

Golden Plains Unified School District

Educational Technology Plan

July 2018 –June 2021



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Executive Summary

The Golden Plains Unified School District is made up of four K-8 schools (Cantua, Helm, San Joaquin, and Tranquility Elementary), one high school (Tranquility High School), and one continuation high school (Rio Del Rey). Golden Plains Unified School District has an enrollment of 1,709 students, with 57.2% English Learners, and 87.2% Free/Reduced Lunch. Golden Plains Unified School District is committed to providing high quality education to all students. Our staff provides a caring and compassionate environment as well as rigorous and challenging curriculum. Communication between parents, community, and school is imperative. The school calendar, upcoming events, staff e-mail addresses, sports schedules, updated grades for students, and many additional links to daily school activities can be accessed from the district website.

We are extremely excited about happenings at Golden Plains the past two years, because we have partnered up with outside researchers and practitioners that bring additional resources and practices to the district, i.e. Sobrato Early Academic Language (SEAL) Model, California Learning and Language Innovation collaboration (CALLI/Stanford University), and the New Pedagogies of Deep Learning (NPDL). The English Language Arts and English Language Development Framework provides alignment of practices so that the home language and culture are nurtured and embraced while learning rigorous grade level content. This year we have embarked in conversations and planning to bring a TK-12 Seal of Biliteracy and Career & Technical Education Pathways to the district. We look forward to all stakeholder participation; feedback and input throughout this planning year to better meet the needs of all of our students as we prepare our students to be College and Career Ready.

GPUSD community of teachers, staff and administrators are firm believes that Technology can be a powerful tool for transforming learning. It can help affirm and advance relationships between educators and students, reinvent our approaches to learning and collaboration, shrink long-standing equity and accessibility gaps, and adapt learning experiences to meet the needs of all learners. Our schools and communities should be incubators of exploration and invention. Educators should be collaborators in learning, seeking new knowledge and constantly acquiring new skills alongside their students. Education leaders should set a vision for creating learning experiences that provide the right tools and supports for all learners to thrive.

However, to realize fully the benefits of technology in our education system and provide authentic learning experiences, educators need to use technology effectively in their practice. Furthermore, education stakeholders should commit to working together to use technology to improve American education. These stakeholders include leaders; teachers, faculty, and other educators; researchers; policymakers; funders; technology developers; community members and organizations; and learners and their families.

Technology in the Golden Plains Unified School District will enhance student learning, improve the efficiency and productivity of staff members and facilitate communication among students, staff, and parents. This Plan addresses the following issues:

- Integration of technology into all classrooms to meet the needs of all students, provide individuality and choice, and enhance learning opportunities.
- Professional development for all staff to ensure that technology is used to transform learning opportunities for all students.
- Maintenance and update of infrastructure to ensure that technology tools are used seamlessly.
- Budget projections for future technology needs.
- Process for monitoring the implementation of the plan.

The Golden Plains School District is committed to providing high quality education to all students. Our staff provides a caring and compassionate environment as well as rigorous and challenging curriculum. Communication between parents, community and school is imperative.

GOLDEN PLAINS UNIFIED SCHOOL DISTRICT VISION, MISSION, TECHNOLOGY, AND GUIDING PRINCIPLES

Technology Vision

To leverage Technology that empowers learners to become digital citizens, constructors of knowledge, innovative designers, computational thinkers, creative communicators and global collaborators

Technology Mission

The golden Plains USD Technology exists to serve the individual educational technology needs of our teachers, staff and students.

Technology Guiding Principles

- All students and staff have access to technology whenever necessary
- The right tool is available and used whenever it is possible and appropriate
- The interaction between technologies is seamless
- Teachers and administrators actively explore and implement emerging trends in the effective use of technology for their potential to improve student learning
- Students are good digital citizens
- Internet access is reliable and consistent
- Technology is purposefully integrated to support clear learning goals
- Technology is the vehicle used to provide enhanced opportunities for rich multi-media collaboration and communication within and beyond the classroom

The Vision in Action

San Joaquin Elementary School is a typical k-8 elementary school in the Golden Plains Unified School District going through a typical day of teaching and learning during a typical mid-week school day in March 2020. The Golden Plains Unified School District has seen transformative growth in the use of technology that makes this school look far from typical to the eyes of an outsider who had not visited a GPUSD School since March 2018. As the Golden Plains Unified School District kept a steadfast focus on preparing students for jobs that don't yet exist and a world that has not yet been envisioned between March 2018 and March 2020, they focused on the thinking skills needed for our students to succeed and how technology could be used to transform learning.

In 2020, students access information from a wide range of resources that cover a span from traditional books to peers in other states and countries to experts in various fields to first- hand virtual experiences. They are able to analyze and synthesize information gleaned from these various resources to create questions, hypotheses, and solutions that help them to share their learning and solve real-world problems. Students then share their new ideas broadly, going well beyond the school walls to push their thinking back out into the world using communication tools that fit the content they have created and the audience they are targeting through blogs, videos, public service announcements, essays, speeches, and ad campaigns.

A Day at San Joaquin Elementary School, March 2020

Before school starts, teachers arrive to prepare for the day. A fifth grade teacher reviews discussion posts that his students made as part of their homework the previous evening. He is preparing for their discussion about the study of climate change that he will accentuate with Augmented Virtual Reality. As this unit moves forward, he is looking forward to asking students about the effects of climate change on

their surrounding communities. Students will explore and virtually experience the effects of climate changes of multiple seasons during a 50-minute VR session.

Students will use their devices to access their online textbooks. They will collaborate, share notes, and submit their online homework. Parents will get access to real time progress of their students. Over the course of the day, technology is seamlessly integrated to transform learning tasks across grade levels and throughout the site.

In sixth grade, a student has worked with her teacher to reach out to an expert in agricultural science professor from Fresno State University who is now engaging in a live video conference to provide the class feedback on an early warning system that they have researched, written about, and for which they are now working on an ad campaign.

Across the school in a fourth grade classroom, students are learning how to apply geometry with 3D printing. They are working on groups learning about 3-d dimensions, they are collaborating in real time with a sister-school in another country

A parent volunteer enters the front office and uses the School-Check In visitors system to confirm that she is a parent and to identify where she will be helping today. This system keeps track of all visitors on campus and where they are so that staff can account for all of our school community in the case of an emergency.

Our parent volunteer enters the school and walks to the Tech Café Center where her fifth grader is working with his teacher, the Science Specialist on an integrated Design Thinking project. The students are working on how to trap and use the rain and dew that comes off the school's roof in order to water the plants at SJES. They have come up with a variety of ideas, researched them, and connected with students at a green school in Santa Barbara that is trying to accomplish the same task. With the help of the Science and Technology specialists, students are working in teams to create prototypes for how they could use angles and forces such as gravity to move the water to a desired location. 3-D printers help them design prototypes, and each group is creating a presentation to share with the school.

As the school day comes to an end, students are allowed to take the devices home with them, This enables 24/7 learning without borders or boundaries, effectively extending the school day and encouraging students to develop a love of learning. Students, who have to take the bus home, are able to use district secure and filtered WI-FI network to continue working and collaborating on their homework assignments

As the teachers wrap up their learning for the day, they are excited about the prospect of guiding their students through another unit that is focused on identifiable learning goals, addresses specific standards, and culminates in opportunities for their students to work on a real-world problem. They look forward to seeing their students research the problem that has been identified, analyze the information they find to determine the most valuable pieces, and synthesize this information into their own solution, and they know that their students will find a variety of ways to share these real world solutions that address the new content they have created in a way that will engage the audience they are seeking to inspire!

STAKEHOLDERS

The stakeholders to this technology plan include teachers, administrators, and classified employees representing all sites, the district, and information technology staff. Input was gathered from all members of the below stakeholder group.

Stakeholders		
Mr. Martin Macias	Superintendent	District Office
Mustafa Zwebti	Director of Technology	District Office
Andrea Garcia	Library Technician	San Joaquin Elementary
Aaron Lescroart	English Teacher T	Tranquility High School
Jovanna Leon	Teacher	San Joaquin Elementary School
Phoua Vang	Teacher	Tranquility Elementary School
Terry Bradley	Teacher	San Joaquin Elementary School
Elizabeth Barnhart	Teacher	Helm Elementary School
Margaret Timmers	Teacher	Tranquility

Plan Duration

The duration of the Plan will be three years (July 1, 2018 through June 30, 2021) The Technology Advisory Committee will review and update the plan annually. The focus of this technology plan is the curriculum and professional development components while maintaining hardware, and infrastructure standards. The purpose of this 3-year Plan is to identify strategies that will help the Golden Plains Unified School District meet National Education Technology Standards (NETS) and promote student achievement on State and District adopted subject and grade level standards through the use of technology. Golden Plains Unified District strives for effective integration of technology into the classroom in support of student achievement. The Golden Plains Unified School District Educational Technology Plan outlines our vision of where the District would like to be at the end of the 3-year period (June 30, 2021).

Summary of Work of the Planning Committee

The Technology Advisory Committee met several times during the 2017-2018 school year. The committee consists of a variety of stakeholders, including a representative of grades k-8 and 9-12 grade levels, library media specialists, and the director of technology.

As a first step, Vision and strategies for the new plan were developed. Using Google Forms, teachers and staff were asked to participate in a technology survey. Survey results were used for the following:

- Identify current use of technology
- Develop technology goals
- Develop Technology Professional Development Goals
- Identity technology infrastructure to support the above goals

The Golden Plains Unified School District's Educational Technology Goals are based on International Society for Technology in Education (ISTE), California State Standards and the Strategic Plan of the Golden Plains Unified School District in order to deliver rigorous academic courses. The Technology Advisory Committee sets yearly priority actions in the area of technology to ensure that the district is continually moving forward utilizing the power of technology as a tool for effective instruction, assessment, and as a resource for student and staff learners to support 21set Century learning. The

Technology Plan will be reviewed and updated annually as part of the district's strategic planning process to include the identification of priority actions that will guide work toward attaining the plan goals.

The Technology Plan provides success indicators for each goal that identify what successful implementation will look like. These are written as observable actions such as "Teachers will actively use the SAMR model as a tool for thinking about purposeful integration of technology when planning lessons and units of instruction" or "Students will intentionally access a variety of resources in order to actively find information in order to solve problems, answer questions, and further their understanding both on their own and with support from staff."

