

San Gabriel Unified



Technology Plan

July 1, 2017 - June 30, 2020

04/18/2017 (revised 04/26/2017)

Table of Contents

1. Plan Background Criteria: The plan should guide the LEA’s use of education technology for the next three years.	
1a. Introduction	3
1b. Planning Committee	3 - 4
1c. Relevant Research	4 - 5
2. Curriculum Component Criteria: The Plan must establish clear goals and realistic strategy for using telecommunications and information technology to improve education services.	
2a. Teachers’ Current Access.....	5 - 8
2b. Student” Current Access.....	8 - 12
2c. Using Technology to Improve Teaching and Learning.....	12 - 14
2d. Student Acquisition of Technology and Information Literacy Skills	14 - 16
2e. Internet Safety and Ethical Use of Technology	16 - 18
3. Professional Development Component Criteria: The Plan must have a professional development strategy to ensure that staff understands how to use these new technologies to improve education services.	
3a. Teachers’ and Administrators’ Current Technology Proficiency	18 - 19
3b. Professional Development Opportunities	19 - 22
4. Infrastructure, Hardware, Technical Support, Software, and Asset Management Component Criteria: The Plan must include an assessment of the telecommunication services, hardware, software, asset management, and other services that will be needed to improve education services.	
4a. Existing Infrastructure, Resources, and Technical Support.....	22 - 24
4b. Needed Infrastructure, Resources, and Technical Support.....	24 - 26
5. Monitoring and Evaluation Component Criteria: The Plan must include an evaluation process that enables the school to monitor progress toward the specific goals and make mid-course corrections in response to new developments and opportunities as they arise.	
5a. Process for Evaluating Progress and Impact on teaching and Learning	26
5b. Evaluating and Communicating Plan Implementation Effects	26

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

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

Located in Southern California's San Gabriel Valley, ten miles east of downtown Los Angeles, San Gabriel Unified School District educates more than 5,000 kindergarten through twelfth-grade students including TK and PK on a traditional calendar schedule.

Established in 1781, the San Gabriel Mission was the fourth California mission and is considered the birthplace of the Los Angeles region. San Gabriel Unified School District was founded in 1868 and is proud of its long tradition of academic excellence. The district is currently comprised of five elementary schools, one middle school, one traditional high school, and one continuation high school.

- Our student population is approximately 1% African-American, 50% Asian, 4% Caucasian, 3% Filipino, 37% Hispanics, and 5% Others.
- The San Gabriel Unified School District has approximately 289 certificated, 30 management, 242 classified, and 5 confidential employees to support our students.
- The San Gabriel Unified School District offers many educational opportunities to our students including our English Language programs which provide supplementary assistance to grade K - 12 students who arrive in San Gabriel knowing little or no English.
- The San Gabriel Unified School District is fortunate to have exceptional parent support and organizations such as San Gabriel Educational Foundation (SEF).
- The San Gabriel Unified School District boasts a long-standing record of excellence. Most of our comprehensive sites are Distinguished Schools. Our 566 employees are committed to the furtherance of this achievement. We make a significant investment each year in the professional growth and development of teachers and instructional service personnel to continue providing the best available resources and opportunities to our students and teachers.

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

The planning team consists of administrators and representatives from our elementary, middle, and high schools. The team also collaborates with the Administrator in charge of the 1:1 initiative and the Director of assessments to ensure alignment of the Tech Plan with both District LCAP and site SIPSA.

The planning team meets regularly with the Tech Committee - a bigger group of teachers and site representatives - to share and modify the needs and logistics of the District Tech Plan.

