

Education Technology K-12 Voucher

Westside Union Elementary



July 1, 2016 - June 30, 2019

05/19/2016

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.

Westside Union School District

District Technology Use Plan

2016-2019

Website: <http://www.westside.k12.ca.us>

Introduction

The Westside Union School District Governing Board, management, teaching, and support staff are committed to providing and maintaining a positive, safe educational environment in which children acquire the basic reasoning skills to be successful learners and productive citizens. Providing educational programs that maximize the students' abilities to be academically successful is the priority of the school district. This is accomplished by ensuring that students have specific standards of academic expectation, are instructed by highly qualified professionals, and have access to a variety of learning strategies and standard based materials. The Board recognizes that students and staff must be equipped and trained to use available technology to support and enhance the curriculum and provide meaningful learning opportunities. Developing a technology focus for curriculum, professional development, equipment acquisition, funding resources, and monitoring is essential.

Westside Union School District serves over 9,200 students and is located in the geographically largest elementary district within the County of Los Angeles covering about 360 miles. The district is made up of twelve school sites. Seven elementary schools within the district serve the needs of the students in kindergarten through sixth grade, three schools serve students in grades K-8, and two schools serve students in grades six, seven and eight. In addition, there is a home education program.

The district is located in the Antelope Valley which is in the northeast region of Los Angeles County. Six of the twelve school sites receive Title I funding. Of the six sites receiving Title I funding, four sites are elementary schools. The other two sites serve students in grades K--8, but are considered title I in the

elementary level only. Approximately 7.4% of students are classified English Language Learners. Ethnicities of the student population district-wide as reported in the October- 2015 - 2016 CBEDS are: American Indian/Alaskan Native 0.25% Asian 4.5% Pacific Islander 0.17% Hispanic 42.49% African American 11.2% White 36.03% Mult/No 6.59%

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

The Westside Union School District Technology Committee formed the team that reviewed and revised the Westside Union School District Technology Plan. Committee members include at least one certificated representative from each school site including classroom teachers, classified representatives from the Information Technology Department, the Assistant Superintendent of Instruction, the administrator of Information Technology, the Curriculum Resource Teacher for Technology, and parent representatives. The Curriculum Resource Teachers specializing in core curriculum were consulted for curriculum integration support. The Director of Curriculum and Instruction assisted with staff development planning. Industry specialists were consulted, when appropriate, for assistance with networking issues, appropriate software, staff development opportunities, and hardware purchases.

In September 2016, the stakeholders met to review the district technology goals and the 2016--2019 technology plan. The group focused on different components of the plan and included members with expertise in the area addressed. Committee members shared ideas in a large group setting. The Curriculum Resource Teacher and the Supervisor of Information Technology compiled the revisions into a rough draft. The rough draft was reviewed and further revised by the tech plan revision group in October. The final version was published at the beginning of November and reviewed by the Assistant Superintendent of Educational Services. The plan was presented to members of the Westside Union District School Board of Trustees.

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

All curriculum and use of technology is research driven. The CCSS are research based. The LEA's research based LCAP provides focus on professional development and inclusion. Information is also gathered from a cadre of teachers who are constantly evaluating the adoptions and curriculums and their effectiveness to reach the LCAP, Technology Scope and Sequence (WUSD CCTSS.) goals, NGSS, and the CCSS. It is understood that all programs and curriculum need to be effective and address the district's goals.

Some major goals of the LCAP, WUSD CCTSS, and this Technology plan is to achieve an equality of technology access and ability to the district's students. One of the items the district is addressing is the training of teachers and support staff in technology. All classrooms need to have equal access to the same technology and a teacher that can teach using that technology effectively.

[Technology research for WUSD's Reading Language Arts adoption](#)

[Technology research for WUSD's mathematics adoption](#)

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.

All school sites have two computer labs. Each computer lab is equipped with 35 work stations. 100% of instructional classrooms have at least one teacher and three student computers with network/Internet access. Epson Interactive Projectors or Smartboards are installed in every instructional classroom. Additional computer stations vary by classroom and site. Each library is equipped with 3 student computer stations.

There are iPads for Gregg Anderson staff, PE teachers, Joe Walker staff, Anaverde staff, Anaverde student cart, Project Lead the Way access, and Student Support Services (Speech, RSP, IEP- related). There are also iPads available in carts for K - 2 teachers at each site. There are Chromebook carts at all school sites which teachers have access for use in their classroom. Numbers of devices for students use in classroom

vary, depending on each school's resources and priorities. Currently the district has a 1:3 ratio of devices per student. More technology is being purchased all of the time and there is a Bring Your Own Device policy for the students as well.