PLAN COMPONENTS:

- **Current Use of Technology:** This section identifies our current use of technology. The findings are based on teachers' responses to technology surveys
- **Technology Goals**: Goals are focused on the continual learning process in which all Golden Plains Unified School District staff engage. These goals focus on observable actions that will support increased proficiency, integration, and use of technology, as well as parent learning and a focus on digital citizenship.
- **Professional Development:** This section identifies the technology professional development goals that will be required to ensure a successful implementation of the technology goals
- Infrastructure, Hardware, Technical Support, and Software: focused on the ongoing evaluation of infrastructure, hardware, and software needed to maintain an up- to-date network that allows classroom technology to run seamlessly. Adequate
- **Funding/Budget:** section focuses on projected costs for future technology needs identified by this plan.
- Monitoring and Evaluations: Processes and steps that will be implemented to ensure the plan's success

CURRENT USE OF TECHNOLOGY

GPUSD administration has invested time and resources to ensure that our teachers have the technology tools and support. Currently, all teachers have the following hardware in their classrooms: a laptop, a SMART Interactive TV or an LCD projector. In addition, most teachers also have at least one desktop and most schools have computer labs. The district is in the process of achieving one-to-one Chromebooks at each site. Chromebooks are 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.

GPUSD has invested in many online resources for administration and classroom management. All GPUSD Teachers/Staff members are provided with Google g-Suite Accounts. Email groups are created to provide secure collaboration tools. District Employees are provided with access to District Management System for Employee Self Service Activities

The district has (1) one Gig internet link to the Fresno County Office of Education. Three of the five district schools are connected to the district office via leased dark fiber from Comcast. The other two schools are connected to district via point-2-point wireless bridges.

The district has implemented a major network refresh during the 2017-18 SY, All core switches and have been upgraded. The district has continue to upgrade its wireless infrastructure to meet the increasing demands of staff and students.

The district just purchased and installed a new Cisco VoIP telephone system and offer Direct-Inward-Dialing telephone numbers to all administrators and front office staff. Voicemail, paging, intercom and bell schedules are also integrated with the phone system

Teachers and principals use Aeries, our current Student Information System (SIS), to input attendance and discipline data, access home information, and obtain emergency medical information. Aeries 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).

Special Education:

Currently, technology is used throughout the Special Education Department for data management and instructional support. Special Education staff use a web-based IEP management program for individualized education plan (IEP) development and service logs. The Internet is used for correspondence with other professionals in the District and for communication with parents and families, as is a web-based communication program. Within the IEP process and mandate, all Special Education students have assistive technology considered for educational support according to their IEP.

Description of the district's current use of hardware and software to support teaching and learning:

Hardware:

Golden Plains Unified School District has made a serious commitment to provide technology hardware and software. The purpose of hardware and software in District classrooms is to provide opportunities for students to support 21st Century learning. Students have access to computing and technology experiences at least once daily, and use technology for learning throughout the day at the upper grades.

Teachers and administrators use a variety of technology tools for productivity, teaching, and learning. The most common uses for both teachers and administrators are communicating with colleagues and parents via email, creating instructional materials, and providing instruction with the use of technology. Printers are available either in classrooms or school site wings via a local area network, and there are currently approximately 120 network printers across the district. Peripheral equipment available at various schools include SMART Interactive TV's, Promethean LCD projectors with speakers, and document cameras.

Software:

All Golden Plains Unified School District computers and mobile devices are licensed with the appropriate operating system, *Microsoft Office*, and variety of education technology software titles. Teachers and students use a variety of on-line tools, as well. The most widely used on-line applications are those in *Google Apps for Education* and Google Classroom

A variety of enrichment software is used by all kindergarten through sixth grade students for repetition and reinforcement to strengthen skills. This courseware is integrated into the core curriculum and used by teachers and students on a daily basis.

Internet Safety:

The Golden Plains Unified School District Technology Plan addresses Internet safety and the appropriate and ethical use of information and technology. All students must complete and sign a Technology Use Form in compliance with District Board Policy "Student Use of Technology" which details how technology is to be used.

All students are limited to web browser access by parental signature of approval and only for use under the direct supervision of certificated staff. Access to the internet is monitored and filtered by a Children Internet Protection Act (CIPA) Approved Filtering System.

The Golden Plains Unified School District continues to focus on technology as a tool to be embedded within instruction to transform learning based on a steadfast focus on meeting or exceeding our state standards. Technology is not viewed as an end goal of its own, rather, the focus is on how technology can improve student learning and prepare our students as thinkers and learners who will be successful in middle school, high school, and beyond. Teachers continually increase their use and integration of technology as they gain greater comfort and expertise with the devices, software, and applications at their disposal. This puts our district in a timely position to support the use of technology to transform lessons and units so that students are given choices in how they demonstrate learning, provided access to resources and opportunities for first-person interactions around the world, and have increased opportunities to use technology to consume, vet, analyze, and synthesize content in order to create

their own meaning and share this with others – this is the thinking and work of the $21^{\mbox{st}}$ Century.

EDUCATIONAL TECHNOLOGY GOALS

Technology facilitates the purposeful integration of learning between subjects, throughout the day, and across the school site in order to individualize learning and allow for student choice. Through training and regular use of technology, staff are experts in ensuring that the right technology tools are used to provide our students with opportunities to learn and share knowledge that would otherwise be unimaginable. A culture is clearly established around the willingness to embrace new ideas and proactively use technology by continually infusing local and global best practices, current trends, and future projections into all conversations about teaching and learning.

Goals

Our Technology Goals begin with the adoption and implementation GPUSD Technology Scope and Sequence (TSS) (Appendix A). This Scope and Sequence is adapted from the Fresno County Office of Education Recommended Digital Literacy and Technology Skills to Support the California Common Core State Standards. The skills identified for each grade level align to the Common Core State Standards (CCSS) for Mathematics and English Language Arts & Literacy in History/Social Studies, Science and Technical Subjects as well as skills required to take the Smarter Balanced Assessment Consortium (SBAC) Computer Adaptive Assessments. Additional skills identified in this Scope and Sequence are from the National Educational Technology Standards: Creativity and Innovation; Digital Citizenship; and Technology Operations and Concepts. The TSS is aligned with the Common Core State Standards requirements for Mathematics and English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects as well as skills required for the Smarter Balanced Assessment Consortium's Computer Adaptive Testing.

Goal #1 All Students will acquire and maintain technology skills as defined in the GPUSD Scope and Sequence

Students will integrate technology into all content areas to increase achievement in California State Standards

Beginning in December 2018,

Teachers will be provide with on-going training and instructions on implementing Scope and Sequence Skills as define for each grade level.

Technology Committee will prepare students' training materials to ensure that students have the proper technology skills

Goal #2 All Students will integrate technology into all content areas to increase achievement in California State Standards

By June 2021 GPUSD students will:

Use technology to reinforce and extend learning in all curricular areas.

Intentionally access a variety of resources in order to actively find information to solve problems, answer questions, and further their understanding both on their own and with support from staff.

Choose to create and share information through formats appropriate to the purpose and audience for the assignment – to include written work, video, presentation, blogs, or other formats that best fit the assignment.

Use standards-based software and web-based resources for extension and/or remediation to meet individual needs.

Use multi-media to transform their sharing and presentation of learning. This may include the use of PowerPoint, Google Slides or other multimedia creation tools that provide opportunities for students to create, display and share multimedia content.

Goal #3 Teachers will incorporate technology into teaching of all content areas to increase student achievement in the California Content Standards.

By June 30, 2021, 100% of teachers will:

Actively use the SAMR* model as a tool for thinking about the purposeful integration of technology when planning lessons and units of instruction.

*(Substitution Augmentation Modification and Redefinition)

Deliver lessons and units of instruction that intentionally integrate technology to further learning, student choice, and access to resources.

Use an online learning management system to plan, develop, and deliver lessons.

Use resources to provide first-person learning experiences through technology. This may include virtual field trips, videoconferences, and/or virtual reality.

Classroom teachers will work collaboratively to plan for the integration of technology into learning experiences focusing on using the right tool at the right time.

Goal #4 GPUSD will ensure that equitable access to technology is available to all students, including Special Education, English Language Learners, and underachieving students

Ongoing, GPUSD will

Build and implement a technology access model where technology is available in all classrooms.

Ensure that every student has a production device and broadband access and support and implement a 1:1 Take-Home Technology

Promote the adoption of Google platform to provide 100% of student with a digital portfolios

Goal #5 GPUSD will continue to explore and implement Digital Transformation Trends in Education

By June 30, 2021, GPSUD will

Replace all out of date computer labs with Classroom Set Devices, STEAM Labs and Tech Cafés

Students will use virtual reality devices to more closely examine topics of study (example virtual visit of the respiratory system) to promote a deeper understanding of the elements or processes being studied

Students will use Minecraft.edu to create 3-dimensional representations of topics studied across academic subjects with reports embedded into their models

GPUSD will seek funding to implement and sustain Fab Lap Project as part of a comprehensive technology program for grades 9 t-12

Students will explore working with robots (Wonder Dash & Dot) using the available accessories (e.g., launcher, xylophone, etc.) and advanced apps, challenge cards, and participate in Wonder competitions.

