West Contra Costa Unified Technology Plan

July 1, 2017 - June 30, 2020

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.

The West Contra Costa Unified School District communities work toward the goal of improving student achievement and preparing students for life and the workplace. The District has prepared this Educational Technology Plan 2017-2020 to articulate a common vision for technology in West Contra Costa schools and identify the strategies that will help schools use technology to promote and adequately support student achievement.

Located on the northeast end of the San Francisco Bay Area, the West Contra Costa Unified School District (WCCUSD) serves 29,463 students in five cities and six unincorporated areas. WCCUSD is the 30th largest school district in California with 18 pre-schools, 1 special education pre-school, 1 special education adult school, 34 elementary schools, 6 middle schools, 2 K-8 schools, 7 high schools, 3 alternative and continuing high schools, 2 adult education sites, 9 operation sites and 9 charter schools. Our diverse student population includes: 53% Latino, 19.7% African American, 11% Caucasian, 10% Asian, 5.3% Filipino and 1.5% other ethnicities. More than 108 languages are spoken within our 110 square mile jurisdiction. There are over 10,750 (about 34%) English Learners (ELs) in our district, of which 83.58% are Spanish speakers. We have 24 schools eligible for Title 1 funding in 2013-2014 including 18 elementary schools, three middle schools and three high schools. Further information can be found on the WCCUSD website, http://www.wccusd.net.

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

Throughout 2015-2017 school year, input was solicited from key Cabinet members, Educational Services, Bond/Facilities and Kindergarten-Adult Operations. A small subcommittee of the larger Technology Subcommittee met several times to develop the plan. In addition, business and Board members were involved in the process of drafting and revising the plan. Community members were asked for input and that feedback was incorporated into the updated plan.

The WCCUSD Educational Technology Plan was developed in close alignment with specifications of both State and Federal guidelines. The WCCUSD Technology Plan Committee aligned the education technology plan with the California Board of Education adopted guide--Education Technology Planning: A Guide for School Districts and the WCCUSD Strategic Plan. Tight integration with the district's strategic plan is an essential ingredient to ensure all staff, community and Board members are working and communicating together with common goals in mind. In other words, "being on the same page" will allow us to walk the same path more effectively and efficiently.

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

West Contra Costa's philosophy is that the use of technology should be integrated into the curriculum at all levels in order to improve student achievement. Technology should not be a separate content taught for its own sake. Technology improves student performances when the application directly supports the curriculum objectives being assessed. Alignment of project or lesson content with state content standards is an important first step to infusing technology into the curricula.

A survey of 465 teachers in California resulted in 92% affirming that the first step in infusing technology into the curriculum is having information about the specific content of a program or use of an application that aligns with state-adopted curriculum standards. A number of respondents indicated that an online resource that profiles electronic learning resources with the specific skills in knowledge areas that align with content standards would help them select programs that will facilitate curriculum integration with technology (Cradler & Beuthel, 2001).

In an ACOT (Apple Classrooms of Tomorrow) study, student engagement remained highest when technology use was integrated into the larger curricular framework, rather than being an "add-on" to an already full curriculum (Sandholtz et al., 1997). Research suggests that when technology is integrated into the larger instructional framework, students will not only learn how to use the equipment and software but will also gain content knowledge (Silverstein et al., 2000). Moreover, using technology within the curriculum framework can enhance important skills that will be valued in the workplace, such as locating and accessing information, organizing and displaying, data, and creating persuasive arguments (Sandholtz et al.,1997; "Critical Issue," 1999).Consistent with this research, technology will not be taught in isolation. To this end the District is developing a Technology Scope and Sequence that lists skills by grade level and specifies who is responsible for teaching the skills. By creating benchmark lessons that address content standards and incorporate technology, teachers are given tools that integrate technology into the curricular and instructional framework. Additionally, West Contra Costa Unified School District will carefully analyze learning resources and lessons both for alignment with California content standards and for the ability to measure growth/achievement on those standards in a variety of ways.

The Learning Return On Our Educational Technology Investment: A Review of Findings from Research, WestED (Ringstaff & Kelley, June 2002) is an extensive report that examines many studies and reports related to educational technology and school reform. It looks at the kinds of impact technology has on education. Several key factors are identified as crucial elements for successfully using technology. They include:

- Technology is best used as one component in a broad-based reform effort
- Teachers must be adequately trained to use technology
- Teachers may need to change their beliefs about teaching and learning
- Technological resources must be sufficient and accessible
- Effective technology use requires long-term planning and support
- Technology should be integrated into the curricular and instructional framework

These key elements are addressed in several places in the WCCUD's Educational Technology Plan. Specifically, they can be found in goals 3 and 4 goals which address the creation of technology-enhanced, standards-based curricular lessons and units, building ongoing professional development.

The installation of equipment and the development of the technology skills does not insure that technology will be integrated into instruction. Another requirement for successful technology integration is professional development. The greatest gains in student achievement occurred when teachers were trained in the use of technology (Schacter, 1999). Intensive and ongoing staff development that provides opportunities for modeling, practice, and reinforcement of technology use with curricula should be linked to curriculum goals and objectives from the onset of technology implementation efforts (Roschelle et al.,2000). Being mentored by an experienced teacher who is proficient with technology is a strategy which builds teacher confidence and interest in technology (Zhao, Pugh, Sheldon, & Byers, 2002). Extensive research conducted by the Office of Technology Assessment reports that "Districts may be well advised to use multiple training and support strategies tailored to the educational goals of the local site" (OTA, 1995). Information such as that above has prompted West Contra Costa USD to provide on-going professional development, to provide more than one time workshops, to build capacity by establishing a Technology Integration Leaders cadre, to include technology in curricular cadre meetings, and to identify technology mentor teachers to provide "just-in-time" training.

Through ongoing data collection and analysis, both District-wide and individually at the site, WCCUSD will continuously monitor its attainment of the goals and objectives of the Educational Technology Plan, and will report results annually to the superintendent, the school board, and the public.

Robert Marzano identified nine essential strategies that are most likely to improve student achievement across all content areas and across all grade levels. Using educational technology applications and resources, we can build on these recommendations and advance student learning through inquiry, collaborative projects, games, and other activities that will capture student interest and make school exciting and meaningful. We can help students take notes, summarize content and make comparisons and we can use technology to engage them in cooperative learning. We can also reinforce their efforts through formative assessment, feedback and recognition. Using Technology with Classroom Instruction that Works, Howard Pitler, Elizabeth R. Hubbell, Matt Kuhn, Kim Malenoski, Published by ASCD, 2007.

21st Century Skills

Technology can foster an increase in the quantity and quality of students' thinking and writing. Productivity tools such as databases, spreadsheets, computer-assisted design, graphics programs and multimedia authoring programs (programs for creating computer-based presentations or lessons) allow students to independently organize, analyze, interpret, develop, and evaluate their own work. Several features of word processors seem to reduce the phobia often associated with writing and enable high school graduates to be proficient at accessing, evaluating, and communicating information. Educational technologies can, by design, provoke students to raise searching questions, enter debates, formulate opinions, engage in problem solving and critical thinking, and test their views of reality. EnGauge 21st Century Skills: Literacy in the Digital Age, Lemke, Cheryl, et al. (2003), Available from http://www.metiri.com/21/21%20Century%20Skills%20Final.doc.