In classrooms at each grade level, devices can be utilized daily as a resource for research, front loading, flip classrooms, blending learning, lesson presentation, collaborative planning, Common Core State Standards, Next Generation Science standards, daily assignments, gamification, and formative and summative assessments. Teachers are able to utilize their teacher workstation to project content from the curricular areas as well as references on varying sites. Teachers have access to lessons that utilize their interactive whiteboard technology in their classroom. The current Math and ELA adoption utilizes devices, projection, and interactive whiteboard technology. Teachers can access Power School, Illuminate, gradebook, Microsoft Office, the Adobe Suite, and Google Apps to manage their instruction and grades and communicate effectively with parents, students, and administrators. Westside is a Google Apps for Education (GAPE) district. Students and teachers have access to the apps utilizing their ability to address Common Core State Standards.

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.

The ratio of students to devices is 1:3 in Westside Union, but access is determined by student identifiers and grade level scope and sequence of Common Core and Next Generation Science standards.

All school sites have two computer labs. Each computer lab is equipped with 35 work stations. One computer lab is used mostly for intervention programs. This computer lab is accessed by the same students up to 3 times a week and students have access during after school tutoring. The other computer lab is used mostly for class instruction, in which all students will have computer access for 30 to 45 minutes each week. Before and after school access of computers in the lab is available for students at most sites.

100% of instructional classrooms have at least three student computers with network/Internet access. Additional computer stations vary by classroom and site. Each library is equipped with 3 student computer stations. Classroom computers are available for student use before and after school

by teacher permission. These computers are used by students throughout the instructional day for classroom assignments, research, intervention, and assessment. For some classrooms these are used to help students access class content when they do not have a device.

Classroom device carts are available at all school sites, which include Chromebooks and iPads. Numbers of devices for students use in classroom vary, depending on each school's resources and priorities. More technology is being purchased all of the time and there is a Bring Your Own Device policy for the students as well. Student's with special needs have iPads. These students include: Speech, RSP, and those with IEPs that directly correspond to the need of a device.

In classrooms at each grade level, devices are utilized daily by students as a resource for research, front loading, response to intervention, blended learning, collaborative work, CCSS standard mastery, daily assignments, gamification, and formative and summative assessments. All students use devices to fully utilize the current Math adoption. Students can access Google Apps to collaborate with their peers and teachers using any device, and every student has an account.

Computers in the computer lab and classrooms have a replacement plan of 5 to 6 years. Other devices are purchased as funding and resources become available at each site, but there is a annual 20% refresh cycle. LCAP drives most of the purchases of other devices because of equitable access.

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 Westside Union School District has developed district educational goals for each of the core curricular areas. Each set of curricular goals is aligned with the Common Core State Standards, or the state framework for the subject area and meets and/or exceeds the State Student Academic Content Standards. Adopted curricular materials aligned with academic content standards, are available at each grade level for each of the core subjects. Each teacher is responsible to meet California academic content standards and the district curricular goals. He/she determines specific academic needs, develop and implement appropriate strategies based on student data, parent input, teacher expertise, and district and community focus. All schools work to implement technology in curricular activities as

outlined in the District Technology plan and WUSD Common Core Technology Scope and Sequence. Each site outlines its curricular focus in its Single Plan for Student Achievement (SPSA). The school's technology plan is integrated within each SPSA in the area(s) where technology will be implemented. Implementation included in each site plan will be monitored at the site level and reported to the District Technology Committee by technology committee representatives. The District Technology Committee will work together to monitor evaluation and progress toward District technology goals. The committee will schedule quarterly after school meetings to address district technology issues and monitor the District Technology Plan goals and timelines.

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.

WUSD has developed and adopted a CCSS Technology Scope and Sequence (CCTSS) for all grade levels. This was adapted from the Fresno's and Long Beach's documents. WUSD's version focuses exclusively on skills needed to take the SBAC and gain mastery over the technology use placed into the CCSS. This gives teachers a quick glance on what skills need to be taught each year for students to achieve the goals set forward in the CCSS. Lessons are developed to encourage the development of technological skills embedded in activities focused on a standard. As the lessons progress, technological skills are introduced, reinforced, or expected to achieve the objective based on the CCSS or NGSS.

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.

WUSD uses CommonSense.org to develop and teach lessons on Internet safety to all students. All teachers receive training using this website's tools and lessons by a technology coach, or Ed Tech Guru, at their site. Teachers are to focus on Internet safety, privacy, copyright, and on-line bullying at the beginning of each school year as appropriate by grade level. Teachers then monitor and continue to stress the importance of what was covered throughout the school year. Students are not currently using email, social networking, or instant messaging in instruction. Students use Google tools to collaborate

with their peers and teachers to fulfill the CCSS. Teachers communicate with parents and students through email, websites, and different LMS (learning management systems); such as Google Classroom and Canvas.