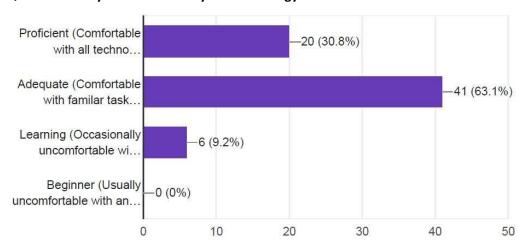
Adopt the integration of Coding for grades 4 – 12

PROFESSIONAL DEVELOPMENT GOALS

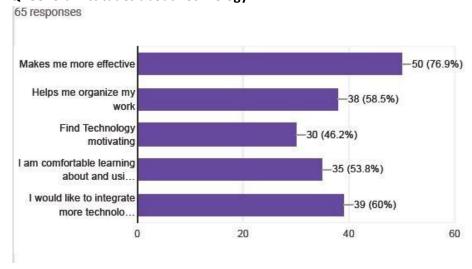
The focus of the professional development goals below is to support the implementation of the goals and success measures listed in the Technology Goals section of this plan. The Golden Plains Unified School District prioritizes professional learning and understands that focused goals based on the needs of our teachers and students and aligned with our Strategic Plan are necessary to ensure that technology is used to transform learning in the classroom. Feedback regarding professional learning needs is an ongoing process and has been gathered from all stakeholders listed in this plan, through the use of staff technology survey. The Staff Technology Survey Questions were designed to get teachers' responses regarding their current use of technology, their technology integration, technology comfort levels and towards identifying technology training needs

Sample questions of the 2018 Teachers/Staff Technology Survey Results: A complete survey results is attached as **Appendix B**

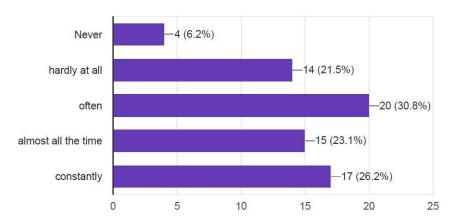
Q. How would you characterize your technology related skills?



Q: General Attitudes about Technology



Q: Please select the amount of time on a daily basis that you use computers to enhance student learning (student writing, content area drill and practice, student research, group projects).



Because we know that different skills and needs can be addressed in different ways, a combination of face-to-face learning, remote video conferencing, self-paced online learning, and online resource libraries will be developed to meet the needs of all adult learners in the Golden Plains Unified School District.

Goal #1 Teachers and administrators will use technology to collect and access student data for the purpose of guiding and improving instruction to meet the needs of all students.

By June 30, 2021, 100% of teachers and administrators will:

Be trained on the using online data management solution that puts a fast, powerful decision-support system at teachers and administrators fingertips.

Use student information systems, and SIS to analyze trends in recorded data and determine next steps for individuals, groups, and classes of students.

Develop individualized learning goals through their data analysis.

Use student data collected and organized to make collaborative instructional decisions during Professional Development Schedules

Use information collected and stored through web-based applications to inform and guide instructional decisions.

Goal #2 Staff will model the effective use of technology during district professional learning, site Professional Learning Communities, and Staff Meetings.

Ongoing

Principals and district learning leaders will regularly incorporate district-adopted technology into professional learning and staff meetings.

Staff will share information and engage in professional learning through purposeful use of Google Drive to share information and engage in professional discussions, as well as to build lessons and units of instruction.

GPSUD will support teachers who wish to become Google Certified Teachers (Trainers).

100% of all GPUSD teachers will become very proficient in all of the essential Google g-Suite applications

Goal #3 Build strong school/home/community relations through the use of technology.

Ongoing

All Golden Plains Unified School District schools and the district office will regularly use social media and district websites to proactively communicate with the school community.

The standard for contents on the District web page, school web pages, and a teachers' web pages will be regularly reviewed, updated, and shared.

Digital citizenship information and training will be shared with parents.

Goal #4 Provide training to teachers to integrate technology into the curriculum.

By June 30, 2021, Teachers will:

Engage in learning opportunities that develop an understanding of the SAMR* model in order to support their planning of transformative lessons and units.

*(SMAR Definition Appendix C)

Be given access to model examples of rich, collaborative, relevant standards-based learning opportunities that purposefully infuse technology.

Receive ongoing training and resources for the integration of technology into the curriculum.

Have opportunities to learn how to use multimedia resources to deliver instruction and provide opportunities for students to demonstrate learning in a variety of ways.

Help to identify further areas of need, district experts in these areas will be identified, and a structured collaboration model will provide a means for sharing this expertise.

Goal #5 Provide training to teachers to utilize lessons that promote good digital citizenship.

Ongoing

Teachers will be given an overview of grade level digital citizenship lessons, as well as time to review lessons and plan for instruction.

Digital Citizenship lessons for each grade level will be curated and shared through Google g-Suite

Teachers will receive training to teach safety issues related to Internet use, including: respect for published documents on the Internet; the importance of using appropriate citation practices to avoid plagiarism; safe, legal, and responsible use of technology; and how to recognize how copyright affects technology systems, information and software resources.

Goal #6 Provide training to teachers and administrators to support Digital Transformation Trends in Education

Ongoing

GPUSD will provide initial and on-going training on the implementation of Augmented Virtual Reality, Robotics, Coding and 3D Printing

Administrators will be trained on technology budgeting in order to provide on-going funding to ensure the success of Digital Transformation at each school site

Administrators will receive ongoing training to enhance and support technology standards with a special focus on the transformative use of technology through the SAMR model.

Goal #7 Professional Development Considerations for Technology Integration

Continue to use the Director of Technology and Technology Committee and Technology staff to support staff by modeling classroom applications.

Provide training to the Technology Team and teachers/staff to utilize the SAMR model for technology integration.

Utilize presentation tools that allow for remote learning to expand learning opportunities for teachers.

Provide training for administrators to aide in the support of their staff, to include web resources and trainings.

Expand professional learning opportunities to address different teacher learning styles including strengths and weaknesses by providing a variety of professional learning modalities, such as faceto-face, remote learning, self-paced learning and accessible learning resources.

Develop incentives to encourage staff to participate in training opportunities.

INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT AND SOFTWARE Existing Infrastructure, Hardware, Technical Support and Software

Golden Plains Unified School District has made a substantial commitment to technology in the classroom. We currently have a District wide data network in place with over 4000 network clients connected either by Ethernet or by Wireless Access Point. This investment in infrastructure and equipment is in a constant state of renewal, in that as we purchase new equipment our existing equipment is refurbished and re-assigned to an appropriate location. This helps us target needs across our district and ensure that we are maximizing the value of our equipment.

The current wide-area data network is Switched Ethernet Fiber from Comcast, in a hub and spoke pattern, with the hub located in Tranquility High School. From the main hub, Tranquility High School, Tranquility Elementary School, San Joaquin Elementary School and the District Office are connected by a Fiber Optic Metro Ethernet Link at 1000Mbps CIR (Committed Information Rate) with plans to increase the Metro Ethernet Link to 2000 Mbps CIR to each of the above school. Cantua Creek Elementary and Helm Elementary are connected via wireless bridges, limited to 300 Mbps. The central hub location is further connected to Fresno County Office of Education via a point-to- point 1000Mbps CIR. All central network equipment are powered through uninterruptible power supply equipment.

All eight elementary schools are equipped with multiple devices in all classrooms. In 2017-2018, GPUSD funded the replacement of 62 Teachers' Laptops and 62 SMART Interactive TV's. Up to 300 of the 1200+, Chromebooks have been replaced during 2017-2018 SY.

All classrooms are connected through wired Ethernet switching technology with from 2 to 8 network ports. In addition, all school sites are completely covered by 802.11 Ruckus wireless networking managed by a Cisco wireless controller. This data network infrastructure provides all students and teachers access to a variety of information resources including Internet access, email, Aeries Student Information System, data systems, Google Apps, and a variety of on-line resources, video conferencing, and District administrative functions.

Available software components supported by the District include:

- 1. **Acellus** is a computer-based online learning system that utilizes I² (Intelligent Interaction), which technology enables it to cater the educational content to the individual skill set of each student through customized, personal instructions
- 2. **ThinkCentral** is the Houghton Mifflin Harcourt (HMH) Web site that allows teachers and students to access digital materials associated with one or more HMH programs. It also allows administrators to set up and modify accounts, and run reports of student, class and school progress.
- 3. **Imagine Learning:** Individualized instruction. Adaptive learning paths meet students where they are, giving them the strategies and skills they need to succeed. Proven efficacy. Studies show significant gains for students who use Imagine Learning programs.
- 4. **Follett Destiny**: is a library manager is a complete library management system that can be accessed from anywhere, 24/7, helping to strengthen the crucial bond between the library, the classroom, and home.
- 5. **Blackboard Connect:** Blackboard Connect is a mass notification system that enables our administrator to send updates and emergency alerts to everyone in your community through emails, phone calls, text messages, or social media channels.

Technology Staffing:

Four full time Information Technology staff members provide a full range of technical support and training for teachers and administrative staff. These include 2 Technology Assistance, a technology technician and the Director of Technology. The team uses a variety of tools to support their work including: *Tools4Ever UMRA*; *Spiceworks* and a variety of on-line tools. This entire 4-person team is on hand to provide telephone, email and direct contact support for the Educational Technology Goals of the District.

In addition, Golden Plains Unified School District has implemented a help desk system for technical support across the district. During 2017-2018, the technology department responded to nearly 2,500 help desk tickets, along with many unrecorded instances of support, and deployed over 500 devices to schools.

Part of our vision includes researching new ways to improve our professional development and communication with tools such as distance learning, video conferencing, online education, and blogging. Depending on the content, professional learning can be provided in a variety of formats, to include face-to-face, remote video conferencing, online self-paced learning, and online resource libraries. We will be exploring the best combination of these resources to meet the needs of all of our adult learners. Maintaining the present level of technology support will be a crucial component in achieving the goals of this plan. As hardware and software use increases, the Director of Technology will review support levels and future needs and communicate these needs to the Superintendent. Goals for monitoring and obtaining the hardware, infrastructure, learning resources and technical support required to support the other components of this plan

INFRASTRUCTURE GOALS

Goal #1 Maintain Up-To-Date Technology Infrastructure to Support Multiple Devices per Student and Staff

On-going: Technology Department will monitor and evaluate network traffic and determine appropriate corrections when needed

December of every year: Director of Technology will identify infrastructure areas in need of upgrading and include the projects' costs as part of the E-Rate Applications

Goal #2 Develop & Implement Hardware Replacement Plan

By February of each year, Technology Department will:

Identify all end-user devices approaching Four-Year Replacement Cycle and prepare a budgetary costs, collaborate with site administrators and business office to identify funding sources

Identity all infrastructure hardware, such as servers, switches, wireless controllers and access points that are eligible for E-Rate Funding

Goal #3 Provide resources and support to ensure that every student in grades 8-12 and staff member has access to a personal computing device.

By Jan. 2019, GPUSD will:

Continue to replace desktop computers and computer labs at the end of life and purchase additional laptops and chrome books for all grades 8-12 in order to provide flexibility in personalized instruction.