Mobile Learning

"...a wide range of learning activities that could be supported through mobile digital tools and environments include: exploring, investigating, discussing, recording/capturing data, building/making/modeling, sharing, testing, adapting, [and] reflecting (Laurillard, 2007). The following articles, research, and kits offer thoughtful discussion regarding mobile learning--definitions, pedagogy, uses, implementation, challenges, and more.

- Attwell, G (November 18, 2010). Research on Mobile Learning. Retrieved from Pontydysgu-Bridge to Learning, http://www.pontydysgu.org/2010/11/research-on- mobile-learning/JISC InfoNet (2011).
- Mobile Learning infoKit. Retrieved from https://mobilelearninginfokit.pbworks.com/w/page/41122430/HomeLaurillard, D. (2007). Pedagogical forms for mobile learning: framing research questions. Retrieved from http://eprints.ioe.ac.uk/627/1/Mobile_C6_Laurillard.pdf
- Parsons, D. and Ryu H. (2006). A Framework for assessing the quality of mobile learning. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.108.2612&rep=rep1&ty pe=pdf
- Sharples, M. et al. (2007). Mobile learning as a catalyst for change (Open Learning, Vol. 25, No. 3, November 2010, 181-185) Retrieved from http://www.telearn.org/warehouse/KAL_Legacy_Mobile_Learning_(001143v1).pdf

Alan November states that “Adding a digital device to the classroom without a fundamental change in the culture of teaching and learning will not lead to significant improvement. Unless clear goals across the curriculum—such as the use of math to solve real problems—are articulated at the outset, one-to-one computing becomes “spray and pray.”

If the language we use to describe an initiative sets the tone and direction for it, and if we want to create a more inspiring vision than giving each student a device, then I have a simple proposition: Let’s drop the phrase “one-to-one” and refer instead to “one-to-world.”

This simple, one-word change takes us beyond the focus on the boxes and wires and alludes to why we are making the investment in the first place. The planning considerations now evolve from questions about technical capacity to a vision of limitless opportunities for learning. This change also has enormous implications for the design of staff development. As soon as you shift from “one-to-one” to “one-to-world,” it changes the focus of staff development from technical training to understanding how to design assignments that are more empowering—and engage students in a learning community with 24-hour support.” Why Schools Must Move Beyond One-to-One Computing. (2016), available from: http://novemberlearning.com/assets/why-schools-must-move-beyond-one-to-one-computing.pdf

National Educational Technology Plan

Future Ready Learning: Reimaging the Role of Technology in Education (2016) is the current National Educational Technology Plan. The District technology plan addresses the five goals and key components identified in the National Educational Technology Plan:

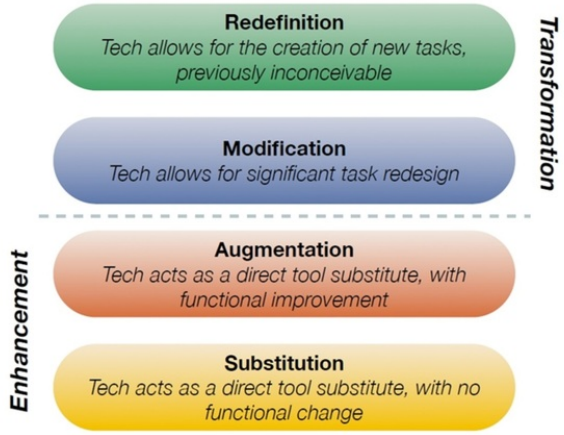
- Learning: All learners will have engaging and empowering learning experiences in both formal and informal settings that prepare them to be active, creative, knowledgeable, and ethical participants in our globally connected society.

- Teaching: Educators will be supported by technology that connects them to people, data, content, resources, expertise, and learning experiences that can empower and inspire them to provide more effective teaching for all learners.
- Leadership: Embed an understanding of technology-enabled education within the roles and responsibilities of education leaders at all levels and set state, regional, and local visions for technology in learning.
- Assessment: At all levels, our education system will leverage the power of technology to measure what matters and use assessment data to improve learning.
- Infrastructure: All students and educators will have access to a robust and comprehensive infrastructure when and where they need it for learning. Retrieved July 19, 2016 from http://tech.ed.gov/netp/

TPAC (Technological Pedagogical Content Knowledge) and SAMR (Substitution Augmentation Modification Redefinition)

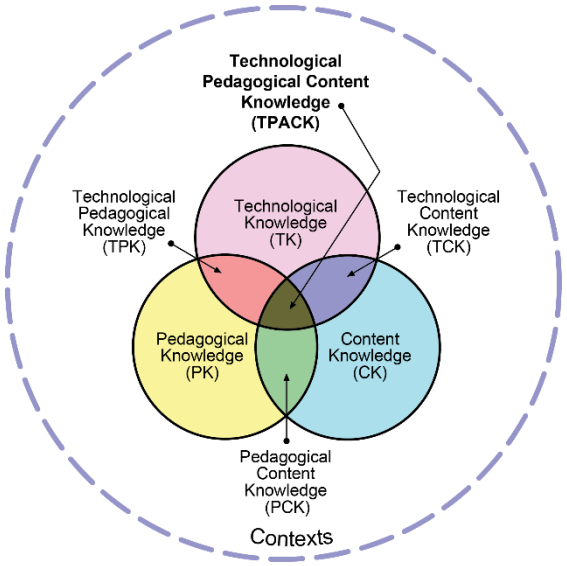
There are two frameworks that we can use to help guide us as we integrate technology into the learning environment. These are not rules or steps that we must follow, but are concepts and ideas that can help us make meaningful decisions when using technology to enhance the learning environment.

As we start integrating the laptops into our classrooms, we need to be aware of their impact on student learning. We can evaluate how we are integrating technology using the SAMR model. This model looks at 4 steps of technology integration and how this can impact learning. SAMR model developed by Dr. Ruben Puentedura http://www.hippasus.com/ Image below by Dr. Ruben Puentedura, Ph.D. http://www.hippasus.com/rrpweblog/



TPACK is a great tool for helping us as we traveling on this path of 21st century learning. It aligns our understanding of technological, content and pedagogical knowledge and how they interact. A truly effective teacher today needs to be knowledgeable in all three areas in order to truly have a 21st century classroom. Image below is reproduced by permission of the publisher, © 2012 by tpack.org

Retrieved July 19, 2016 from https://sites.google.com/a/ames.k12.ia.us/ahs-technology-integration/home/tpack-and-samr



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

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

Currently, all teachers have the following hardware in their classrooms: a laptop, an LCD projector, a document camera, and speakers secured to a single media cart. In addition, most teachers also have at least one desktop and most schools have computer labs. We are rolling out our one-to-one initiative which has guaranteed a tablet per student at each site. Tablets housed in classrooms are stored in a secure charging cart. All classrooms are wi-fi enabled and offer consistent access to the internet for faculty and administrators, at all sites.

WCCUSD has invested in many online resources for professional growth, curriculum development, and student achievement. All teachers have a suite of digital applications available to support their professional duties and professional growth. All teachers have district secured accounts for digital communication tools such as *eSchool* and Employee Self Service (ESS), among others, which facilitate communication with district officials, site administrators, parents, and students.