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.

Currently WUSD has a group of teachers and administrators who are committed to learning and implementing new technologies in every classroom. The desire is for every student to access and have the opportunity to learn CCSS, CCTSS, and NGSS standards with embedded technology. WUSD has a group of instructional teacher leaders called the Edtech Gurus that evaluate needs and give professional development at their sites based on observable needs reflected in teacher's proficiency skills. Current adoptions of curriculum require teachers, administrators, and students to utilize technology to fully address the CCSS. There is a focus on skills required by students to achieve the WUSD CCTSS and require the teachers and administrators to be fully capable of doing these tasks to instruct the students. Yearly Educational Services gives a survey to teachers and administrators that anonymously collects their needs for professional development. The 2016 survey shows that 67.8% feel proficient with technology integration and on a basic level 32.2% feel that they are proficient with communication and grading tools. Teachers and administrators have opportunities to watch video training using the online tech training site: www.wusdtechfaq.com. PD is offered at their site with the Edtech Gurus once a week. Specific training is offered by Educational Services during each quarter. The district also gives the opportunity for teachers and administrators to attend CUE Conferences as well as the AV EdTech Summit.

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

Teachers and administrators have opportunities to watch video training using the on-line tech training site: www.wusdtechfaq.com. PD is offered at their site with the Edtech Gurus once a week either in a regular staff meeting, or in a small group session. These instructors focus on the SAMR model as well as the 4 C's of the CCSS. Specific training is offered by Educational Services during each quarter. The LEA also gives the opportunity for teachers and administrators to attend CUE Conferences as well as the AV EdTech Summit.

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.

Westside uses the district's website, School Messenger, and PowerSchool to facilitate school/home communication. School Messenger sends email as well as phone calls/voicemail to parents regarding important school/district information. Hardware and access is not provided by Westside to students/parents for home access, but all schools have a computer kiosk available for parents to access information. All staff have email addresses and utilize this to communicate with parents. The district does not host student email.

We have moved away from installed computer software, so currently, the main electronic learning resources for K - 8 students are online. Teachers, students, and parents utilize these resources to fulfil the CCSS, WUSD CCTSS, and LCAP goals. The district's ELA and Math curricula for K - 8 have online components for use during lessons, independent practice, and assessments. The district has an online student information system, PowerSchool, as well as an assessment and data system, Illuminate. These systems are used for assessment, grading, and communicating with parents. The LEA is a Google App for Education district. All students and teachers have access to this online service to address current curricular goals. New and current resources are reviewed, piloted, and adopted with help of committees of teachers and administrators. All resources are reviewed every year to determine their benefit. These

digital resources are available anywhere with Internet service access.

The District receives E-rate discounts for local voice lines, the SIP trunk line, cellular voice, internet access, and the Wide Area Network. The hardware/infrastructure currently exists of a 10 gb backbone with 1 gb connection to the district office. The District has a 10 gb fiber connection to the Internet. Each classroom has a wireless access in addition to outside access points. All sites are connected to the network in a mesh configuration. The district is currently utilizing 1 gb of the 10 gb available through the ISP, Time Warner, and have plenty of room for growth. The District has a Cisco VoIP phone system connecting to a SIP trunk provided by Verizon with a capacity of 80 concurrent calls. Each school has their own voice gateway with a fail over landline for 911 in case of network failure. System includes dual Callmanager and Unity servers for voicemail. All staff members have access to voicemail services.

The LEA's inventory is monitored in several ways. The district has an inventory document that tracks the age of desktops and hardware. The LEA is in the process of developing a more efficient system of tracking inventory. iPad inventory is done in Meraki. Chromebooks are managed through Google Administration. Devices are inventoried through make, model, serial number and can be tracked. Mobile devices are stored on carts or towers that are secured with a key. The carts are usually stored in a specific location on site for further security. Teachers and principals are responsible making sure that all devices are secured on site in their carts/towers at the end of the school day. All mobile devices have a annual 20% refresh cycle. All room entry points are monitored with cameras and alarmed when school is out of session. iPads are monitored with a mobile device management system, Meraki, and is installed on the device to monitor location and to shut down the iPad in case of theft.

The technology department supports the staff and students through an online ticketing system. Trouble tickets are prioritized by the issue and number of users affected. Tech problems directly affecting teaching and learning are typically responded to within 24 hours. Tickets for lower level tech concerns are usually resolved within one to two days. The current ratio of support techs to devices is 1:2,600. Staff have access to an online knowledgebase to research issues. Phone support is provided via an IT Helpline. Technology training is offered on-demand to all staff. The current ratio of support techs to devices is 1:2,600. Staff have access to an online knowledgebase to research issues. Phone support is

provided via an IT Helpline. Technology training is offered on-demand to all staff.