Implement and expand wireless network systems, access points, and security systems to accommodate current and future wireless devices.

Implement policies in support of students and staff to use personal devices such as personal laptops and hand held devices.

Goal #4 Develop a Disaster Recovery Plan

By June, 2019, Technology Department will:

Collaborate with stakeholder to develop a documented process or set of procedures to recover and protect a business IT infrastructure in the event of a disaster. Such a plan, ordinarily documented in written form, specifies procedures an organization is to follow in the event of a disaster.

TECHNICAL SUPPORT GOALS

Goal #5 Maintain Present Levels Of Technology Support

Ongoing

Monitor, review and analyze technology support through help desk to determine process and/or personnel needs.

Cross-train staff so that multiple employees are able to respond to all district support needs.

Maintain systems for support, ordering, and record keeping.

Develop and maintain technology support set of users' expectation that defines service level agreements (SLA) for each technology support function

INTERNET CONNECTIVITY GOALS

Goal #6 Implement And Maintain Sufficient Internet Bandwidth Access

Ongoing:

Monitor, review and analyze technology support through help desk to determine process and/or personnel needs.

Cross-train staff so that multiple employees are able to respond to all district support needs.

Maintain systems for support, ordering, and record keeping.

Develop and maintain technology support set of users' expectation that defines service level agreements (SLA) for each technology support function

AUTOMATING OFFICE PROCEDURES

Goal #7 Streamline Business Office And HR Procedures

Ongoing:

Cross-train staff so that multiple employees are able to respond to all district support needs.

Maintain systems for support, ordering, and record keeping.

Develop and maintain technology support set of users' expectation that defines service level agreements (SLA) for each technology support function

FUNDING AND BUDGET DISTRICT FUNDING

The Golden Plains Unified School District depends on the local economy and property taxes to fund the District's budgets. Based on the District's Strategic Plan goals, each site principal works with all interested stakeholders (students, parents, staff, community, School Site Council, Parent Teacher Association, etc.) to determine how site monies are used to improve instruction and student achievement of all curricular standards.

Estimate of annual implementation costs beyond ongoing expenditures for the term of the plan

The current adopted 2015-2016 budget is displayed below. The second chart describes new projects proposed to support the implementation of this plan on a year-by-year basis along with projected costs.

HARDWARE & INFRASTRUCTURE

Year	Proposed Budget (including current and proposed expenditures)	Estimated Cost for Proposed Expenditures
2018-2021	Chromebooks Refresh and 1-to-1 initiative (300) Per year	\$90,000 per year
2018 – 2021	Teachers devices/SMART TV's	\$40,000 per year
2019 – 2021	Technology Café/ STEAM Lab (1) for each elem. School	\$20,000
2019-2020	Infrastructure/network refresh \$100,000 (90% to be funded by E-Rate)	\$10,000
2020-2021	Infrastructure/network refresh \$75,000 (90% to be funded by E-Rate)	\$7,500

PROFESSIONAL DEVELOPMENT

Year	Proposed Budget (including current and proposed expenditures)	Estimated Cost for Proposed Expenditures
	PD (Google g-Suite, Aeries Gradebook, Tech Integration, Everest Financial Workshops)	\$20,000 per year

Proposed budgets increases by year:

Year	Budget	
2018-2019	\$130,000	
2019-2020	\$135,000	
2020-2021	\$140,500	

Potential Saving: The technology has taken the lead in either renegotiating or eliminating several contracts, such as web hosting, duplicate web filtering and reducing telephone costs that resulted in an annual savings of more than \$30,000.

MONITORING AND EVALUATION

Process for monitoring, evaluating, and communicating progress

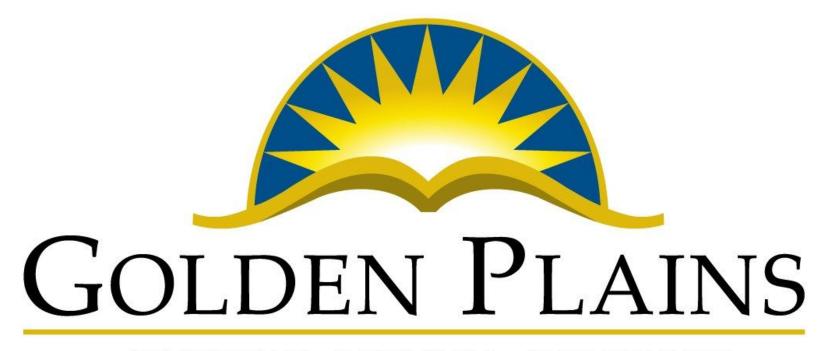
The Director of Technology, in collaboration with the Technology Advisory Committee, will be responsible for initiating the implementation of the Educational Technology Plan. Success indicators, as identified in the goals in the above sections (Instructional Program; Professional Learning; Infrastructure, Hardware, Technical Support, and Software; and Funding and Budget) will be monitored and evaluated through the Golden Plains Unified School District Strategic Management Process. Annual Priority Actions will be developed, acted upon, reviewed, and updated. At technology planning meetings, the technology advisory committee will develop a Priority Action List (PAL) and support the development of new Priority Actions for the following year. The Director of Technology will be responsible for evaluating progress toward Priority Actions on a quarterly basis with the support of the District Leadership Team. In addition, a report on infrastructure and classroom impact will be made to the School Board on an annual basis.

The District Technology Advisory Committee (TAC) will meet at least quarterly throughout each school year and discuss the following:

- Review progress in the current year on goals in the Technology Plan(at least twice per school year)
- Review results of feedback from classroom instructional staff regarding integration of technology in classrooms, implementation of Common Core Curriculum Standards, effectiveness of professional development and technical support
- Update resources available, including grants to support implementation and or adjustments to goals in the Technology Plan
- Collect information on innovations in technology and best practices to be disseminated to school sites
- Recommendations to the Superintendent on short-term revisions to the Technology Plan
 Through participation in TAC meetings, the Superintendent will be made aware of needs
 identified and any recommendations made by the TAC.

Information gathered from teachers and other instructional staff including recommendations, will be reviewed by the TAC at their meetings and the TAC will determine along with the Superintendent, if Board action is needed. The Superintendent and the Board as needed will evaluate recommended actions related to the Technology Plan.

When the District enacts a new the new Strategic Plan, the Technology Plan will become part of the Strategic Plan and the Technology Plan will continue to be monitored, evaluated, and updated through the implementation of the new Strategic Plan.



UNIFIED SCHOOL DISTRICT

Whatever it takes...Our kids are worth it

TECHNOLOGY SCOPE AND SEQUENCE 2018

Lower Elementary

Digital Literacy Categories		Alignment to CCSS/ SBAC	Skills	K	1	2	3	4	5
		SBAC test taking skills	Turn on a computer and login	I	I	R	М	М	М
	Basic Operations	SBAC test taking skills	Use pointing device such as a mouse to manipulate shapes, icons; click on urls, radio buttons, check boxes; use scroll bar	I	I	R	M	M	M
		SBAC test taking skills	Use desktop icons, windows and menus to open applications and documents	I	Ι	R	М	М	M
		SBAC test taking skills	File management – saving documents	0	I	I	R	М	M
Demonstrate proficiency in the use of		SBAC test taking skills	Explain and use age-appropriate online tools and resources (e.g. tutorial, assessment, web browser)		I	I	R	M	M
computers and applications		W6	Explain and use age-appropriate online tools and resources (e.g. tutorial, assessment, web browser)	I	I	R	M	M	M
as well as an understanding		W5, W6, W10	Use a word processing application to write, edit, print and save simple assignments	I	I	R	М	М	M
of the concepts underlying hardware,		W5, W6, W10	Use menu/toolbar functions (e.g. font/size/style/, line spacing, margins) to format, edit and print a document		I	I	Я	M	M
software and connectivity.	Word Processing	W5, W6, W10	Highlight text, copy and paste text		0	I	I	М	M
·		W5, W6, W10	Copy and paste images within the document and from outside sources Insert and size a graphic in a document		I	I	R	M	M

	L4	Proofread and edit writing using appropriate resources (e.g., dictionary, spell checker, grammar, and thesaurus)		O	I	I	R	M	
I – Introduce R – Reinforce M – Mastery (ability to teach others) O – Optional for grade level									

Digital Literacy Categories		Alignment to CCSS/ SBAC	Skills	K	1	2	3	4	5
		MD, SBAC testing skills	Demonstrate an understanding of the spreadsheet as a tool to record, organize and graph information.				I	I	R
	Spreadsheet (Tables/	SBAC testing skills	Identify and explain terms and concepts related to spreadsheets (i.e. cell, column, row, values, labels, chart graph)			0	I	I	R
	Charts and Graphs)	MD, SBAC testing skills	Enter/edit data in spreadsheets and perform calculations using formulas			0	I	I	R
Demonstrate		MD, SBAC testing skills	Use mathematical symbols e.g. + add, - minus, *multiply, /divide, ^ exponents				I	I	R
proficiency in the use of computers and applications		RI 7	Use spreadsheets and other applications to make predictions, solve problems and draw conclusions.				I	I	R
as well as an understanding of the concepts underlying hardware, software and connectivity.		W6	Create, edit and format text on a slide		I	I	R	M	M
		W6	Create a series of slides and organize them to present research or convey an idea			I	I	R	М
	Multimedia And	W6, SL 5	Copy and paste or import graphics; change their size and position on a slide			0	I	I	R
	Presentation Tools	W6, SL 5	Use painting and drawing tools/ applications to create and edit work			I	I	R	M

		W6, RL 7, SBAC testing skills	Watch online videos and use play, pause,	I	I	R	M	M	M	
I – Introduce R – Reinforce M – Mastery (ability to teach others) O – Optional for grade level										

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

I – Introduce R – Reinforce M – Mastery (ability to teach others) O - Optional for grade level