Teachers and principals use Powerschool, our current Student Information System (SIS), to input attendance and discipline data, access home information, and obtain emergency medical information. Powerschool also provides a gradebook for secondary teachers. Special

Education teachers use SEIS (Special Education Information System) to complete state requirements for Individualized Educational Programs (IEPs).

All teachers are provided with district Google Drive accounts, providing access to the Google suite of productivity tools for professional collaboration, content development, and student workflow management. Currently, several teachers are using GSuite (formerly Google Apps for Education) and Google Classroom with their students. District educational technology staff has focused on these tools in professional development.

Based on need, the special education department works to provide teachers and students with both devices and online applications in accordance with universal design learning principles. Teachers and students may be provided with specific assistive learning tools such as interactive projectors, headsets equipped with microphones for speech-to-text programs, and access to special subscriptions of online programs.

Illuminate Education is used for the creation and administration of district benchmarks and local assessments. It also functions as a repository for all assessment data. Teachers can generate reports detailing the proficiency for each specific common-core skill assessed, and may include suggestions for next steps. Illuminate also provides access to a digital cumulative file snapshot, useful for IEP meetings and parent conferences.

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.

All students have access to technology at all school sites with consistent and reliable wi-fi. Most student devices have been equipped with a Windows Operating System to ensure the tools are available to all students on or off site. Computer labs are used at the secondary level for specialized curriculum, such as robotics and engineering pathways. Many labs at the elementary site support a computer prep class, on average twice a week. Many labs are being dismantled with a strategic shift to focusing on tablets in each teacher classroom.

Over time, teachers have been transitioning to digital content, lessons, and communications tools to use with their students. Increasingly, teachers K-12 are specifically using GSuite (formerly Google Apps for Education) to provide students with curriculum and productivity tools, and skills to their students. In addition to providing access to digital tools and content during the school day, WCCUSD also provides these resources in after-school programs to extend opportunities for enrichment and remediation. In order to assure that students with special needs have equal access to technology, the Special Education Department works with families, teachers, service providers, and our Information Technology Services department to ensure that these students have appropriate assistive technology support and resources.

Special Education teachers work in collaboration with General Education teachers to assist students in completing digital assignments and finding accommodations when required. Special Education teachers define for General Education teachers the proper use of adaptive technologies required for their students to complete digital assignments. Special Education Assistive Technology Specialists support teachers and IEP Teams by providing access and training with appropriate technologies and digital resources for students with disabilities.

These ongoing efforts to provide access to digital tools and resources are being implemented to help students with special needs access appropriate content, curriculum, and learning based on individual needs.

The EdTech staff also works with Special Education staff to improve communication and collaboration between general education and SPED classroom teachers, to improve student completion of digital lessons, and to advance student confidence in taking assessments. Students must have equal access to technology to not only complete digital assignments, but learn foundational skills to make them competitive for school, workplace, and society in the 21st Century. Based on past and on-going student and parent BrightBytes surveys, the district maintains a picture of how many of our population do not have internet access at home. Based on this data, our tablets were purchased with hard-drive space so that curriculum and assignments could be downloaded and stored on the device. By providing the same opportunities for those who do not have internet access at home, the district is bridging the digital divide.

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.

The Technology Plan is driven by the West Contra Costa Unified School District's Local Control Accountability Plan (LCAP) Goals:

1. Improve student achievement for all students and accelerate student learning increases for English Learner (EL) and low income (LI) students.
2. Improve instructional practice through professional development and professional learning communities at schools and recruiting and retaining high quality teachers and principals.
3. Increase parent and community engagement, involvement, and satisfaction.
4. Improve student engagement and climate outcomes, and allocate services to English Learner (EL) and Low Income (LI) students.
5. Provide basic services to all students, including facilities, access to materials and technology.

Furthermore, the Educational Technology Team is dedicated to:

- Providing and coordinating full time coaching support in the classroom.
- Facilitating the integration of technology into instruction district-wide.
- Supporting schools with professional development to improve capacity in integrating technology into regular classroom practice using the SAMR model of technology integration and the 4Cs: Collaboration, Creativity, Critical Thinking, and Communication.

Students must have equal access to technology to not only complete digital assignments, but learn foundational skills to make them competitive for school, workplace, and society in the 21st Century. Based on past and on-going student and parent BrightBytes surveys, the district maintains a picture of how many of our population do not have internet access at home. Based on this data, our tablets were purchased with hard-drive space so that curriculum and assignments could be downloaded and stored on the device. By providing the same opportunities for those who do not have internet access at home, the district is bridging the digital divide.

Goal 2c: Technology will be integrated into all curricular areas to assist students in mastering California Common Core Standards (CCCS) as well as practicing and acquiring the 4 C's (Critical thinking, Communication, Collaboration, and Creativity).
Objective 2c.1: By June 30, 2020, all sites' Single Plans for Student Achievement (SPSA) will include one educational technology based action for every goal.
Year 1 Benchmark: By June 30, 2018, all sites' Single Plans for Student Achievement (SPSA) will include one educational technology based action for 50% of their goals.
Year 2 Benchmark: By June 30, 2019, all sites' Single Plans for Student Achievement (SPSA) will include one educational technology based action for 75% of their goals.

Objective 2c.2: By June 30, 2020, 90% of all teaching staff will plan instructional activities that integrate technology for the purpose of engaging students in the 4Cs (critical thinking, communication, collaboration, and creativity).
Year 1 Benchmark: By June 30, 2018, 40% of all teaching staff will plan instructional activities that integrate technology for the purpose of engaging students in the 4Cs (critical thinking, communication, collaboration, and creativity).
Year 2 Benchmark: By June 30, 2019, 70% of all teaching staff will plan instructional activities that integrate technology for the purpose of engaging students in the 4Cs (critical thinking, communication, collaboration, and creativity).

Objective 2c.3: By June 30, 2020, 90% of teachers and administrators will be able to define SAMR and 4C goals and describe their use in the classroom. Administrators will effectively observe classrooms and measure technology integration.
Year 1 Benchmark: By June 30, 2018, 40% of teachers and administrators will be able to define SAMR and 4C goals and describe their use in the classroom. Administrators will effectively observe classrooms and measure technology integration.
Year 2 Benchmark: By June 30, 2019, 70% of teachers and administrators will be able to define SAMR and 4C goals and describe their use in the classroom. Administrators will effectively observe classrooms and measure technology integration.

Objective 2c.4: By June 30, 2020, 80% of administrators, teaching staff, and instructional aides will actively use online tools such as GSuite (formerly Google Apps for Education), Illuminate, ed1stop, and other apps and web services adopted by the District in order to advance learning and complete professional duties.
Year 1 Benchmark: By June 30, 2018, 40% of administrators, teaching staff, and instructional aides will actively use online tools such as GSuite (formerly Google Apps for Education), Illuminate, ed1stop, and other apps and web services adopted by the District in order to advance learning and complete professional duties.
Year 2 Benchmark: By June 30, 2019, 70% of administrators, teaching staff, and instructional aides will actively use online tools such as GSuite (formerly Google Apps for Education), Illuminate, ed1stop, and other apps and web services adopted by the District in order to advance learning and complete professional duties.

