and creativity. Our survey has given us some excellent guidelines for areas that we need to improve upon. With the restructuring of our Technology department and continued refinement of support in accordance with our LCAP plan, our goal is to provide consistent support, improved communication, and development of online (flipped) courses and organization of our digital resources.

3b. Goals and an implementation plan, with annual activities, for providing professional development opportunities based on a LEA needs assessment.

Staff will have the opportunity to participate in professional development in support of this Technology Plan. Delivery of this training will be delivered in various possibilities, face to face, online, webinars, and/or collaborative documents. Needs will be identified and developed based upon input from staff. Professional development requests per our technology survey are; google doc training, advanced Microsoft office and technology troubleshooting skills. Bennett Valley uses the Train the trainer model to develop proficient users who will support other users, these professionals are our grade level Technology Mentors who are members of our Technology committee. We will focus some of our professional development efforts to building teachers' isolated technical skills to preparing teachers to implement technology-enhanced, learner-centered instruction. Bennett Valley has been a member of the Sonoma County Office of Education 21st Century team that has collaboratively worked towards implementing 21st century skills in our district for the last 3 years. BVUSD just adopted Eureka Math and has several staff members attending various trainings and we will utilize the train trainers as we utilize the digital resources.

Create a Video Resource Library

In a recent survey, 30% of teachers report that lack of technical support is a major challenge. (BrightBytes) We will work to create a library of how-to videos for frequently requested help topics. We will assist teachers and staff on how to use available technology and how they can prepare a video or screencast, or create an online course (flipped course) using our district moodle.

Update Strawberry School Technology

Our Strawberry school site has the technology upgraded and it is our goal to continue to provide support and troubleshooting training.

Math Support

With the adoption of our new Common Core math series, we have provided hands on training for our staff which includes an online database of resources. Staff was also trained on how to use technology to deliver their math lessons.

4. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, SOFTWARE, AND ASSET MANAGEMENT COMPONENT CRITERIA: The Plan must include an assessment of the telecommunication services, hardware, software, asset management, and other services that will be needed to improve education services.

4a. Describe the existing hardware, Internet access, electronic learning resources, technical support, and asset management already in the LEA that will be used to support the Curriculum and Professional Development Components of the plan.

Infrastructure-Hardware-Technical Support and Software

Driven by curriculum-centered, 21st century and common core objectives, BVUSD maintains an infrastructure that enables teachers and students to easily use technology and online resources to achieve academic goals. The district's infrastructure has been significantly improved over the past three years; however, current and emerging technologies require greater bandwidth and functionality. Meeting our curricular and district goals will require continual infrastructure analysis and upgrading.

Technology varies at our two school sites.

Yulupa Elementary School has:

1. Each classroom has a bank of five to eight student computers/laptops, a mounted projector, networked laser printer, sound system, a teacher instructional computer and a teacher laptop for classroom administrative/communication purposes.
2. A computer lab equipped with 24 student computers, an instructor instructional computer, an instructor monitoring computer with 2 larger screens for display, 3 additional work stations for use by students or staff, a projector, DVD/cassette tape transferring station, 2 green screens, 1 portable green screen, duplication stations and 1 color copier.
3. A library equipped with eight student work stations, a library volunteer work station, a teacher checkout station, an instructional laptop, a monitoring computer station (monitoring student work stations), a library clerk station, 4 laser printers, a sound system, a large screen TV and a mounted projector (signal split to display on large TV and projector)
4. MPR equipped with sound system and an instructional cart.
5. 3 notebook carts each with 25 notebooks.
6. Several classrooms have a set of 7 android tablets/windows 8.1 tablets and a few with ipads.
7. Yulupa is equipped with a security camera system.

Strawberry Elementary School has:

1. Each classroom has two student computers, a mounted projector, networked laser printer and a sound system.
2. A computer lab equipped with 36 student computers, 1 instructor work station, 1 monitoring work station with a large monitor attached for instructor viewing while out on the floor.
3. A library equipped with 3 work stations, large screen TV, document camera, networked laser printer and a set of tablets
4. MPR audio system
5. 4 notebook carts each with 35 notebooks.
6. All classrooms have an android tablet for positive behavior program.
7. Strawberry is equipped with a security camera system.
8. A wireless controller and wireless AP system is installed at Strawberry
9. 3 servers

District:

1. District office houses our servers that have student/teacher shares and administrative programs
2. District office has the wireless network controller that serves the district office and Yulupa campus – wireless APs are installed across campus.

Plan to address bandwidth needs

(What capacity/speed is currently available, what is needed? how was that determined)?