Digital Literacy Categories		Alignment to CCSS/ SBAC	Skills	K	1	2	3	4	5
		RI 5 RI 7	Use age appropriate technologies to locate, collect, organize content from media collection for specific purposes, citing sources.	I	I	R	М	M	M
		RI 5 RI 7	Perform basic searches on databases, (e.g. library, card catalog, encyclopedia) to locate information.			I	I	R	М
	Research and Gathering Information	RI 5 RI 7	Evaluate teacher-selected or self-selected Internet resources in terms of their usefulness for research.	I	I	R	М	M	M
	Information	RI 7	Use content specific technology tools (e.g. environmental probes, sensors, and measuring devices, simulations) to gather and analyze data.			0	I	I	R
		RI 6, RI 7, RI 9	Use Web 2.0 tools (e.g. online discussions, blogs and wikis) to gather and share information.			0	I	I	R
		RL 7	Identify and analyze the purpose of a media message (to inform, persuade and entertain).			I	I	R	М
Demonstrate the ability to		W 6	Work collaboratively online with other students under teacher supervision.			I	I	R	M
making, ar		W 6, W 10	Use a variety of age-appropriate technologies (e.g. drawing program, presentation software) to communicate and exchange ideas.		Ι	Ι	R	M	M
	Communication and Collaboration	W 6, W 10 SL 2, SL 5	Create projects that use text and various forms of graphics, audio, and video, (with proper citations) to communicate ideas.			I	I	R	M

creativity and innovation.	W 6, W 1 SL 3	Use teacher developed guidelines to evaluate multimedia presentations for organization, content, design, presentation and appropriateness of citations.		0	I	I	М
	W 6, W 1 SL 1	Use district approved Web 2.0 tools for communication and collaboration.		I	I	R	M

I – Introduce R – Reinforce M – Mastery (ability to teach others) O - Optional for grade level

Upper Elementary

Digital Literacy Categories		Alignment to CCSS/ SBAC	Skills	6	7	8
		Technology Operations & Concepts	Identify successful troubleshooting strategies for minor hardware and software issues/problems (e.g., "frozen screen").	I	I	R
	Basic Operation	Technology Operations & Concepts	Independently operate peripheral equipment (e.g., scanner, digital camera, camcorder), if available.	I	I	R
		Technology Operations & Concepts	Compress and expand large files.	I	I	R
Demonstrate proficiency in the use of computers and applications as well as an understanding of the concepts underlying the hardware, software and connectivity.		Technology Operations & Concepts	Identify and use a variety of storage media (e.g., CDs, DVDs, flash drives, school servers, and online storage spaces), and provide a rationale for using a certain medium for a specific purpose.	I	I	R
		W 6	Demonstrate automaticity in keyboarding skills by increasing accuracy and speed. (For students with disabilities, demonstrate alternate input techniques as appropriate.)	I	R	M
		Creativity & Innovation	Identify and assess the capabilities and limitations of emerging technologies.	I	I	R
		W 5, W 6, W 10	Demonstrate use of intermediate features in word processing application (e.g., tabs, indents, headers and footers, endnotes, bullet and numbering, tables).	I	I	R
		W 5, W 6, W 10, SL 5	Apply advanced formatting and page layout features when appropriate (e.g., columns, templates, and styles) to improve the appearance of documents and materials.	I	I	R
	Word Processing	W.5, W 6, W 10	Highlight text, copy and paste text.	I	R	M

W 5, W SL 1	, ,	Use the Comment function in Review for peer editing of documents.	I	I	R
W 5, W SL 1		Use the Track Changes feature in Review for peer editing of documents.		0	I

I – Introduce R – Reinforce M – Mastery (ability to teach others) O - Optional for grade level

Digital Literacy Categories		Alignment to CCSS/ SBAC	Skills	6	7	8
		R, SMP, RI 7	Use spreadsheets to calculate, graph, organize, and present data in a variety of real-word settings and choose the most appropriate type to represent given data	I	I	R
	Onwandahaat	F, SMP 5, RI 7	Enter formulas and functions; use the autofill feature in a spreadsheet application.	I	I	R
Demonstrate proficiency in the use of computers	Spreadsheet (Tables/ Charts and	F, EE, SMP 5, RI 7	Use functions of a spreadsheet application (e.g., sort, filter, find).	I	I	R
and applications as well as an	Graphs)	EE, SMP 6	Use various number formats (e.g. scientific notations, percentages, exponents) as appropriate	Ι	I	R
understanding of the concepts underlying		F, SMP 5, RI 7	Use advanced formatting features of a spreadsheet application (e.g., reposition columns and rows, add and name worksheets).	I	I	R
hardware, software and connectivity.		SMP 5, RI 7	Differentiate between formulas with absolute and relative cell references.			I
		SMP 5, RI 7	Use multiple sheets within a workbook, and create links among worksheets to solve problems.		0	I
		SMP 5, RI 7	Import and export data between spreadsheets and other applications.		0	I
	Mathematical Applications	G, SMP 5	Draw two and three dimensional geometric shapes using a variety of technology tools.	I	I	R
		EE, SMP 5	Use and interpret scientific notations using a variety of technology applications.			I
		EE, A, F, SP, SMP 5, W 8, SL 5	Explain and demonstrate how specialized technology tools can be used for problem solving, decision making, and creativity in all subject areas (e.g., simulation software, environmental probes, computer aided design, geographic information systems, dynamic geometric software, graphing calculators).	I	I	R

I – Introduce R – Reinforce M – Mastery (ability to teach others) O – Optional for grade level

Digital Literacy Categories		Alignment to CCSS/ SBAC	Skills	6	7	8
		SMP 3, SL 5	Create presentations for a variety of audiences and purposes with use of appropriate transitions and animations to add interest.	I	R	М
Demonstrate proficiency in the use of computers and		SMP 5, W 6	Use a variety of technology tools (e.g., dictionary, thesaurus, grammar checker, calculator/graphing calculator) to maximize the accuracy of work.	I	R	М
applications as well as an understanding	Multimedia and Presentation	SL 5	Make strategic use of digital media to enhance understanding	I	R	М
of the concepts underlying	Tools	W 6, SL 5	Use painting and drawing tools/ applications to create and edit work	I	R	М
hardware, software and connectivity		RL 7, RI 7, SBAC testing skills	Use note-taking skills while viewing online videos and using the play, pause, rewind and stop buttons	Ι	R	М
		SMP 3, SL 5	Independently use appropriate technology tools (e.g., graphic organizer, audio, visual) to define problems and propose hypotheses.	I	I	R
Demonstrate	Acceptable Use, Copyright	Digital Citizenship	Comply with the district's Acceptable Use Policy related to ethical use, cyberbullying, privacy, plagiarism, spam, viruses, hacking, and file sharing.	I	R	M
the responsible use of technology and an understanding of ethics and safety issues in using electronic media at home, in school and in society		Digital Citizenship	Explain Fair Use guidelines for using copyrighted materials and possible consequences (e.g., images, music, video, text) in school projects.	I	R	M
	and Plagiarism	Digital Citizenship	Analyze and explain how media and technology can be used to distort, exaggerate, and misrepresent information.	I	I	R
		Digital Citizenship	Give examples of hardware and applications that enable people with disabilities to use technology.	I	I	R
		Digital Citizenship	Explain the potential risks associated with the use of networked digital environments (e.g., internet, mobile phones, wireless, LANs) and sharing personal information.	I	R	М

I – Introduce R – Reinforce M – Mastery (ability to teach others) O – Optional for grade level

Digital Literacy		Alignment to CCSS/ SBAC	Skills	6	7	8
Categories		RI 5, RI 7	Identify probable types and locations of Web sites by examining their domain names (e.g., edu, com, org, gov, au).	I	I	R
		RI 5, RI 7	Use effective search strategies for locating and retrieving electronic information (e.g., using syntax and Boolean logic operators).	I	R	M
Demonstrate the ability to use technology		RI 5, RI 7	Use search engines and online directories. Explain the differences among various search engines and how they rank results.	I	I	R
for research, critical thinking, decision and	Research (Gathering	RI 7	Use appropriate academic language in online learning environments (e.g., post, thread, intranet, discussion forum, dropbox, account, and password).	I	Ι	R
	and Using Information)	RI 5, RI 7, SMP 3	Explain how technology can support communication and collaboration, personal and professional productivity, and lifelong learning.	I	Ι	R
		RI 5, RI 7	Write correct in-text citations and reference lists for text and images gathered from electronic sources.	I	I	R
		RI 5, RI 7	Use Web browsing to access information (e.g., enter a URL, access links, create bookmarks/favorites, print Web pages).	I	I	R
		RI 7, RI 10, SMP 5	Use and modify databases and spreadsheets to analyze data and propose solutions.	I	I	R
		RI 7, SMP 3	Develop and use guidelines to evaluate the content, organization, design, use of citations, and presentation of technologically enhanced projects.	Ι	Ι	R

I – Introduce R – Reinforce M – Mastery (ability to teach others) O - Optional for grade level

Digital Literacy Categories		Alignment to CCSS/ SBAC	Skills	6	7	8
Demonstrate the ability to use technology for research, critical thinking, decision making, communication, collaboration, creativity and innovation.		W 6, W 10, SL 5, SMP 5, RI 7	Use a variety of media to present information for specific purposes (e.g., reports, research papers, presentations, newsletters, Web sites, podcasts, blogs), citing sources.	Ι	Я	M
		W6, W 10, SL 2, SL 5, SMP 3	Demonstrate how the use of various techniques and effect (e.g., editing, music, color, rhetorical devices) can be used to convey meaning in media.	I	Ι	R
	******	RI 6, RI 7, RI 9, SMP 3, SL 5	Use a variety of district approved Web 2.0 tools (e.g., email discussion groups, blogs, etc.) to collaborate and communicate with peers, experts, and other audiences using appropriate academic language.	Ι	Я	M
		W 6, W 10 SL 3	Use teacher developed guidelines to evaluate multimedia presentations for organization, content, design, presentation and appropriateness of citations.	I	R	M
		RI 6, RI 7, RI 9, SMP 3	Plan and implement a collaborative project with students in other classrooms and schools using telecommunications tools (e.g., e-mail, discussion forums, groupware, interactive Web sites, video- conferencing).	I	I	R

I – Introduce R – Reinforce M – Mastery (ability to teach others) O – Optional for grade level