Activities	Timeline	Department(s) Responsible	Monitoring & Evaluation	LCAP Goal
Provide support in the development of technology actions to support goals in SPSAs.	Starting January 2018	EdTech Team	Number of technology focused actions in SPSAs	1, 2, 4
Provide ongoing support to all teachers in the integration of technology into regular classroom practice	Ongoing	EdTech Team	Number of teachers supported and feedback through evaluations	1, 2
Post exemplary tech-integrated lessons to the district's EdTech website	Starting Fall 2017	EdTech Team, Tech Teacher Leaders, and Classroom Teachers	Number of posts and teachers involved	1, 2, 4
Provide workshops for teachers to collaborate on creating technology integrated lessons as well as evaluate and edit online lessons	Starting Fall 2017	EdTech Team	Number of workshops, attendance, and feedback through Evaluations; BrightByte survey data	1, 2, 4
Provide online materials as well as face-to-face professional development on SAMR and the 4Cs	Starting Spring 2017	EdTech Team	Number of workshops, attendance, and feedback through evaluations; BrightByte survey data	1, 2, 4

Teachers and administrators will participate in live and online produced professional developments created by the EdTech team to reinforce common definitions and goals for one-to-one integration.	Ongoing	EdTech Team, Teachers, Administrators	# of certificates and surveys.	1, 2, 4
Create, facilitate, and support teacher PLCs (Professional Learning Community) around the use of technology in the classroom and focused on SAMR and the 4Cs	Starting Fall 2017	EdTech Team	Number of meetings, attendance, and feedback through evaluations; BrightByte survey data	2
Teachers and administrators will use technology resources to obtain, analyze and present assessment data (state and local) to inform instruction and program design.	Ongoing	Site personnel: Administrators, Instructional Leadership Teams, Teachers	Meeting agendas and minutes	2
Teachers will use Google Classroom and GSuite as a means of designing assignments in line with SAMR, communicate with parents and students, and showcase student work.	Ongoing	Teachers and administrators with support from EdTech Team members	Parent, student, and faculty feedback and showcase via Classroom/ Site/ District social media	1, 2, 3, 4

Include technology integration as an agenda item at all elementary and secondary curriculum professional development sessions. Use SAMR model for base of inquiry.	Starting Fall 2017	Educational Services, EdTech Team	Meeting agendas and minutes	2
Include technology integration as an agenda item at all site staff and ILT meetings	Starting Fall 2017	Site staff and Administrators	Meeting agenda	1, 2, 4

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.

Goal 2d: Technology will be integrated into all curricular areas to assist students in mastering California Common Core Standards (CCCS) as well as practicing and acquiring the 4 C's (Critical thinking, Communication, Collaboration, and Creativity).
Objective 2d.1: By June 30, 2020, 80% of student learning activities in ELA, Math, Social Science and Science will indicate digital lessons that integrate technology to the substitution and augmentation levels of SAMR integration.
Year 1 Benchmark: By June 30, 2018, 20% of student learning activities in ELA, Math, Social Science, and Science will indicate digital lessons that integrate technology to the substitution and augmentation levels of SAMR integration.
Year 2 Benchmark: By June 30, 2019, 50% of student learning activities in ELA, Math, Social Science, and Science will indicate digital lessons that integrate technology to the substitution and augmentation levels of SAMR integration.

Objective 2d.2: By June 30, 2020, 80% of students will acquire and use information literacy skills and fair use rules and become proficient in the use of multimedia computer and internet technologies in order to be successful navigators, communicators, informational processors, critical thinkers, and digital citizens.
Year 1 Benchmark: By June 30, 2018, 25% of students will acquire and use information literacy skills and fair use rules and become proficient in the use of multimedia computer and internet technologies in order to be successful navigators, communicators, informational processors, critical thinkers, and digital citizens.
Year 2 Benchmark: By June 30, 2019, 50% of students will acquire and use information literacy skills and fair use rules and become proficient in the use of multimedia computer and internet technologies in order to be successful navigators, communicators, informational processors, critical thinkers, and digital citizens.

Objective 2d.3: By June 2020, 90% of WCCUSD students will have a tablet device that includes cloud-based productivity tools, collaboration tools, research tools, and digital textbooks for use at school and at home.
Year 1 Benchmark: By June 30, 2018, 50% of WCCUSD students will have a tablet device that includes cloud-based productivity tools, collaboration tools, research tools, and digital textbooks for use at school and at home.
Year 2 Benchmark: By June 30, 2019, 75% of WCCUSD students will have a tablet device that includes cloud-based productivity tools, collaboration tools, research tools, and digital textbooks for use at school and at home.

Objective 2d.4: By June 2020, 90% of WCCUSD students will demonstrate proficiency in using digital technology for academic work.
Year 1 Benchmark: By June 30, 2018, 50% of WCCUSD students will demonstrate proficiency in using digital technology for academic work.
Year 2 Benchmark: By June 30, 2019, 75% of WCCUSD students will demonstrate proficiency in using digital technology for academic work.

Activities	Timeline	Department(s) Responsible	Monitoring & Evaluation	LCAP Goal
Assessment- Conduct the BrightBytes survey to determine degree of computer use and knowledge of students	Bi-annually in Fall and Spring	Educational Services (EdTech Team)	Survey results	1, 2, 4
Adopt articulated, grade level technology proficiency standards for Pre-K-12 that address 21st century skills and student technology proficiency (including keyboarding skills) and information literacy based on the 2016 ISTE Standards for Students.	Starting May 2017	EdTech Team, Educational Services	Technology Sub-Committee members, Educational Services, and EdTech Team	1, 2, 4, 5
Institute a system through which students learn not only how to troubleshoot, but also how to help others to solve technology questions and problems.	Starting Fall 2017	EdTech Team, ITS, Tech Teacher Leaders, Site Administrators	System is communicated to school community	1, 2, 3, 4, 5
Curriculum will be advanced that presents students will guidelines for cybersafety and digital citizenship.	Ongoing	EdTech Team, Educational Services, and Library Services	Observations and student surveys	1, 2, 3, 4, 5

District guidelines will be developed to ensure all students receive timely instruction in order to ensure their proficiency for class work and SMARTER Balanced assessments.	Starting Spring 2017	EdTech Team, Educational Services, Site administrators	District guidelines posted on the district's website once completed	1, 2
Professional development sessions are given in transitioning appropriate curriculum, lessons, labs and assessments to a digital format.	Ongoing	EdTech Team	Number of workshops, attendance, and feedback through evaluations	1, 2, 4
Advanced professional development sessions given on SAMR, blended learning, TPACK, digital workflow, and parent and student communication.	Starting Spring 2017	EdTech Team	Number of workshops, attendance, and feedback through evaluations	1, 2, 4
The annual Digital Learning Day focuses on digital citizenship, with lessons and resources for teachers and students.	Ongoing	EdTech Team	Observations, teacher certificates of completion and evaluations, BrightBytes data from student surveys	1, 2, 3, 4

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.

Goal 2e: Teachers and students will become knowledgeable about the human, cultural, and societal issues related to technology and will practice legal and ethical behavior including copyrighted work and avoiding plagiarism.
Objective 2e.1: By June 30, 2020, 100% of Technology Teacher Leaders will be Common Sense Certified Educators.
Year 1 Benchmark: By June 30, 2018, 50% of Technology Teacher Leaders will be Common Sense Certified Educators.
Year 2 Benchmark: By June 30, 2019, 75% of Technology Teacher Leaders will be Common Sense Certified Educators.