Planning Committee

Name	Position
Khai Nguyen	Technology Director
Jackie Avakian	Ed Tech TOSA
Quoc Tran	Director of Assessments
Tuoi Nguyen	Assistant Principal, Elementary Site, 1:1 initiative
Ross Perry	Principal, Elementary Site
Christopher Guyer	Assistant Principal, High School
Stephen Feng	Assistant Principal, Middle School
Maria Celis	High School Teacher
Matt Neuenburg	Elementary School Teacher
Donald Tom	Parent and Elementary School Site Tech

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

- **The plan’s curricular and professional development outcomes that are supported by research.**

San Gabriel Unified is committed to providing PD of sufficient intensity and duration to have a positive and lasting impact on the teacher's performance and students' learning in the classroom. Results from research by International Society of Technology Education (ISTE) indicates that the high-quality PD should be personalized and designed to promote inquiry and higher level thinking. The district's LCAP is focused on building tech infrastructure, offering technology trainings that are structured and focused on needs of all. As a result, SGUSD's Technology PD is designed and delivered based on the following researched topics.

<p>The TPAC Framework http://www.tpack.org/</p>	<p>Technology/Pedagogy/Content: The TPAC model values the correlation of these 3 domains to ensure effective teaching and learning with technology</p>
<p>The SAMR Model http://hippasus.com/blog/</p>	<p>Substitution - Augmentation - Modification - Redefinition model supports the integration of technology into curriculum by providing access and improving skills by focusing on depth of knowledge and the ability to share results of one's work with a broader audience in order to solicit feedback to modify and improve the outcome</p>
<p>ISTE Standards (International Society for Technology in Education) http://www.iste.org/standards/standards/standards-for-students</p>	<ol style="list-style-type: none"> 1. Creativity and Innovation 2. Communication and Collaboration 3. Research and Information Fluency 4. Critical Thinking, Problem-Solving, and Decision-Making

- **Information gathered from site visits and surveys including best practices.**

San Gabriel Unified School District has provided K-12 grade classrooms a variety of tech tools, based on grade level and department needs, priorities, and requests. Over 90% of the students have access to a 1:1 device on daily basis.

In a survey conducted by BrightBytes the following information was gathered:

Strengths:

- 90% of students and teachers have access to a digital device in their classroom
- Sites have access to a full-time classified tech support to help troubleshoot and resolve device issues
- The district Tech TOSA offers classroom and site support in using technology as requested by teachers and principals
- Sites have access to a certificated Tech Coach for trainings and support as needed
- After school PDs offered to the district teachers in using technology on regular basis
- Teachers attend conferences outside the district to learn effective ways in using technology tools and apps to enhance learning
- 58% of teachers feel confident in using basic technology in the classroom
- 30% of teachers are comfortable in using Multimedia in the classroom
- 82% of teachers believe technology enhances learning
- Parent trainings in becoming familiar with the technology used in the classroom is offered based on site needs and principal request

Needs:

- 25% teachers expressed the need for PD in improving their basic skills in using technology
- 57% teachers have expressed need for PD in using Multimedia
- Teachers share the continuous need for support in integrating new technologies into their curriculum in order to enhance learning for All students
- K - 12 Digital Citizenship Curriculum to be implemented across the district
- Support of programs such as Coding, Robotics, 3D printing, Maker Space, and Invention Convention to prepare students for 21st Century College and Careers

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

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

San Gabriel Unified School District has the following technology available to all teachers:

- Access to the Internet (wireless and LAN)
- Access to instructional tools - Desktop or portable computer (Mac or PC), Document camera, iPad, projection device
- All teachers in the elementary school setting have a Promethean Board, Smart Board, or similar devices
- All teachers in the middle school setting have access to at least a Promethean Board, an Epson Smart projector or comparable.
- All teachers in the high school setting have access to a Promethean Board or comparable.
- All teachers have access to a printer and other shared peripherals such as scanners, digital cameras, file servers, etc.
- All staff is provided with e-mail, virus and spam protection, firewall and internet filtering.
- All schools have a central computer lab to which teachers have access.
- All schools have a dedicated site support tech.

Hardware and software used in the classroom:

K - 12 teachers use the computer labs at their site for various instructional activities in addition to using technology in their classrooms.

Reinforcement of mathematics and ELA related activities aligned to Common Core are the focus of everyday instruction.