High School

Digital Literac	Digital Literacy Categories		Skills	9	10	11	12
		Technology Operations & Concepts	Identify successful troubleshooting strategies for minor hardware and software issues/problems (e.g., "frozen screen").	I	R	M	M
Demonstrate proficiency in the use of computers and	Basic Operations	Technology Operations & Concepts	Independently operate peripheral equipment (e.g., scanner, digital camera, camcorder), if available.	Ι	R	M	M
applications as well as an understanding of the concepts		Technology Operations & Concepts	Compress and expand large files	I	R	M	M
underlying hardware, software and connectivity.		Technology Operations & Concepts	Identify and use a variety of storage media (e.g., CDs, DVDs, flash drives, school servers, and online storage spaces), and provide a rationale for using a certain medium for a specific purpose.	Ι	R	M	M
		W 6	Demonstrate automaticity in keyboarding skills by increasing accuracy and speed. (For students with disabilities, demonstrate alternate input techniques as appropriate.)	R	M	M	M
		Creativity & Innovation	Identify and assess the capabilities and limitations of emerging technologies.	I	R	M	M
Demonstrate		W 5, W 6, W 10	Demonstrate use of intermediate features in word processing application (e.g., tabs, indents, headers and footers, endnotes, bullet and numbering, tables).	R	M	M	M
the responsible use of technology and an	Word Processing	W 5, W 6, W 10, SL 5	Apply advanced formatting and page layout features when appropriate (e.g., columns, templates, and styles) to improve the appearance of documents and materials.	R	M	M	M

understanding of ethics and safety issues in		W.5, W.6, W 10	Highlight text, copy and paste text	R	M	M	M
using electronic media at home,		W 5, W 6, W 10, SL 1	Use the Comment function in Review for peer editing of documents	I	R	M	M
in school and in society.		W 5, W 6, W 10, SL 1	Use the Track Changes feature in Review for peer editing of documents	I	R	M	M
	Spreadsheet (Tables/ Charts and Graphs)	F, SMP 5, RI 7	Use spreadsheets to calculate, graph, organize, and present data in a variety of real-word settings and choose the most appropriate type to represent given data	R	M	M	M
		F, SMP 5, RI 7	Enter formulas and functions; use the autofill feature in a spreadsheet application.	R	M	M	M
		F, EE, SMP 5, RI 7	Use functions of a spreadsheet application (e.g., sort, filter, find).	R	M	M	M
		EE, SMP 6	Use various number formats (e.g. scientific notations, percentages, exponents) as appropriate	R	M	M	M
		F, SMP 5, RI 7	Use advanced formatting features of a spreadsheet application (e.g., reposition columns and rows, add and name worksheets).	R	M	M	M
		SMP 5, RI 7	Differentiate between formulas with absolute and relative cell references.	R	M	M	M
		SMP 5, RI 7	Use multiple sheets within a workbook, and create links among worksheets to solve problems.	R	M	M	M
		G, SMP 5	Draw two and three dimensional geometric shapes using a variety of technology tools.	I	R	M	M
	Mathematical	EE, SMP 5	Use and interpret scientific notations using a variety of technology applications.	I	R	M	M
	Applications	EE, A, F, SP, SMP 5, W 8, SL 5	Explain and demonstrate how specialized technology tools can be used for problem solving, decision making, and creativity in all subject areas (e.g., simulation software, environmental probes, computer aided design, geographic information systems, dynamic geometric software, graphing calculators).	R	M	M	M

	Multimedia and Presentation Tools	SMP 3, SL 5	Create presentations for a variety of audiences and purposes with use of appropriate transitions and animations to add interest.	R	M	M	M
		SMP 5, W 6	Use a variety of technology tools (e.g., dictionary, thesaurus, grammar checker, calculator/graphing calculator) to maximize the accuracy of work.	R	M	M	M
		SL 5	Make strategic use of digital media to enhance understanding	R	M	M	M
		W 6, SL 5	Use painting and drawing tools/ applications to create and edit work	R	M	M	M
		RL7, RI7, SBAC testing skills	Use note-taking skills while viewing online videos and using the play, pause, rewind and stop buttons.	R	M	M	M
		SMP 3, SL 5	Independently use appropriate technology tools (e.g., graphic organizer, audio, visual) to define problems and propose hypotheses.	R	M	M	M
	Digital Citizenship	Digital Citizenship	Comply with the district's Acceptable Use Policy related to ethical use, cyberbullying, privacy, plagiarism, spam, viruses, hacking, and file sharing.	I	R	M	M
		Digital Citizenship	Explain Fair Use guidelines for using copyrighted materials and possible consequences (e.g., images, music, video, text) in school projects.	I	R	M	M
		Digital Citizenship	Analyze and explain how media and technology can be used to distort, exaggerate, and misrepresent information.	I	R	M	M
		Digital Citizenship	Give examples of hardware and applications that enable people with disabilities to use technology.	I	R	M	M
		Digital Citizenship	Explain the potential risks associated with the use of networked digital environments (e.g., internet, mobile phones, wireless, LANs) and sharing personal information.	I	R	M	M
	Research (Gathering and Using Information)	RI 5, RI 7	Identify probable types and locations of Web sites by examining their domain names (e.g., edu, com, org, gov, au).	R	M	M	M

		RI 5, RI 7	Use effective search strategies for locating and retrieving electronic information (e.g., using syntax and Boolean logic operators).	I	R	M	M
		RI 5, RI 7	Use search engines and online directories. Explain the differences among various search engines and how they rank results.	I	R	M	M
		RI 7	Use appropriate academic language in online learning environments (e.g., post, thread, intranet, discussion forum, dropbox, account, and password).	I	R	M	M
		RI 5, RI 7, SMP 3	Explain how technology can support communication and collaboration, personal and professional productivity, and lifelong learning.	I	R	M	M
	Communication and Collaboration	RI 5, RI 7	Write correct in-text citations and reference lists for text and images gathered from electronic sources.	I	R	M	M
		RI 5, RI 7	Use Web browsing to access information (e.g., enter a URL, access links, create bookmarks/favorites, print Web pages).	I	R	M	M
		RI 7, RI 10, SMP 5	Use and modify databases and spreadsheets to analyze data and propose solutions.	I	R	M	M
		RI 7, SMP 3	Develop and use guidelines to evaluate the content, organization, design, use of citations, and presentation of technologically enhanced projects.	I	R	M	M
		W 6, W 10, SL 5, SMP 5, RI 7	Use a variety of media to present information for specific purposes (e.g., reports, research papers, presentations, newsletters, Web sites, podcasts, blogs), citing sources.	I	R	M	M
		W6, W 10, SL 2, SL 5, SMP 3	Demonstrate how the use of various techniques and effect (e.g., editing, music, color, rhetorical devices) can be used to convey meaning in media.	I	R	M	M
		RI 6, RI 7, RI9, SMP 3, SL 5	Use a variety(of district approved Web 2.0 tools (e.g., email, discussion groups, blogs, etc.) to collaborate and communicate with peers, experts, and other audiences using appropriate academic language.	I	R	M	M
		W 6, W 10 SL 3	Use teacher developed guidelines to evaluate multimedia presentations for organization, content, design, presentation and appropriateness of citations.	I	R	M	M

RI 6, RI 7, RI 9, SMP 3	Plan and implement a collaborative project with students in other classrooms and schools using telecommunications tools (e.g., e-mail, discussion forums, groupware, interactive Web sites, videoconferencing).	I	R	M	M	
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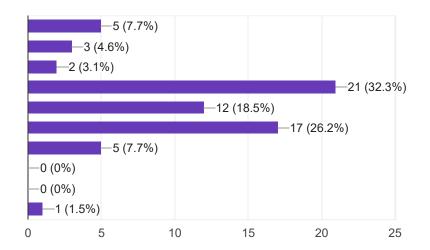
STAFF TECHNOLOGY SURVEY

65 responses

Demographics

Location

65 responses

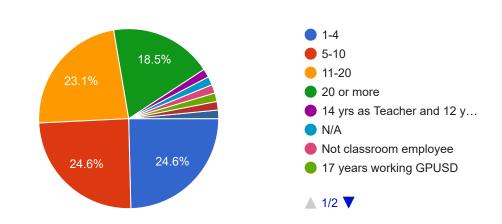


Role?

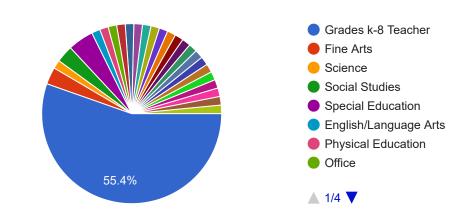


Years of Classroom Experience

65 responses

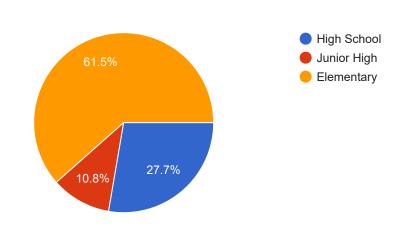


What area do you teach in?



What grade level do you teach in?