Objective 2e.2: By June 30, 2020, 90% of teachers will teach at least two digital citizenship lessons from Common Sense Media during the 2019-2020 school year.
Year 1 Benchmark: By June 30, 2018, 50% of teachers will teach at least two digital citizenship lessons from Common Sense Media during the 2017-2018 school year.
Year 2 Benchmark: By June 30, 2019, 70% of teachers will teach at least two digital citizenship lessons from Common Sense Media during the 2018-2019 school year.

Objective 2e.3: By June 30, 2020, 50% of schools will hold a Digital Learning Night during the 2019-2020 school year.
Year 1 Benchmark: By June 30, 2018, 20% of schools will hold a Digital Learning Night during the 2017-2018 school year.
Year 2 Benchmark: By June 30, 2019, 40% of schools will hold a Digital Learning Night during the 2018-2019 school year.

Activities	Timeline	Department(s) Responsible	Monitoring & Evaluation	LCAP Goal
Adopt articulated, grade level technology proficiency standards for Pre-K-12 that address 21st century skills and student technology proficiency and information literacy based on the 2016 ISTE Standards for Students.	Starting May 2017	EdTech Team, Educational Services	Technology Sub-Committee members, Educational Services, and EdTech Team	1, 2, 4, 5
Institute a system through which students become certificated Digital Citizens.	Starting Fall 2017	EdTech Team, ITS, Tech Teacher Leaders, Site Administrators	System is communicated to school community	1, 2, 3, 4, 5
Curriculum will be advanced that presents students will guidelines for cybersafety and digital citizenship.	Ongoing	EdTech Team, Educational Services, and Library Services	Observations and student surveys	1, 2, 3, 4, 5
Professional development sessions are given in including digital citizenship lessons and conversations into regular classroom practice.	Ongoing	EdTech Team	Number of workshops, attendance, and feedback through evaluations	1, 2, 4

The annual Digital Learning Day focuses on digital citizenship, with lessons and resources for teachers and students.	Ongoing	EdTech Team	Observations, teacher certificates of completion and evaluations, BrightBytes data from student surveys	1, 2, 3, 4

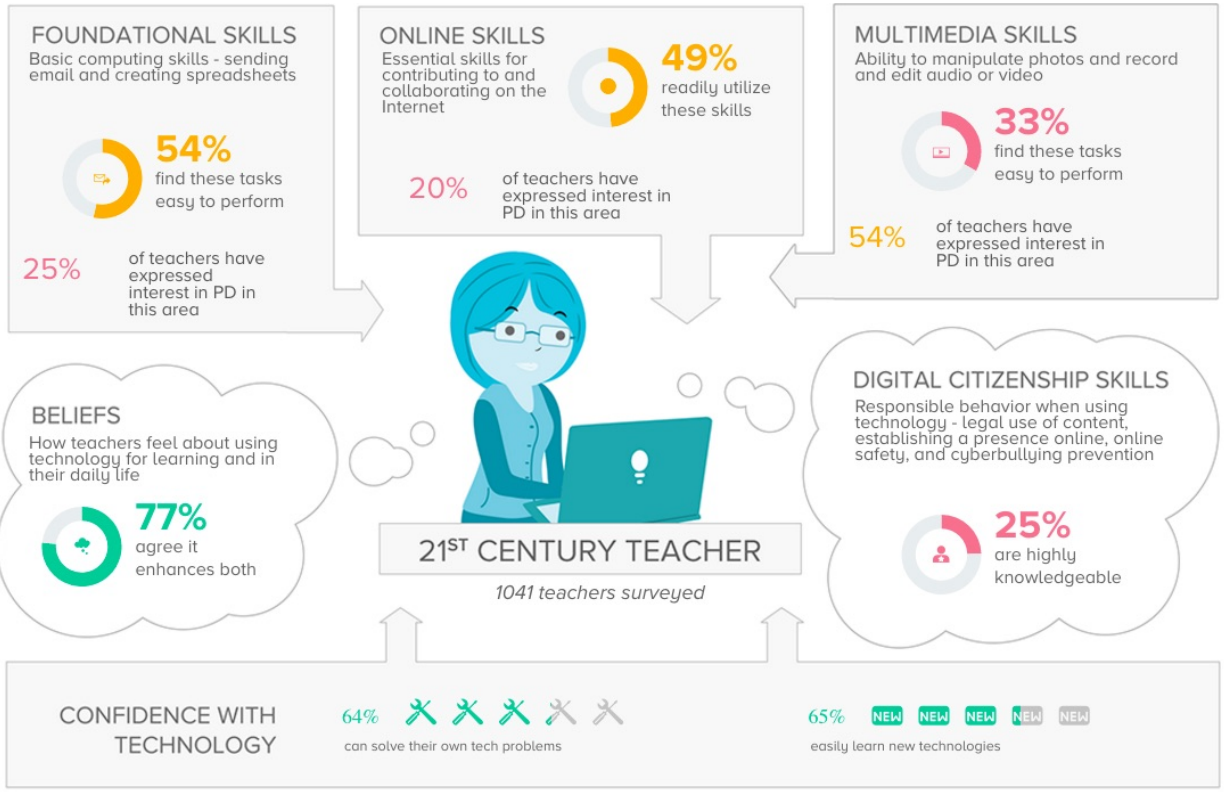
3. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA: The Plan must have a professional development strategy to ensure that staff understands how to use these new technologies to improve education services.

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

3a. Teachers' and Administrators' Current Technology Proficiency
Summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development.

1. BrightBytes surveys: twice yearly, Fall 2014, Spring 2015, Fall 2015, Spring 2016, Fall 2016
2. 70% of certificated staff took the Fall 2016 survey
3. PD offered since Fall 2016: Illuminate (district assessment system), GSuite (formerly Google Apps for Education: Drive, Docs, Slides, Sheets, Forms), Google Classroom (classroom management), Social Media for Personalized Learning
4. Tech Teacher Leaders
5. Coaches

The 2016-17 school year has seen a much greater interest and occurrence of professional development on the use of technology. This has been driven by our current 1:1 implementation as well as the growing importance of educational technology in teaching and learning. Since the fall of 2014, we have used BrightBytes to collect data biannually about our teachers and administrators' technology access, skills, and use, both personal and professional. A summary of the most recent evaluation (Fall 2016) is below:



Seventy percent of our certificated staff members (both teachers and site administrators) took the survey. The data shows that while the majority of our teachers and site administrators believe that technology enhances both learning and their daily lives (77%), just over half (54%) are comfortable with basic computing skills, just less than half (49%) are using essential online skills, and only a third (33%) have multimedia skills. More importantly, only a quarter of our certificated staff feel they are highly knowledgeable in digital citizenship skills. Bridging the divide between belief/interest and skills/usage/confidence is the aim of our professional development.

