

Sierra Sands Unified School District Technology Plan

July 2016 through June 2019

The SSUSD Technology Plan outlines the vision of technology implementation and integration based on LCAP goals. The technology plan will be used as an instructional roadmap to engage all learners.

District Vision: Growing a community of engaged learners connecting to future opportunities through innovative education engaging all learners.

District Mission: We are committed to providing the highest quality education in a safe environment to all K-12 students. We believe the school shares with the family, church, and community the responsibility for developing lifelong learners who are responsible, productive citizens.

District Goals 2014-2017:

Goal 1: Provide an academic program aligned with the Common Core State Standards that supports all students with equal opportunity for educational growth and creativity while preparing them for a productive future.

Goal 2: Provide district wide data systems to inform the implementation of a variety of student programs, opportunities, strategies, and targeted interventions that maximize student success.

Goal 3: Provide safe, drug-free, well-maintained, culturally-sensitive, and appropriately equipped schools to ensure a positive learning environment.

Goal 4: Provide opportunities for community input and educational advocacy through communication of goals, activities, and accomplishments in order to represent the desires and utilize the capabilities of our unique community.

Goal 5: Provide growth opportunities through professional development to engage all learners.

Past and Present

Sierra Sands Unified School District (SSUSD) has been on the road to recovery from the 2007-2010 budget crisis for a number of years. The Governor's latest budget has a projection of reaching 2007 budget levels by 2021. In this environment, it is often difficult to initiate new programs, especially those that require significant purchases and professional development. However, when the State of California announced one-time money in order to support the adoption of the Common Core State Standards (CCSS), the District could only spend that money in three categories: Instructional Materials, Professional Development, and Technology. Many districts needed to spend a significant portion of their CCSS funding on bandwidth, internet infrastructure, and wireless infrastructure in order to support devices and the new SBAC online testing. Prior to the one-time funding, SSUSD had spent years planning and building a significant infrastructure that could handle increasing bandwidth and support wireless devices. Please see the Hardware/Infrastructure section for a brief history and summary of our current state.

Because the infrastructure was already in place, the District was able to focus the CCSS technology expenditures on student devices. In the 2013-2014 school year, the District conducted an intensive comparison of devices from iPads to Tablets and Chromebooks. Chromebooks were being used in a number of districts in Southern California with great success, and they were seen as a way to introduce a large number of devices into student hands at a low cost. SSUSD involved many stakeholders in the investigation process; a small pilot was conducted as a way to provide Proof of Concept and in the end, Chromebooks were chosen as the preferred student device based on functionality, ease of use, ease of support, and total cost. The District also investigated acquiring a free Google Apps for Education domain in order to provide students with Google accounts for online collaboration, publishing, document storage, and interaction. In addition, during the 2013-2014 school year, the District applied for and received a technology grant to improve math and science performance for military connected students. This grant allowed the District to hire three Educational Technology Coaches to support technology integration in the curriculum. This integration included Chromebook and Google Apps adoption as well as many other educational technology components.

The District believes that technology is as fundamental to learning as the paper and pencil, so there is always at least one extra Chromebook in each class cart to ensure no one goes without in case of hardware failure. Since the initial roll-out, the District continued to add Chromebook devices each year until a 1:1 ratio was reached in the 2015-2016 school year. The Chromebooks have proven to be a vital part of instruction, engagement, and collaboration and they have performed very

well during the administration of the Smarter Balanced Assessment (SBAC) state assessments.

In the 2016-2017 school year, the District will begin its Chromebook sustainability program by replacing all of the first year Chromebooks with new Chromebook devices. In 2017-2018, the District will replace all of the second year Chromebooks, and so on. The District plans to continue this sustainability program into the foreseeable future so that every student in the District will continue to have a fully supported and functioning device.

Since its inception, the District has participated in the Federal E-Rate program as a way to supplement some of its technology related costs. The E-Rate program provides discounts on telephone costs as well as infrastructure devices that support internet connectivity. This program has allowed the District to implement and maintain a robust network infrastructure that supports 21st century learning with access to online content and resources.