Teachers in various departments have access to iPads, Chromebooks, Macbooks, and PCs in addition to a presentation board, document camera, and printer. The following software are utilized using these devices but are continuously evaluated and updated based on department needs.

- iReady Intervention
- Google Apps for Education (Google classroom, Google Docs, Google Sheets and Slides)
- iWork and iLife (Pages, numbers, keynote, iMovie, garageband, iPhoto)
- Adobe Suite (Dreamweaver, Photoshop, Illustrator, InDesign)
- DoInk (green screen app)
- Learning A - Z (Reading)
- Discovery streaming
- Typing Agent
- BrainPop (across curriculum)
- Dreambox, Mathspace, iXL (Math)
- Coding online programs (code.org, scratch)
- Aeries SIS
- EADMS
- Apple classroom management software

- HP classroom management software
- School branch chromebook management software
- Apple Remote Access
- Software supplementary to adopted textbooks

Technology currently being used by teachers and administrators to promote effective classroom instruction and school management

- ActivInspire and Promethean Board interaction
- Aeries SIS
- EADMS
- Apple classroom management software
- HP classroom management software
- School branch chromebook management software
- Google Drive for collaboration
- Blackboard
- Teacher and District Website
- Social Media (Facebook & Twitter)

Technology being used to provide powerful learning opportunities, especially for special-needs students and students who require additional resources to improve academic performance.

- All students are given equal access to technology tools
- Special-needs classrooms are equipped with a Promethean Board or similar interaction tool
- Students have access to iPads, iMacs, PCs and such. These devices are equipped with appropriate apps based on teacher recommendation and student curricular level and need.
- Students have access to math intervention web-based sites such as ALEKS, Dreambox, and iXL

Technology assists teachers and principals with their administrative tasks, attendance, and grading

- Teachers and administrators use AERIES Student Information System for administrative tasks, attendance, and grading. Teachers, however, are not limited to AERIES for grading purposes.
- Tech Committee is evaluating the integration of Loop with Aeries to improve home/school communication (replacing blackboard).

Data made more easily available to teachers and principals so that they can make informed decisions to meet individual student academic needs.

- Student information is made available through AERIES and EADMS
- iReady Diagnostic and Intervention software data is available to K - 8 and continuation school

Technology assist with student assessment:

Teachers are able to assess students in various form utilizing technology.

- General classroom assessments - teacher created assessments
- Google Classroom/Drive
- Microsoft OneNote
- 1:1 devices in the classroom to assist in the CAASPP delivery
- Student data is readily available to all teachers via Aeries
- iReady assessment data is available to user teachers

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

Technology currently available to all students

All students in SGUSD are given equal access to devices, programs, and use of the available technology.

Elementary Schools:

During the 2016-17 school year, all 5 elementary schools became 1:1 in student to computer availability. Students in grades K-1, have access to iPads. All iPads are equipped with standard native educational apps such as Pages, Keynote, and Numbers. Other educational free apps may be installed as seen appropriate for the class by the teacher. Teachers may also request up to 2 educational apps per year for student use to be purchased by the district.

Students in grades 2-3 have access to iPads and/or Chromebooks. Students in grades 4-5 have access to Chromebooks. Students use Google Classroom and Google Drive applications to collaborate and complete assignments. Students also have access to Google extensions and add-ons and may have access to these features at the discretion of the classroom teacher.

Middle School:

During the 2016-17 school year, Jefferson Middle School is about 90% complete with becoming 1:1 in student to computer availability. The math department is equipped with

Dell Latitude laptops. The English and Social Science departments are equipped with Chromebooks. The Science department is currently determining what type of equipment will meet the needs of their curriculum and best suits their students. In the meantime, students in this department use the computer lab to complete assignments.