According to the most recent BrightBytes survey, teachers are most interested in the following professional development topics:

Multimedia Skills	54%
Classroom Management with Technology	51%
Online Tools for Critical Thinking	44%
Online Collaboration	39%

During the 2016-17 school year, we have concentrated on GSuite (formerly Google Apps for Education) (online collaboration and writing), Google Classroom (classroom management), and Illuminate Education (district assessment system). Currently, most professional development is provided in after school sessions that focus on one tool and its integration into classroom practice. The time is divided between differentiated instruction (direct instruction for those who want it, with all class materials and resources shared so that those who are more comfortable can work ahead) and time to plan using the tool in the classroom. Our EdTech Summer Camp extends our professional development year into June with sessions on specific integration strategies using different tools and resources. Participants are given ample time and support in practicing and planning.

Educational technology is supported within the central office by three Teachers on Special Assignment. The District Educational Technologist provides a majority of the district-wide professional development, serves as an EdTech support to administrators and teachers, and, with the Educational Technology coaches, plans professional development, including the yearly EdTech Summer Camp. Our Educational Technology coaches, one each for elementary and secondary, are an integral part of our professional development program. While more traditional, whole group training is offered district-wide, our coaches work with individual teachers and grade levels to provide specific support through modeling, small group training, and collaboration on tech integration. In addition, our coaches provide planning support to school sites and assist at district professional development sessions.

Each school has an on-site Technology Teacher Leader, a classroom teacher who acts not only as an EdTech support to other teachers and disseminator of technology updates, but also a provider of training. Professional development is delivered by Technology Teacher Leaders at our sites on modified or collaboration days, or in small groups after school.

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

Goal 3b: Technology will be integrated into all curricular areas to assist students in mastering California Common Core Standards (CCCS) as well as practicing and acquiring the 4 C's (Critical thinking, Communication, Collaboration, and Creativity).
Objective 3b.1: By June 30, 2020, 90% of all district-lead professional development will include instructional strategies that integrate technology into the curriculum, based on the SAMR model.
Year 1 Benchmark: By June 30, 2018, 40% of all district-lead professional development will include instructional strategies that integrate technology into the curriculum.
Year 2 Benchmark: By June 30, 2019, 70% of all district-lead professional development will include instructional strategies that integrate technology into the curriculum.
Objective 3b.2: **By June 30, 2020, 100% of lesson plan development in ELA, Math, Social Science and Science will take into consideration where, when, and how technology tools will be integrated.**
Year 1 Benchmark: **By June 30, 2018, 60% of lesson plan development in ELA, Math, Social Science and Science will take into consideration where, when, and how technology tools will be integrated.**
Year 2 Benchmark: **By June 30, 2019, 80% of lesson plan development in ELA, Math, Social Science and Science will take into consideration where, when, and how technology tools will be integrated.**

Objective 3b.3: By June 30, 2020, 90% of teaching staff will actively use online tools, such as GSuite (formerly Google Apps for Education), ed1stop, Newsela, and Encyclopedia Britannica to plan and implement instruction and to monitor and assess student learning as measured by the bi-annual Brightbytes survey.
Year 1 Benchmark: By June 30, 2018, 50% of teaching staff will actively use online tools, such as GSuite (formerly Google Apps for Education), ed1stop, Newsela, and Encyclopedia Britannica to plan and implement instruction and to monitor and assess student learning as measured by the bi-annual Brightbytes survey.
Year 2 Benchmark: By June 30, 2019, 75% of teaching staff will actively use online tools, such as GSuite (formerly Google Apps for Education), ed1stop, Newsela, and Encyclopedia Britannica to plan and implement instruction and to monitor and assess student learning as measured by the bi-annual Brightbytes survey.

Activities	**Timeline**	**Department(s) Responsible**	**Monitoring & Evaluation**	**LCAP Goal**
Assessment- Conduct the BrightBytes survey to determine degree of computer use and knowledge of teachers	Bi-annually in Fall and Spring	Educational Services (EdTech Team)	Survey results	1, 2, 4
Assessment- Conduct a professional development preference survey of all site certificated staff to determine specific PD needs in EdTech	Spring 2017 and annually in the Spring	Educational Services (EdTech Team)	Survey results	2
Assessment- Technology Teacher Leaders analyze all survey data in order to plan site professional development in EdTech	Fall 2017 and annually in the Fall	Educational Services (EdTech Team) and Tech Teacher Leaders	List of EdTech professional development sessions by site	2

Provide ongoing support to all teachers in the integration of technology into regular classroom practice	Ongoing	EdTech Team	Number of teachers supported and feedback through evaluations	2
Post exemplary tech-integrated lessons to the district's EdTech website	Starting Fall 2017	EdTech Team, Tech Teacher Leaders, and Classroom Teachers	Number of posts and teachers involved	1, 2, 4
Provide workshops for teachers to collaborate on creating technology integrated lessons as well as evaluate and edit online lessons	Starting Fall 2017	EdTech Team	Number of workshops, attendance, and feedback through evaluations; BrightByte survey data	2
Provide online materials as well as face-to-face professional development on SAMR and the 4Cs	Starting Spring 2017	EdTech Team	Number of workshops, attendance, and feedback through evaluations; BrightByte survey data	2
Teachers and administrators will participate in live and online produced professional developments created by the EdTech team to reinforce common definitions and goals for one-to-one integration.	Ongoing	EdTech Team, Teachers, Administrators	# of certificates and surveys.	1, 2, 4

Create, facilitate, and support teacher PLCs around the use of technology in the classroom and focused on SAMR and the 4Cs	Starting Fall 2017	EdTech Team	Number of meetings, attendance, and feedback through evaluations; BrightByte survey data	2
All school sites include 30 minutes of EdTech focused professional development/discussion every month within their collaboration time	Fall 2017 and ongoing	Site Administration and Technology Teacher Leaders	List of EdTech professional development sessions by site, site meeting agenda	2
Include technology as a standing agenda item for all elementary and secondary curriculum meetings.	Begin August 2017	Educational Services and K-Adult Operations	Meeting agendas	1, 2, 3, 4
Include technology integration as an agenda item at all elementary and secondary curriculum professional development sessions. Use SAMR model for base of inquiry.	Starting Fall 2017	Educational Services, EdTech Team	Meeting agendas and minutes	2
Continue to update educational technology website with all professional development materials, example lessons, and other online resources	Ongoing	Educational Services (EdTech Team)	www.wccusd.net/edtech	1, 2, 4

Create a comprehensive professional development plan focusing on technology integration	June 2017 and updated yearly	Educational Services (EdTech Team)	PD EdTech sessions added to the district PD calendar	1, 2, 3, 4, 5
EdTech Coaches work with individual teachers and grade levels to provide specific support through modeling, small group training, and collaboration on tech integration.	Ongoing	Educational Services (EdTech Team)	Number of teachers/grade levels/sites worked with	1, 2, 4
EdTech Coaches and the District EdTechnologist work with school sites to support strategic planning around the integration of technology into regular classroom practice.	Ongoing	Educational Services (EdTech Team)	SPSA	1, 2, 4
Week-long EdTech Summer Camp for intensive professional development on tech integration	Ongoing	EdTech Team	Attendance, surveys, resources posted on the EdTech website	1, 2, 4

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.

WCCUSD communicates with parents through a variety of technologies. Communication through email and our auto-dialer system are the most common methods used to inform parents of upcoming events, attendance issues and other information. The district's webpage is also used to inform parents and the public of district events, school information, LCAP dashboards, meetings and a variety of other information. Our webpage is updated daily and can be found at http://www.wccusd.net.