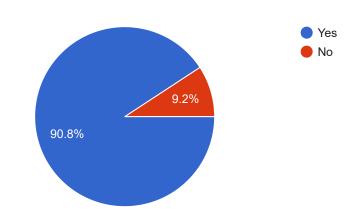




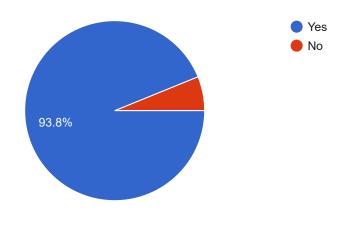
Technology in The Classroom

I have a teacher's laptop or desktop

65 responses

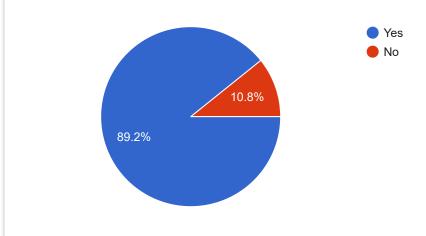


I have access to wireless in my classroom or work areas



I have access to a printer in my classroom

65 responses

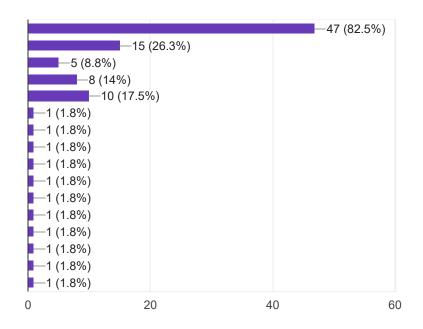


My students have access to Chromebooks Carts

Technology in the Workplace (Office)

I use the following technologies

57 responses

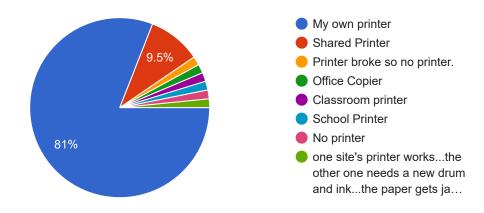


My Computer is a



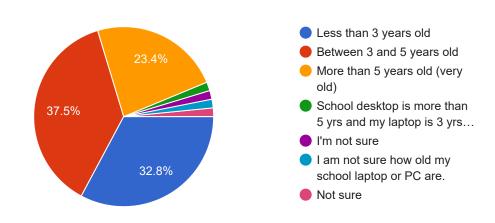
I print to

63 responses



My Computer is

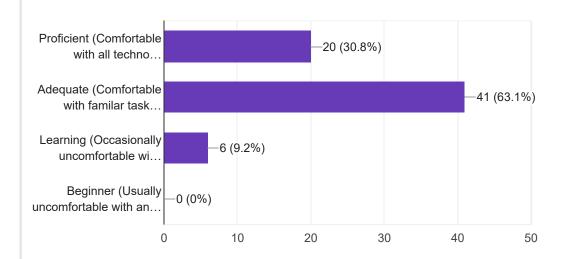
64 responses



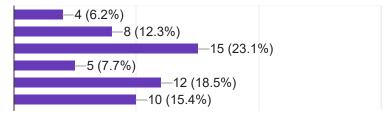
SKILLS

How would you characterize your technology related skills?ed Question

65 responses

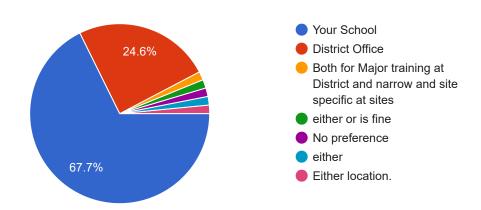


Please indicate which of the topics listed below you would like to see offerred as a staff development opportunity.

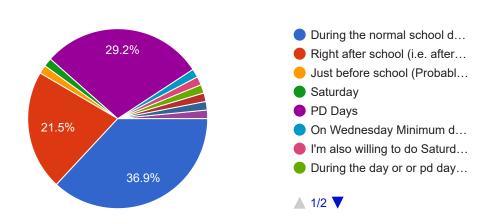


Where would you like staff development classes to be held?

65 responses



When is a suitable time to offer technology related staff development?



If you could wave your magic wand...What one thing would you do to improve technology related staff development offerings in our district? I would improve the technology development offered by providing trainings and practice for staff at different initial skill levels and provide slow and faster paced training depending on the complexity of the topic, skill, or site that would be the focus of the training. I would also have follow up training sessions so that staff could continue to receive support and have new areas of concern and query addressed.

37 responses

Actually get help when I need it. Printer broke, and two student's chromebooks broke and nothing has been done.

How to use my smart board effectively.

Work with site tech leads.

Reliable internet service

Make trainings available once or twice a month.

I am happy with everything right now would like to see the internet more dependable

Training on the new text that is recieved (how the new tec. works and opperates) and then again to be trained how all tec. work together as a unit and not seperately from each othe. Along with easy step by step hand outs with pictures

Smart Board

Having easier access to others who know the systems and can help when there are questions.

I would like to receive training on the new smart tv that we are about to receive. I am tech savvy, and am figuring out Aeries as we go. The most beneficial thing to focus on would be the tech that most affects student learning. The application of all these specialized tools given my this new TV would be awesome if we can FULLY utilize them. Also, since we are all rookies on this topic we can all begin with the same training, and as some teachers advance and become more familiar with the TV we could then differentiate to dive even deeper. Either way the support is appreciated.

when new tech is introduced into the classroom such as the new touch smart boards.... some short course going over the basics of use would be helpful

I agree: I would improve the technology development offered by providing training and practice for staff at different initial skill levels and provide slow and faster paced training depending on the complexity of the topic, skill, or site that would be the focus of the training. I would also have follow up training sessions so that staff could continue to receive support and have new areas of concern and query addressed.

This survey is a good start. I appreciate all of your efforts.

Printer cartridges to replace printer in classroom, training on new technology like the Smart TVs

Chromebooks for all classrooms.

I would like to be taken through areas at a slower rate and have practice with it.

To offer training on the new technology that we get.

An intranet system for all docs, payroll, and company news updates.

Innovation Technology Practices

Create mini book guides for new teachers and for other teachers to refer to when stuck. We give the initial training and then we have little resources to go back to other than our memory. And, we sometimes forget when we do not use a system. Secondly, take the time to make sure we have mastery...it often feels rushed.

Follow-up training is essential-that usually never happens.

I want to have LEXIA back in my classroom

I would like to have training on implementing the new Smart TV software.

We need either a site or district wide computer teacher that could be on site to teach/lead students in research or computer literacy lessons. Also provide Promethean/Smart board trainings periodically to keep skills sharp. Additionally, keep teacher laptops/PC's up to date and current. Also have a working computer lab for students that has working computers.

I would improve the technology development offered by providing trainings and practice for staff at different initial skill levels and provide slow and faster paced training depending on the complexity of the topic, skill, or site that would be the focus of the training.

I would make the necessary improvements to make Internet access available on the entire SJES campus. The wireless signal is often weak or doesn't work at all in room A3 (SEAL room). I would also make sure all students had access to a functioning chrome books with high speed wireless internet.

I would like to have training on my new smartboard. I know there are resources available but to have more then 10 min training on how to use the new boards would be wonderful! Also, new teachers need to have a list or training on what resources are available with in the district such as Goguardian. I am not sure what software is available through the district i.e. a pdf editing software.

Thank you for asking the question!

First priority is the Smart Board training. Many of of teachers have got the smart board installed but no instructions or training on how to used them.

MacBook pro and Smart board

First of all I am very satisfied with our technology dept. The staff is very approachable and they don't make you feel stupid, they want the best for our students. I would like training here at our site with just our staff because we know our needs.

You're doing great! Keep up the good work :D

Using the smart board with students or lessons.

I think every time we receive new technology, a training at the site on how to use said technology would be beneficial.

I agree with the above and, I need to know how I can use my visualizer with the new smart tv, and also I would like to know when my laptop or the reported "new laptop" will be have the smart tv program? I am unable to

use this new technology to its full potential, and I would like to have the capabilities to do so.

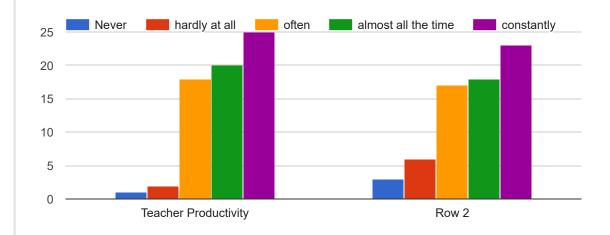
More flexible for teachers to have access to update computers & sites to use.

You will never please everyone. However during school or after school in ALL areas of technology.

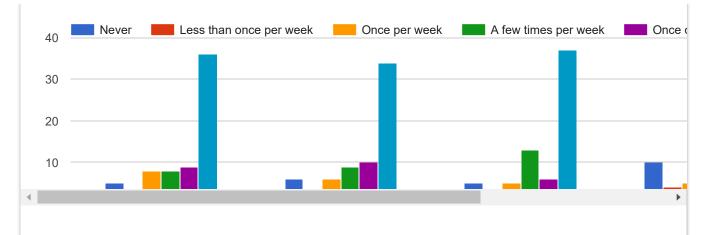
I really appreciate how staff is always available to help me out of problems. Everytime I've used the chromebooks only a few books will hook up to the internet at a time. We need training on the new smart TVs.

Instructional & Technology Integration

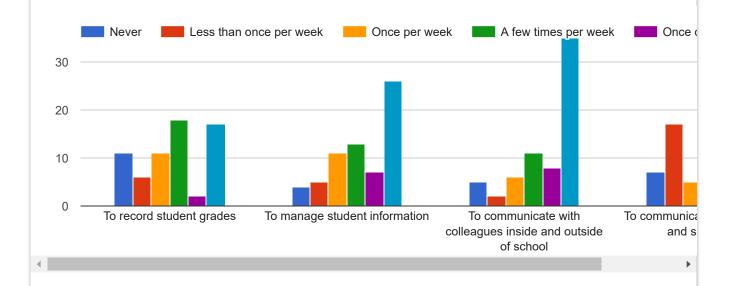
Please select the amount of time on a daily basis that you use computers to enhance teacher or office productivity (word processing, record keeping, communication with staff and parents via notes and e-mail)



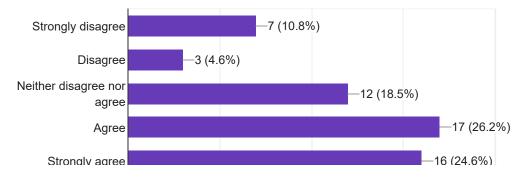
How frequently do you use technology to perform the following activities?



How frequently do you use technology to perform these activities?

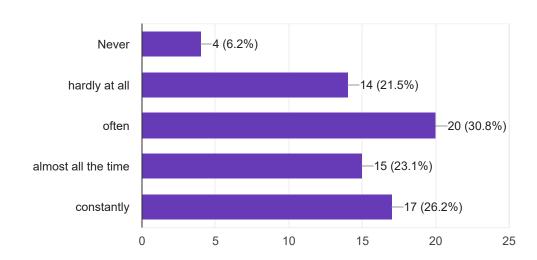


Availability of the laptops/Chromebooks has helped me to shift my teaching from being more teacher-centered to being more student-centered.

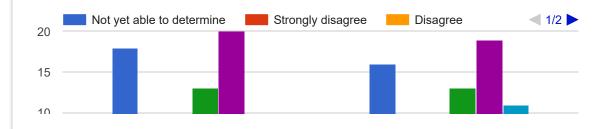


Please select the amount of time on a daily basis that you use computers to enhance student learning (student writing, content area drill and practice, student research, group projects).