Our district recently in collaboration with our county office of education upgraded our bandwidth

We upgraded our switches by installing new gigabit ports on our campuses. We have added additional APs at both sites to balance the load in our wings. We upgraded our wireless system a few years ago to a commercial managed wireless controller. We upgraded the wiring/ports at the Strawberry campus to ensure. We have tested our system with the CAASP bandwidth checker and our system checked out ok with the number of students to be tested at one time.

We have collaborated with our county office of education to test our system and we get updates from them. Our current download speed is 47.12 mbps and our upload speed is 94.14 mbps.

We will continue to look at upgrade of servers, switches and bandwidth as we move towards a 1 to 1 computing era.

Asset management:

The district uses an open source database called CMMS where we record all equipment by site, classroom and staff member.

One hundred percent (100%) of all district computers are fully networked through a LAN. Internet access is managed by our network which has an opt-e-man line and we are filtered by Sonoma County Office of Education. We are upgrading this access from SCOE in the coming school year. We are also upgrading the Strawberry classroom wiring to improve classroom access and connectivity. The fourth grade wing was completed in time for online SBAC testing. The district servers are protected with a firewall and Internet filtering software through SCOE.

Existing Technical Support: Technical support is offered by our Director of Technology Director and two site computer lab instructors. Technology support is also offered by our district Grade Level Technology Mentors through staff in-services delivered during grade level meetings. We are looking at open source web based ticketing system to improve support.

Phone System:

We are looking at a hybrid phone system that will give teachers better options for accessing voice mail and stream line district/school wide communication.

4b. Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, technical support, and asset management needed by the LEA's teachers, students, and administrators to support the activities in the Curriculum and Professional Development components of the plan.

We need to upgrade existing wiring in some wings and add a few more APs. We are upgrading our connection to SCOE. We need to look at

- **Hardware Needed:** Upgrade hardware as problems are noted and develop a replacement plan for both sites with budgetary constraints in mind. Upgrade Strawberry computers and add classroom technology so that both sites have equitable student access to technology.
- **Computer/Laptop Replacement Policy:** Continuing to look at upgrading aging school/classroom technology and funding options.
- **Devices:** Digital microscopes and a replacement policy.
- **Antivirus Software:** Continue to implement needed antivirus protection to all district computers.
- **Servers:** Continue to monitor server needs for OS and hardware upgrades.
- **Website:** Look at all available resources for district/school website.
- **LMS:** Continue developing our Moodle servers and monitor hardware needs for this.
- **Electronic Learning Resources Needed:** Classroom tablets to move toward 1:1 computing. I pads and apps needed for Assistive technology. Add more web based programs so students have access at home and school.

- **Networking and Telecommunications Infrastructure Needed:** Expand Teleconferencing available for students and district staff to move to a more collaborative environment.
- Upgrade **Phone System** Wiring and phone system
- Upgrade from a opt-e-man line and SCOE access
- Upgrade district **switches** as needed
- Add wireless **APs** to balance devices in all sections of school
- **Physical Plant Modifications Needed:** Continue monitoring infrastructure for needss
- **Technical Support Needed:** Refine request process with open source online ticketing system – look at server needs for this.
- **Software** (purchase new programs as they become available – student applications and web based applications)
- **Google Docs:** Continue expanding collaborative documents/calendars to manage time and resources. Also, continuation and expansion of student usage of google docs and sites.
- **Adaptive Technology** – purchase IPADs and other devices.

5. MONITORING AND EVALUATION COMPONENT CRITERIA: The plan must include an evaluation process that enables the school to monitor progress toward the specific goals and make mid-course corrections in response to new developments and opportunities as they arise.

5a. Describe the process for evaluating the plan's overall progress and impact on teaching and learning.

BVUSD will use google forms to create surveys for staff that evaluates our progress with technology and learning and our staff development and growth. Data will be collected in the spring of each plan year and evaluated in the fall of each year. BVUSD Technology Committee/Mentors will review results and make mid-course corrections as needed. and achievement will be given to the administration, school board and stakeholders in the fall of each plan year. The Technology Committee will also monitor the use of technology in the classroom to deliver curriculum, review impact on teaching and learning and next steps. Review logs from help desk software (once in place) to identify needed support and identify problem technology.

5b. Describe the schedule for evaluating the effect of plan implementation, including a description of the process and frequency of communicating evaluation results to tech plan stakeholders.

The Technology Committee will be responsible for monitoring and evaluating the progress of the Technology Plan and for making appropriate adjustments. In order to do so, the committee will:

- Meet typically monthly during the school year to assess the implementation of the plan.
- Use surveys, observations, and collected survey data from staff and our educational community
- Monitor and adjust the plan as needs change, budgets allow and new technologies emerge.

Results will be communicated through shared documents with our google docs. A presentation focused on student and staff growth and achievement will be given to the administration, school board and stakeholders in the fall of each plan year.