Most families have internet connections through their phones or home devices. All parents are able to be communicated with by phone and because of this, it is the most common method used for urgent or informational messages. Teachers communicate with parents through their websites, email or phone. Because of our diverse population, methods vary. All staff members have email accounts. At this time, WCCUSD does not provide students with email.

Each site is equipped with a router capable of a 10 Gb connection to our central office. WCCUSD has a 10 Gb connection to the internet, through our county office, with a redundant 1 Gb link. Switches in all IDF's are also capable for 10 Gb connections to the main router. Some sites have older fiber and are capable of only 1 Gb connections. All sites have wireless throughout in order to accommodate the tablet technologies. All servers are either cloud-based or are located in the central office. All secondary schools have a minimum of 2 labs and most elementary sites have one lab. Each classroom is equipped with a projector, document camera and laptop. Most classrooms have mini-labs of 5 computers/laptops and the teacher has one stationary computer. Workstations are no longer being replaced due to mobility being the priority. Media centers and offices are equipped with multiple workstations/laptops for staff and student use. Our district uses Cisco VoIP provided by a cloud-based company. All classrooms, other rooms and offices are equipped with a Cisco phone. The district also uses the Bogan intercom system, used in the case of announcements or emergencies.

The district has invested in an updated Cisco Unified Communication data center and NetApp and EMC storage devices. The district uses a hybrid approach for its content filter. Part of it exists as a module on our firewall (Sourcefire) and the other is cloud-based (Open DNS). For mobility, we use iBoss to filter students while off site.

The district pays an outside company to inventory all equipment on a yearly basis. This inventory is kept at the district level for insurance purposes and consists of make, model, serial number, P.O. number and date of acquisition. All new equipment is tagged and logged by our warehouse department and our software allows us to keep track of the age of the equipment and where it is located. Sites must sign for their equipment and computers are named by specific location. When equipment is "aged out", it is tagged as E-waste and a professional E-waste company disposes of the equipment.

All workstations are locked down to prevent theft. All mobile devices have software installed that allows us to locate stolen or lost devices. These devices are insured by the company providing the software and if a device cannot be located, the district recovers a

portion of the cost depending on the age of the device. This money is used to purchase new devices for replacement. The district also has an insurance division which assists with loss due to natural disaster or theft. Stolen equipment procedures can be found at http://www.wccusd.net/cms/lib03/CA01001466/Centricity/domain/79/resources/Stolen%20Laptop%20Reporting.pdf.

The district uses a variety of electronic resources for our students. Almost all of this software is cloud-based. Licenses are purchased through our library system and through our IT department. The district uses Microsoft Office for email and productivity tools, Google Drive and associated apps for district/staff communication, Google Apps for Education for students, LanSchool for computer/tablet classroom management and Destiny software for digital textbooks and other digital material. These resources are used district-wide and will accommodate all grade levels. Grade-specific software and online applications must be approved by the Educational Services Department. The approval process can be located at http://www.wccusd.net/Page/5652. The resources that have been approved can be found at http://www.wccusd.net/Page/5872. All resources are tightly tied into our Common Core Standards and LCAP goals and must be justified by the site principal before approval.

The Information Technology Department employs 3 helpdesk technicians, 2 system technicians, 4 network specialists and nine desktop technicians to support the entire district. WCCUSD also employs 12 staff members who provide data support for our Student Information Management System, State Reporting and Attendance. This information can be found at http://www.wccusd.net/page/528. An outside company is also hired to help support the district with tablet repair and faster response times. A "loaner" cart of 40 tablets are located at each site for the purpose of providing immediate replacement of broken or lost tablets. Once a week, the broken tablets are repaired and replaced. Most helpdesk tickets are resolved within 3 days. Projects take much longer, sometimes up to a couple weeks.

The district uses ERATE (80%) to defray the costs of internet connections. Category 2 projects, upgrading site infrastructures, have been paid by using both Bond funds and ERATE discounts.

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.

In order to better support curriculum and instruction, WCCUSD plans to implement the following technologies:

1. Student email
2. Up-to-date database of parent email and cell phones for texting
3. Upgrade Firewall and Intrusion Protection System
4. Online Registration
5. Wireless upgrades at all sites – To keep up with changing wireless standards, it is recommended to upgrade wireless access points every 6 years for approximately 10 sites per year on a rotational basis. Prices will decrease as the cabling standards do not change as quickly as the wireless standards.
6. LanSchool

7. Network Monitoring Tools
8. Upgrade aged equipment – To keep up with changing computer standards, it is recommended to replace or **upgrade** equipment every 4 years for tablets and 5 years for laptops and desktops.
9. More personnel to support technology
10. Bridging the digital divide by providing internet to disadvantaged students

Technology needs 2017-2020				
Technology Needed	Rationale	Timeline	Cost	Funding Source
Student Email	Balancing student safety and better communication between teachers and students has been a challenge for the district. Therefore, the district will create a closed-system, using Google's Gmail where students will be able to communicate within the district only.	August, 2017	$0	NA
Up-to-date database of parent email and cell phones for texting	A more accurate database of parent email and cell phone numbers needs to be collected. At the present time, many emails and cell phone numbers are inaccurate or incomplete. This will allow the district to reach parents in a variety of ways for informational or emergency purposes. Information will be collected through surveys and registration.	December, 2017 and ongoing	$0	NA

Upgrade Intrusion Protection System and Firewall to accommodate increased bandwidth	The current hardware does not have enough throughput to support the number of users we now have on the Internet. It is also not robust enough to inspect malicious traffic.	August, 2017	$300,000	Bond Funds
Online Registration	WCCUSD is in the process of implementing online registration. Full implementation, more training and ongoing communication needs to be accomplished.	August, 2018 August, 2019	$70,500 $73,745	General Funds Technology Budget (Budgeted)
Wireless Upgrades	Wireless technology changes often as well as the need for more wireless devices to accommodate the ever increasing devices that connect. Last year, the district built a new infrastructure for 3 of our neediest schools. This year, we will be rebuilding the wireless infrastructure for 12 of our sites (Bayview, Chavez, DeJean, Fairmont, Grant, Highland, Lake, Lincoln, Riverside, Stege and Washington. Next year, the plan is to rebuild 8 sites (El Cerrito, Hanna Ranch, Hercules Middle and High, Kensington, Montalvin, Murphy and Vista). The rebuilding process needs to continue in this manner for 10 sites per year.	July, 2017 July, 2018 July, 2019 - 10 sites	$720,959 $1,400,000 $800,000	Bond Funding after ERATE Discount Bond Funding after ERATE Discount General Funds after ERATE discount