65 responses

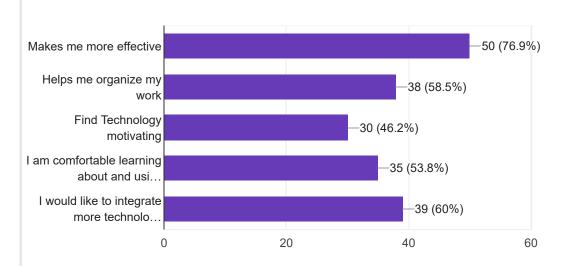


Rate your level of agreement with the following potential benefits to your students



General Attitudes About Technology

65 responses



I use

Technology Goals:

Technology Goal 1

48 responses

Master it

Use my smart board more effectively

Upgrade staff's computers/laptops

New PO system through Everest for all sites.

Use for DATA driven decisions

Technology received on time.

Find applications that aide in student development for behavior management

Familiarize myself with Aeries

learn excel

Become proficient with the Smart TV/Promethean Board

learn how to use the computer better

Since I teach music having the students use CAI more would help.

Fast, working internet all the time

Chromebooks for every classroom no more sharing

Use the Chrome books on a daily basis or at least 3 times a week.

To get a Chrome Book cart

Aeries training

To share and learn from other teachers how they are using chromebooks in the classroom.

Get a dedicated computer lab person.

Full use of Google Classroom

Learn to use Fusion 360

Learn how to use my Smart Board

Get better software

Incorporate Smart TV software

More assignments for students via chromebook

Get a working laptop

Learn on how to use the new smart tv

I would like to become Goggle certified to ensure that I fully understand the various components of Goggle and how they can be utilized in my classroom.

To understand how to use the new smart board and all of its potential.

To have a crome books available for the math department

Google cerification

To know more about my MacBook Pro.

Learn how to use Google docs, drive, Classroom, etc.

I would like to learn about Google classroom.

I would like every student to have a laptop of their very own.

Use technology for research

Develop assignments that guide students through research.

power point

To integrate technology to student learning effectively.

Students improve skills by researching information for assignments.

Get hardware to make each computer work with smart boards and printers

TK chrome books to read

I would like for the RSP teachers to have a small set of chrome books for students to use. As of now we do not have any.

Find/use tools to help enhance instruction.

Hiring a computer program teacher. It would be nice to have the students go to a computer expert, who can teach the students and us teachers, new innovative ways to use programs such as google classroom.

Integrate more student based projects for Glade

Proficient in snart tv

Knowing how to use my new TV.

Technology Goal 2

44 responses

Get a printer

Get students on chrome books

Have our files scanned and saved in a memory bank ie Laserfiche

Have teachers use technology with all their lesson integrating curriculums

Training for new technology.

Find more ways to provide content using the chrome books

Familiarize myself with Google Classroom, Docs, slides,

learn html and css

Understand and utilize the Google platform better

Become more familiar with using the technology that's available.

Smart TV training and proficiency in using it

Google classrooms with student and shared teacher access

When I get a smart TV to be able to incorporate it in to my lessons more.

To always have Internet access in my classroom

Learn how to use technology in a way that I can do my job better

How dual immersion teachers can use technology to enhance language learning.

Build a class website

Implementing ERWC Modules through technology

Teach Fusion 360 (CAD) to my welding students.

To have a system in place so that all my students Chromebook activity will show on my Smartboard.

Get Lexia

Build my tech knowledge for presenting lessons/activities to students

Desk top Computer or Laptop for students to use in the counseling office

Learn how to incorporate Active inspire into Mac

I would like to learn about entry level coding so that I can encourage my students' curiosity and promote their learning about this deeper component of technology.

To become more comfortable with math (I teach math to all eighth grade students at my site) software and tools.

Have students access to technology to enhance learning.

Link information google classroom grades to gradebook

To learn how to use a Smartboard.

Stay up to date with Aeries gradebook and all of its' features

I would like to receive more training on Aeries in general.

Have students produce projects

Gather videos/documentaries to analyze and help us visualize our readings.

excel

Create learning commons with technology in the library for students.

I am getting better at integrating, creating fun learning assignment. Learning should be fun at all times and have student success.

Freedom to fix problems on my own rather than wait days for assistance

TK can practice math 15 min. Per day

Training on smart boards.

Learn how to use my SMART Board and use the features effectively within the classroom.

I would like to see more computer training for the teachers, on a semi annual basis.

Use Google Classroom for Assessments

Students proficient in chrome book

For students to use the chromebooks more.

Technology Goal 3

39 responses

Use smart board more

Generate more interactive lesson on smart boards

Reduce as much paperwork as possible and rely more on technology for related work.

Have parents able to log into their students Aeries account to look up grades and discipline

Visits to sites to see what is needed.

Have a better understanding of MAC processing system

Become famliar with the smart TV that we are going to receive.

learn video editing

Be able to map the copier/printer to laptop/macbook

Learn more about the apps available with Google such as Google Classroom and other.

New computers, chrome books, teacher laptop

digital textbooks

I would like to be able to use Google sites to set up suitable websites for my students

To have a lab just for Foreign Language classes

Continue to learn how to use technology to teach students

To learn from other teachers/districts how to integrate technology effectively.

Reliable WiFi in my room

Students are able to utilizing technology on all levels to complete work, check grades, research, create, develop, etc.

Learn to use the smart television

My students be able to print from Chromebooks in my classroom.

Have tech working all the time

Build a "storehouse" of sites suitable for students to practice math, writing, reading

Get a chromebook for every student in my class

I would like to have the opportunity to learn more about, programs such as, Minecraft.edu and then use it/them with my students to help them to express their knowledge, curiosity, and creativity in a format that provides almost unlimited possibilities in the topics, time periods, and locations that can be explored.

To understand how to run reports on Aeries. This is NOT a user friendly program. I have spend hours trying to better understand how to get the correct reports that I need from Aeries. As a new teacher to the district, there was NO training on how to even get started.

Have more training on google sites to provide a classroom site with resources assessments, video tutorial available to our students.

To be able to print at each School site from my MacBook Pro.

Receive a new smartboard and learn all of its' features

Get students comfortable with using Chromebooks

Get easier access to computers for my class.

Get more technology training.

I want to become more knowledgeable on Classroom Google. The summer class a few years ago was too fast.

Printer replacement cartridges for classroom printers

TK can use chrome books to create slides for presentations

Functional printer

For the school district to hire more staff to maintain daily computer issues that occur in the classroom. This would enable the classroom issues to be taken care of in a more timely manner.

How to use Google forms

Proficient in mac

Teach the students how to keyboard.

Thank you for your participation

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Google Forms

SAMR Model: A Practical Guide for EdTech Integration

Posted in Pro Tips | October 30, 2017

The <u>SAMR Model</u> is a framework created by Dr. Ruben Puentedura that categorizes four different degrees of classroom technology integration. The letters "SAMR" stand for Substitution, Augmentation, Modification, and Redefinition. The SAMR model was created to share a <u>common language across disciplines</u> as teachers strive to help students visualize complex concepts.

While it's often visualized as a ladder or staircase as above, this can be misleading because Substitution (the bottom of the ladder) is sometimes the best choice for a particular lesson. This is why it's better to think of the SAMR model more as a spectrum. On one end technology is used as a one-to-one replacement for traditional tools, and on the other end technology enables experiences that were previously impossible without it.

Click here to learn how to transform static resources, particularly PDFs, into engaging content in 3 easy steps

Regardless of how you visualize it, the SAMR framework can be a simple and effective way to assess how you are incorporating technology into your instruction.

The SAMR Model Explained (with Examples)

The SAMR model is made up of <u>four steps</u>—Substitution, Augmentation, Modification, and Redefinition. Substitution and Augmentation are considered "Enhancement" steps, while Modification and Redefinition are termed "Transformation" steps.

Think of the difference between seasoning an old family recipe (Enhancement) and creating an entirely new, original dish (Transformation). Susan Oxnevad referred to this movement across the spectrum as <u>"teaching above the line."</u>

Substitution

At this stage, technology is directly substituted for a more traditional one. It is a simple, bare-bones, direct replacement. For example, if you are teaching a government lesson on the Constitution, you might use an electronic or web-based version of the document

instead of a hard copy. Students might also answer questions about the Constitution using a Microsoft Word instead of filling out a worksheet.

Substitution might also include a student using Keynote, PowerPoint, Prezi, Slides, or a similar program to present information about an article or amendment to the class.

In this step, <u>you ask yourself</u> what we stand to gain by replacing traditional tools with technology. Invariably, some situations will be better served with pen and paper.

Augmentation

The technology is again directly substituted for a traditional one, but with significant enhancements to the student experience. In other words, <u>you ask yourself</u> if the technology increases or augments a student's productivity and potential in some way.

Returning to the Constitution example, a student might augment a presentation on, say, the 14th Amendment with a video clip of how equal protection under the law was enforced during school desegregation. It could also include interactive links to relevant supreme court decisions, such as Plessy v. Ferguson or Brown v. Topeka Board of Education.

Modification

In this stage, you are beginning to move from enhancement to transformation on the model. Instead of replacement or enhancement, this is an actual change to the design of the lesson and its learning outcome. The key question here—does the technology significantly alter the task?

A student presenting research on the 14th Amendment, to continue our example, might create his or her own unique graphic organizer for the class that not only includes the usual multimedia resources but represents a new product or synthesis of existing material. As another example, a group of students might collaborate in a cloud-based workspace to propose a modern definition of equal protection under the law and solicit feedback on their proposals from classmates.

Redefinition

The last stage of the SAMR model is Redefinition and represents the pinnacle of how technology can transform a student's experience. In this case, <u>you ask yourself</u> if the technology tools allow educators to redefine a traditional task in a way that would not be possible without the tech, creating a novel experience.

For example, after completing their group work and soliciting feedback from classmates (both tasks that could be completed "offline" although arguably not with the same experience as in the modified format), students could utilize technology to network with students several states away to see how regional differences impact how others think about the Constitution.

Taking it a step further, students could even interact in real time with citizens in another country to examine key differences in constitutional philosophy and law. This can bridge the gap between K-12 and higher education as it did in this digital citizenship project.