High School:

During the 2016-17 school year, Gabrielino High School is about 90% complete with becoming 1:1 in student to computer availability. The Math department is equipped with iPad Air 2's. The Science department is equipped with iPad Pros. The English and Social Science departments are equipped with Chromebooks. All other departments such as the visual and performing arts will be equipped with a device that is appropriate for the students and recommended by the teachers. In the meantime, students in this department use the Mac lab, PC labs, or Media Center to complete assignments.

Del Mar High School is completely 1:1 in student to computer availability. All students have access to a Mac lab, a Microsoft Surface Pro cart, a Chromebook cart, and Macbook Air cart.

Technology being used by students in the library media center and labs

All students in Elementary Schools, Middle School, and High School have access to the library media center and labs. The media centers are equipped with PCs and Macs. PCs have access to the Destiny database. Students use this database to search for various types of literature. All SGUSD schools have at least 1 computer lab. These labs are equipped with PCs, iMacs, or both. Students use the labs for completion of assignments. These assignments include but are not limited to research, word processing, presentations, coding, robotics, animation, art projects, Photoshop, and web design.

Technology currently available to students during after-school hours

Many school sites open the computer lab before or after school. In addition, students may utilize the local library to complete assignments during open hours on the weekdays and weekend.

Elementary schools:

McKinley Elementary 3:00 - 4:00 pm daily

Roosevelt lab and library open 8:00 - 8:30 am

Washington no access at this time

Wilson no access at this time

Coolidge no access at this time

Middle School:

Jefferson Middle School - 2 hours every day after school with certificated supervision

High School:

Gabrielino High School

- wifi remains accessible for those with their own devices
- Student center - College Career Center computers are accessible
- Computer labs are open for tutoring/Internet access
- Library/Media Center

Del Mar High School - access to lab till 4:00 pm daily

Technology integrated into the curriculum is being used to provide powerful learning opportunities for all students.

Many teachers use Google Classroom to deliver instruction and assignments. All students have access to a district provided email account that accesses the Google Classroom. Students are able to complete assignments at home, community libraries, and/or at community centers. Some teachers at the middle school and at the high school utilize Microsoft OneNote, which is similar to Google Drive. All students have the same access.

New adopted curriculum in the past few years included a technology component in which interactive lessons, online supplemental student support, and web-based manipulatives are available.

Several sites extend the school day by providing web-based intervention programs. One such program is web-based math intervention program called ALEKS. Other sites extend the day by providing students with the opportunity to learn coding.

All elementary classrooms are equipped with Promethean Boards for interactive lessons. The middle school and high schools also have Promethean Boards or similar devices.

All students have district created Google email accounts. These accounts are utilized to access google applications to complete assignments. SGUSD has also provided many web-based applications for student use. These programs are Learning A - Z, Discovery Education, Typing Agent, etc.

How is technology integrated into the curriculum being used to provide powerful learning opportunities for special-needs students and students who require additional resources to improve academic performance?

All classrooms are equipped with technology devices appropriate for the grade level and curricular area. Depending on the needs of the students, the classrooms either have iPads, Chromebooks, PCs, Macs, or laptops. The purpose of the devices is to provide all student equal opportunities to access the curriculum resources, research opportunities, project-based learning, and getting ready for the CAASPP assessments.

What steps is the LEA taking to ensure equity of access for all students regardless of their academic standing, socioeconomic level, proficiency in English, or disabilities?

SGUSD has developed the 1:1 initiative with the following goal in mind:

“Using a 1:1 (one device per child) classroom model, students will develop the college and career readiness skills of Creativity, Communication, Collaboration, and Critical Thinking in order to meet the 21st Century Common Core Content and Technology Standards.”

In the essence of SGUSD’s mission to provide a full, rich educational experience for all students, we envision educational technology as a means to achieve this goal. Technology will be accessible and effectively support all students and staff to provide the following:

- All students are safely and effectively using technology aligned to Common Core.
- All teachers are trained and supported to use instructional technology.
- All student will develop Digital Literacy and Digital Citizenship appropriate for their grade level.
- All students and teachers will have equal access to the tools of technology with a 1:1 ratio of computers to students.