The District has implemented several protection measures to ensure staff and students have access to safe and appropriate content online. One such measure is a content filter that allows District administration to block inappropriate websites as well as report on inappropriate behavior. The filter also provides reports on questionable web searches that not only help protect students from inappropriate access but also provides triggers and early indicators for concerns such as bullying, depression, or violence. The District also has anti-virus and anti-malware programs in place, as well as a district firewall and various monitoring programs that help to make sure our data and our network is safe and secure.

All of these components, from infrastructure to end user device, and all the protective measures in between have allowed the District to excel at providing a 21st century learning environment for our staff and students.

Existing Hardware/Infrastructure:

Sierra Sands Unified School District consists of eleven (11) school sites with multiple support service locations. All District sites are connected to the District network via wired or wireless network connectivity. Access to the Internet is provided through the District Data Center and includes control measures to ensure safety and security. The District Data Center is the central point for the District's computing services. The network is operated and maintained by the Technology Department.

School inventories are monitored using various software programs and methods to ensure implementation of District goals. This allows the District to adequately service and support the estimated 7,000+ network devices. Network devices are comprised of desktop PC's, laptops, tablets, and Chromebooks. The majority of classrooms have dedicated audio visual components to support delivery of instruction. Through recent modernization efforts, classrooms have adequate electrical capacity to support technology needs.

Networking, Internet, and Telecommunications Infrastructure:

The District currently has a 1 Gb Internet connection as well as a 1 Gb fiber backbone to all district sites. This level of service allows the District to meet the demands of 21st Century learning. The District will monitor bandwidth capacity to ensure technology needs are being met.

The District telecommunications infrastructure is comprised of a fully integrated Voice over IP (VoIP) and unified messaging solution. This increased the District's ability to enhance its safety and communication efforts to the sites. The system will be updated in the summer of 2016. It will continue to be evaluated on an ongoing basis to remain current with industry standards.

Local Control Accountability Plan Goal 1:

Provide an academic program aligned with the Common Core State Standards that supports all students with equal opportunity for educational growth and creativity while preparing them for a productive future.

SSUSD believes that in order for all students to be college and career ready, they must have access to technology and acquire digital literacy skills. It is recommended that future curriculum adoptions include digital platforms that provide student access to the curriculum from any internet-connected device. Technology should be utilized to improve teacher effectiveness and inform instruction through communication and formative assessments.

➤ **Prepare students to use technology and acquire digital literacy.**

- Implement and refine a TK-5th grade timeline of digital literacy skills.
- Technology Professional Development for teachers, instructional coaches, paraprofessionals, and administrators.
- Ensure technology integration is embedded into PGs (Pacing Guides) across the curriculum.
- Continued SBAC preparation.
- Google Accounts for all students for use on and off campus.
- Research possible tablet pilots in K-2 by 2016-17.
- Information Literacy - Purposeful development of curriculum on how to search for valid information, cite information, etc.
- Develop best practices that should be in all digital lessons.
- Develop lesson support that implements effective use of technology to improve teaching and learning.
- Work with school sites to adopt or transition to approved resources.

➤ **Prepare students for college and career readiness.**

- Sustain Chromebook Program.
- Student Email - Continue the use of student email platform as a productivity and learning tool for students in grades 3-12.
- Planning for online student portfolios.
- Ensure 12th grade students can transfer work from Google to a personal account before graduation.
- Since the District has reached a 1:1 ratio, the Chromebook sustainability plan will

go into effect in the 2016-2017 school year. The sustainability plan allows for the replacement of 1000-1500 (depending on budget) Chromebooks each year as a way to ensure all students have current and relevant devices. This also ensures that the devices the students are using will be supported by SBAC.