Mobile Management	The district has purchased LanSchool (5000 licenses) to assist teachers in the classroom to manage the tablets and computers. Because Lenovo owns LanSchool, a license comes with each tablet (15000 licenses) Configuration of the software, additional licenses (10,000) need to be purchases, roll-out and teacher training must still be accomplished.	August, 2017 - Configuration is complete January, 2018 - Roll-out is complete August 2019 - Teacher training is complete	$0 as long as Lenovo tablets continue to be the standard. Included in price $200,000 for non-Lenovo licenses	NA General Funds Technology Budget
Network Monitoring Tools	The district has purchased Cisco Prime and LiveAction to monitor all aspects of network functioning for the purpose of being proactive and minimize downtime. Configuration and training is necessary to complete the process.	August, 2017 - Configuration is complete January, 2018 - Training is complete for network team January, 2019 - Training is complete for LAN team August, 2019 - Active monitoring by all staff is occurring	Training costs are included in Cisco credits previously purchased with equipment 2017–2020 $150,000 Prime licenses are purchased with equipment	General Funds Technology Budget (Budgeted)
Upgrade Aged Equipment	All equipment (tablets, laptops, etc…) should be replaced every 4 to 5 years respectively.	August, 2017 and ongoing each year. Inventory to be replaced is determined.	$4,000,000	General Funds (Reserves)

Tech Support Needs	In order to create a promotional "tiered" structure in the IT Department, a new job description for a Senior Desktop Technician has been created. 2 Senior Desktop Technicians and 1 Desktop Technician should be hired by August, 2017.	April, 2017 - Senior Desktop Technician job is approved August, 2017 - 2 Senior Desktop Technicians and 1 Desktop hired.	August,2017 - $225,000 for 2 Senior Techs and 1 Desktop Tech and ongoing	General Funds Technology Budget (Budgeted)
Site Tech Support	Hire a classified or certified person for 20 hours per month to assist with technology repairs.	August, 2017 Begin planning January, 2018 Implement at all Schools	$395,200 for all sites and ongoing	Title 1 or LCAP TBD
Bridging the digital divide by providing internet to disadvantaged students	A recent survey was conducted at all sites asking who does not have internet at home. The results are indicated below in Figure 1. Based on the results of the survey, a plan will be created and funding sources and donations will be sought. Disadvantaged students will be provided with internet access at home.	July, 2017 Create a plan to solicit funds September, 2017 Implement plan August, 2018 All students have access.	$360,000 per year based on 1500 students at $20 per month.	Donations and Grants

Figure 1

School:	Site Location:	Counts:	3/17/2017 Enrollment
Bayview	San Pablo		570
Chavez	Richmond	52	564
Collins	Pinole	0	327

Coronado	Richmond	48	453
Crespi	El Sobrante	29	496
DeAnza	Richmond		1308
DeJean	Richmond	62	482
Dover	San Pablo	78	711
Downer	San Pablo	58	620
El Cerrito High	El Cerrito		1465
Ellerhorst	Pinole	6	372
Fairmont	El Cerrito	13	548
Ford	San Pablo		477
Gateway	?		135
Grant	Richmond	189	491
Greenwood	Richmond	24	231
Hanna Ranch	Hercules	7	489
Harbour Way	El Sobrante		18
Harding	El Cerrito	6	431
Helms Middle	San Pablo	38	1000
Hercules High	Hercules	2	988
Hercules Middle	Hercules	18	587
Highland	Richmond	21	477
Home Teach	?		73
Kennedy	Richmond	46	932
Kensington	Kensington	5	507
King	Richmond	48	483
Korematsu	El Cerrito	24	649
Lake	San Pablo	66	423
Lincoln	Richmond		445
Lupine Hills	Hercules		381
Madera	El Cerrito		506
Middle College	San Pablo	7	283

Mira Vista	Richmond	8	548
Montalvin	San Pablo	36	429
Murphy	Richmond	11	508
Nystrom	Richmond		507
Ohlone	Hercules		386
Olinda	Richmond	10	303
Peres	Richmond		536
Pinole Middle	Pinole		543
Pinole High	Pinole		1143
Richmond High	Richmond	30	1569
Riverside	San Pablo	25	382
Shannon	Pinole	10	335
Sheldon	Richmond	15	387
Stege	Richmond	51	285
Stewart	Pinole	24	459
Tara Hills	San Pablo	19	494
Transition	San Pablo	17	115
Valley View	Richmond	10	346
Verde	Richmond		324
Vista High	San Pablo	4	154
Washington	Richmond	29	459
Wilson	Richmond	28	474
		1174	
			28608

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.

Evaluation Instrument(s) & Data To Be Collected	Frequency of Collection	Process to Monitor
BrightBytes Survey: • Teacher technology proficiencies • Teacher instructional use • Student technology proficiencies • Student classroom use	Bi-annually (Fall and Spring)	After each collection, the EdTech Team will review data and make adjustments as needed to coaching schedules and professional development opportunities as well as provide reports to the EdTech Subcommittee.
Sign-in Sheets: Number of attendees	Each professional development opportunity	Data Collected, aggregated and disseminated by the EdTech Team.
Workshop Evaluations: Effectiveness of trainings	Each professional development opportunity	Data Collected, aggregated and disseminated by the EdTech Team.
Single Plan for Student Achievement: one educational technology based action for every goal	Annually	Data Collected, aggregated and disseminated by the EdTech Team.

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.

Expected Outcomes:

- Determine the impact of technology use on student learning
- Measure levels and types of student and teacher use
- Determine what technology uses have the most of benefits for students
- Monitor status of implementation as planned.
- Revise plan timeline and activities on an on-going basis

The District will develop strategies to assess the impact of a standards-based technology embedded curriculum, taught by well-trained teachers, on student achievement. Throughout the three years of this plan, the Technology Subcommittee will meet monthly and serve as a forum to:

1) determine if the plan is being implemented, and
2) determine the impact of the plan on student learning.

During the first year, quarterly reporting processes will be established in order to develop an Implementation Checklist for the plan's components. This checklist will assess progress towards achieving total implementation of the plan activities and strategies. Cabinet level staff or designee responsible for overseeing the plan components will provide qualitative and quantitative data based on the instruments describe in each component section. Teacher and administrative surveys will be used to determine the impact of the plan on student learning. Please refer to the Curriculum, Professional Development, and Infrastructure, etc. components for the details of the instruments for data collection and analysis.

The Technology Advisory Committee will use the data to determine the overall effectiveness of the plan and to assess the need to adjust or modify the activities, timelines, and budgets. The committee will prepare an implementation status report on the progress toward the plan goals and the completion of activities and submit the report and budget recommendation to Superintendent and the West Contra Costa Unified School District Board of Education on an annual basis.

Schedule for evaluating the effect of plan implementation

Implementation of the Plan:

The District will conduct an ongoing formative evaluation and assessment of progress towards the goals to inform decision making and professional development, and to make mid-course corrections in implementation.

Evaluation Instrument(s) & Data To Be Collected	Frequency of Collection	Process to Monitor
Progress Reports: Evaluating plan effectiveness	Quarterly	Each year the Chief Technology Officer will prepare an Annual Action Plan based on the Technology Plan and available funding. The CTO will prepare progress reports and financial summaries on the implementation of the Action Plan for members of Cabinet. Based upon feedback, modifications will be made to the plan as needed.
Progress Reports: Evaluating plan effectiveness	Quarterly	The CTO will prepare progress reports and financial summaries on the implementation of the Action Plan for the Technology Subcommittee Meeting. Based upon feedback, modifications will be made to the plan as needed.
Technology Newsletter	Quarterly	The quarterly Technology Newsletter will be a vehicle to disseminate information, celebrate successes and share teaching and learning experiences.