SGUSD will provide the tools necessary to support English acquisition for English Learners, promote academic achievement for targeted subgroups, and close the achievement gap by continuously supporting its teachers and students, and providing the best available tools and training.

1:1 Initiative Committee and Technology Committee were formed with representation from every grade level and site in order to make the above possible.

Replacement cycle has been built into the plan, and funding needed to support the replacement policy

1:1 Initiative Goals:

Enhance all school sites’ current infrastructure to support instruction and curriculum delivery with the least interruption

Provide meaningful staff development to support the success of the 1:1 initiative and the integration of technology into teaching and learning.

Continue to monitor technology innovations and needs and the sustainability of the 1:1 vision.

Funding for the 1:1 Initiative is planned and supported by the LCAP committee and the LCFF.

Funding for other technological needs are based on bond monies and allocated funds provided to the ITS department.

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

What are the LEA's curriculum goals and plans for assisting students to meet content standards and demonstrate college and career readiness?

District-wide, SGUSD has adopted the California Common Core standards. This priority has guided everything from textbook adoption (including ancillary materials) to hardware purchases.

Are targets for improvement in student achievement being met?

Currently, there is not enough data to track the impact of technology on student achievement. There is also the issue that the primary metric used to measure student achievement (CAASPP) is relatively new, affording a set of data that is too small to be able to draw meaningful conclusions from. The district has piloted the iReady program, which generates a predicted proficiency of students after a diagnostic followed by guided lessons in order to improve achievement.

How do local improvement plans, immediate intervention plans, site plans, self-studies, accreditations suggest the curricular focus for the LEA technology use to school improvement efforts?

The district-wide plan supports that all students have access to 1:1 devices and all students will have at least 90 minutes of daily use of technology while focusing on ISTE standards, SAMR and TPACK researched models.

How will your curricular goals and needs influence your technology goals?

SGUSD has arrived at the threshold in public education where there is a shift in focus on curriculum. The pace of technological progress has, frankly, outpaced our district's ability to keep up. Curricular goals should be driven by principles that are responsive to and reflect the changing landscape of the information/social media age. SGUSD is

committed to supporting all students in preparing them college and career ready as they graduate.

How will technology be used to create more powerful learning experiences to improve student academic achievement?

Along with an emphasis on STEM/STEAM, there are several initiatives at the elementary, middle, and high school levels:

- 1:1 technology initiative
- Maker Space
- Invention Convention
- Coding and Robotics

How are you redesigning learning spaces to support the LEA curricular goals?

Currently, we are moving away from the traditional model of having a static computer lab that students cycle through and creating learning spaces that are more technology friendly. This ranges from mobile technology carts (iPad, Chromebook, notebook computers) to maker spaces that are linked to classrooms via LAN and WAN.

Some pilot classrooms have begun to move away from traditional seating environments, adding mobility and opportunity for collaboration and group projects.

How are/will Professional Learning Communities (PLCs) being used to ensure the quality and implementation of the plan?

- SGUSD has committed to a Professional Development Plan that will include Google Certification, attendance at CUE and such annual conferences, in addition to district-wide ongoing professional development.
- The District Tech TOSA drafts an annual Tech PD plan according to needs and vision of the 1:1 and Tech Committee.
- The District has also made available a site tech coach at each site to support the immediate needs of teachers.

As you analyze data and develop technology goals, how will technology support the academic needs of your significant subgroups?

Some classes target LTELs (Maker Space using 3D printing as the vehicle for language development instruction).

iReady a visually interactive and adaptive program is available to K - 8 and continuation HS.

Classroom devices are equipped with necessary software to promote literacy and academic success.

How will technology be used to help students demonstrate college and career readiness, improve CAASPP scores, and meet achievement targets?

One to one technology will increase the opportunities for proficiency. Students are given access to practice tests and the interim CAASPP assessments throughout the year.