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.

Currently teachers and administrators have access to technologies to implement the plan. Wifi is currently at all sites, in every classroom, and outside access points. No new network improvements are needed at this time. Bandwidth and infrastructure is sufficient to support the plan and make use of emerging technologies. The District receives E-rate discounts for WAN and LAN access. Electrical capacity in the classrooms is currently under evaluation. Additional circuits will be added where needed to support the charging of mobile devices. Hallways, and offices and outside entry to all rooms are monitored by camera to keep the resources secure. Alarms are set in the main buildings on all campuses. By next year, the district goal is to have every room alarmed at each site. The planned layout of hardware and ancillary wiring is configured in a safe way for students and staff.

Access controls are in place to protect against unauthorized access or data leaks. The district uses Fortinet's Next Generation FortiGate application control system as the firewall. This appliance provides unified threat management protection, including intrusion prevention system (IPS), virtual private network (VPN) access, web filtering, application control, and data leakage protection. Encryption protocols are currently under review. The district uses Lightspeed Systems' web filter to monitor traffic on all ports. It allows us to block harmful websites and enforce safe search on all district computers. It also allows staff members to override the content filter and provides comprehensive reporting on user behavior.

Students and teachers are able to access the majority of their work from any location in the school or home. Many of the LEA's schools open the computer labs to students before and after school. All school sites are secured with physical access control systems that lock the campuses down on schedules and video surveillance that monitor activity. Parents and community members are able to access school information through the Internet and a web browser. Parents receive confidential passwords that enable them to access specific data regarding their student.

The LEA currently has a video on-line learning resource and a searchable knowledge database for teachers. The district also records via Hangouts on Air trainings that they can view later. The use of software support happens within 12 hours of an email to the Curriculum Resource Teacher for Technology. Teachers can request a training video, a sample lesson, or hands on one to one training from the CRT. Teachers also have a tech support hotline available, tech portal for work tickets, site techs, and Ed Tech gurus to help with the running and functionality of the software.

The District purchases Adobe and Microsoft licensing through the CAMSA discount program. As a feature of this program, both software vendors offer their software at a discount for staff members as well.

Students have access to Google Apps for Education and Microsoft Office 365 tools at any location. All new electronic learning resources that support academic content standards are reviewed and selected by Educational Services, and then evaluated for network compatibility by the IT department. Resources will be distributed via server or online application, where available. No new resources are needed for data collection or student management and all systems are compatible with local and state data collection systems.

Mobile devices are key to ensuring equitable access to technology for all students. Currently, the LEA's on campus' ratio of student to mobile device is 1:3. All students will need access to a device with internet access at school and home. In order to address equitable access, the district's goal is to increase to a ratio of 1:1.5 mobile device per student. Existing equipment is able to meet all needs with little modification as identified in the plan. The goal is to have 1,000:1, 1,000 devices per site tech or one site tech per school. Site techs do not provide support to students' personal devices.

The plan requires the LEA to consider new emerging technologies, broadband methods, device refresh, and support. Several of these technologies are described below. The plan's goals could utilize augmented reality which can help students become eye witnesses of events and locations. Google Expeditions, and VR combined with this technology can further enhance the CCSS. Wearable tech is also an emerging technology that could be used to implement the plan's goals. Students living in areas not serviced by broadband providers may need access to cellular data services. The district is also investigating the Lifeline federal program for the provision of broadband connection to the district's underserved families.

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.

Every semester the plan and its goals will be evaluated toward the success of the students and achievement goals set forth in the WUSD CCTSS. This will be determined by the Ed tech gurus, administration, and IT department and based on student access to devices, Google, Common Sense Media, and district on-line curriculum systems. Student and teacher data can be accessed through online management systems. The LEA will see a natural increase in the percent of teachers and students using Google Classroom. Google Drive will curate digital portfolios for students, teachers, and parents to reflect on academic growth. Student computer fluency and self efficacy will increase as observed during digital performance assessment. With the implementation of the above, student achievement should increase on the summative assessments that take place online through the Smarter Balanced Assessment. This plan is focused on the district's LCAP goals.

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.

Every year this plan will be re-evaluated and discussed with stakeholders. This will allow revision and clarification of goals as well as assessing the achievement of these goals. Successes, as well as areas of improvement, will be documented. This will create a method to make mid-course corrections. To evaluate these goals the Edtech Gurus, administration, and IT will collect data in regards to the use of technology and the furtherance of the WUSD CCTSS, CCSS, NGSS, and LCAP goals. A report will be generated after this evaluation and published on the district's website and at a school board meeting. Best practices will be further shared through the Edtech Guru sessions at each site.