Professional Development

- Google Apps for Education
- Illuminate
- Aeries
- Socratic Seminars, DBQs (Document Based Questions), online collaboration
- Information Literacy
- Digital Citizenship
- Data Dashboard
- Renaissance Place 360
- Publisher Platforms

Staffing

- Technology Coaches (Educator Effectiveness Funding, 2016-2018)
- District Project Teachers
- Elementary Computer Paraprofessionals
- Technology Department
- Librarians

Local Control Accountability Plan Goal 2:

Provide district wide data systems to inform the implementation of a variety of student programs, opportunities, strategies, and targeted interventions that maximize student success.

The District is committed to a continuous improvement model and utilizes various platforms to assess student performance and inform instruction. Continued professional development will be provided to support the use of data systems. Support will be provided to teachers and administrators so that data and reports may be easily generated to guide interventions.

➤ Increase the use of data systems to maximize student success.

- Continue the use of the CADA (Common Assessment Data Analysis) tool to analyze student performance.
- Support Google to improve grade level and content collaboration.
- Develop and implement secondary common formative assessments.
- Train district Technology Coach, district computer paraprofessionals, site project teachers, librarians, and elementary administrators in Renaissance Place 360 to support running reports, collecting assessment data, and providing intervention.

Professional Development

- Google Apps for Education
- Illuminate
- Aeries
- Moby Max
- Ren Place 360
- CADA Tool
- Common Formative Assessments

Staffing

- Technology Coaches (Educator Effectiveness Funding, 2016-2018)
- District Project Teachers
- Elementary Computer Paraprofessionals
- Technology Department
- Librarians

Local Control Accountability Plan Goal 3:

Provide safe, drug-free, well-maintained, culturally-sensitive, appropriately equipped schools to ensure a positive learning environment.

The District is committed to providing safe, drug-free, well-maintained, culturally-sensitive, appropriately equipped schools to ensure a positive learning environment. The District believes that technology is an integral part of providing appropriately equipped schools. Technology should be effectively maintained to support 21st Century learning.

➤ Appropriately equip schools to ensure a positive learning environment.

- Work with business services to identify funding sources for continued purchase and refresh of infrastructure and software.
- Sustain grade level and content area to 1:1 Chromebook carts based on curricular needs.
- Purchase and deploy Chromebooks, licenses, carts, mice, and headphones for all students in identified grade levels.
- Purchase and deploy instructional technology support such as audio/visual components, interactive classroom technology, and other digital learning tools that aid in the engagement of students and delivery of instruction.
- Maintain consistent upgrades of wireless infrastructure and bandwidth increases.

Professional Development

- Google Apps for Education
- Electronic devices maintenance

Staffing

- Technology Coaches (Educator Effectiveness Funding, 2016-2018)
- District Project Teachers
- Technology Department

Local Control Accountability Plan Goal 4:

Provide opportunities for community input and educational advocacy through communication of goals, activities, and accomplishments in order to represent the desires and utilize the capabilities of our unique community.

The District values its partnership with the community and recognizes the importance of developing strong relationships. Community input and educational advocacy can be supported through technology such as the District and site websites as well as other resources. Technology resources are also an effective vehicle in which to communicate district goals, activities, and accomplishments.

➤ **Increased stakeholder engagement through various technology resources.**

- Continue encouraging use of the AERIES Parent Portal.
- Improve school-to-home communications through the use of a Mobile App.
- Continue district and site website upgrades.
- Improve site responsibility for website management.

Professional Development

- AERIES
- Communication via Mobile App

Staffing

- Technology Coaches (Educator Effectiveness Funding, 2016-2018)
- District Project Teachers
- Technology Department
- Site Administrators

Local Control Accountability Plan Goal 5:

Provide growth opportunities through professional development to engage all learners.

The District is committed to the Continuous Improvement Model which begins with ongoing professional learning and development. All district devices, applications, and system will be supported through professional development with the goal of improving teaching and learning.

- **Provide professional development to improve teaching and learning.**

Professional Development

- Electronic devices
- Applications
- Systems
- Instructional practices

Staffing

- Technology Coaches (Educator Effectiveness Funding, 2016-2018)
- District Project Teachers
- Technology Department
- Site Administrators

¹ Special thanks to Capistrano U.S.D. for sharing this template for the Sierra Sands Technology Plan format.