How do your curriculum and technology goals align with LCAP?

Current site SIPSA (School Improvement Plan for Student Achievement) is aligned to LCAP goals and funding sources.

Student assessment data drives the decisions in purchasing necessary tech tools in order to improve achievement

Does the LEA budget include allocations to acquire the hardware, electronic learning resources, infrastructure, professional development, and technical support necessary to implement the plan?

Yes, both one-time and ongoing costs have been identified in LEA's LCAP plan

What funding sources, including federal, state, or local programs are available to support the plan?

LCFF and Bond Money

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

What are the LEA's curriculum goals and plans for assisting students to meet technology literacy and information literacy skills?

SGUSD has adopted two documents relating to technology and information literacy: The Common Core State Standards K-12 Technology Skills Scope & Sequence as well as the K-12 Technology Literacy Continuum. Both of these documents were adopted in 2015. Goals and plans for assisting students to meet technology and information literacy skills can be found in the K-12 Technology Literacy Continuum posted on District website under Staff/Technology Literacy tab.

This document offers suggested activities for meaningful technology integration and practices for implementation of the K-12 Technology Skills Scope and Sequence.

The District has also made it a priority to engage students in meaningful conversations by compiling Digital Citizenship Curriculum using the Common Sense Media resources.

What LEA adopted curriculum (matrix, and/or scope and sequence, i.e. International Society for Technology in Education [ISTE] Standards for Students) supports the acquisition of technology and information literacy skills?

The SGUSD K-12 Technology Scope and Sequence is integrated and aligned with Common Core State Standards and includes skills required for the Smarter Balanced Assessment Consortium's computer adaptive testing. The document was designed to serve as referral and guidance to educators to more effectively integrate technological skills within the curriculum. The District's current standards based

report card for Kindergarten through Fifth grades include an evaluation of student digital literacy. The K-12 Scope and Sequence can assist teachers in making this determination.

Teachers of SGUSD align their use of technology focusing on TPACK, SAMR, and ISTE Standards to ensure research-based integration and mastery of skills.

How are technology and information literacy skills embedded in content area lessons? Are specific courses offered that address these skills?

SGUSD teachers K-12 use both the Technology Literacy Continuum and Technology Scope and Sequence to ensure technology is integrated into daily lessons in a meaningful way and that skills are assessed in the lesson according to the grade level expectation. We embrace technology across the subject areas to help teach literacy. Google Classroom and Drive allow students to collaborate with their peers and teachers to increase their instructional time and quality of instruction. The tech tools we use allow us to differentiate our literacy instruction. We can focus on helping our struggling learners and push our more advanced learners. Technology/Information Literacy can now be taught more visually and more interactively, and many of the resources we use promote greater integration of different subject areas.

These skills are embedded in core content classes K-8. At Gabrielino High School, all 9th graders take the College Prep Transition Course. Information literacy skills covered in this course include: website evaluation, plagiarism, MLA 7 citations, and subscription databases.

Current but not limited tools used to promote technology and information literacy in the district include:

Vocabulary	Membean	Flocabulary	BrainPop	
Targeted Literacy Practice	Think CERCA	Readwrite	Google Voice Typing	IXL
	Learning A – Z	iReady Reading and Math		
Writing, Note taking, and Collaboration	Padlet	Kidblog	Nowcomment	Google Drive
	Easy Bib	Skitch		
Conventions	Grammerly	Noredink		

Math	iReady Math	GroGebra	Desmos	GoFormative
Typing Skills	Typing Agent			
Informal/Formal Assessment	Quizlet	Kahoot	Prezi	Pictochart
	Weebly	Aleks	Socrative	Google Forms
	Accelerated Reader			

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

What LEA board policies will be or have been developed to implement Internet safety instruction?

San Gabriel Unified School District Board Policy 6162.6 addresses internet safety:

"The Superintendent or designee shall provide age-appropriate instruction regarding safe and appropriate behavior on social networking sites, chat rooms, and other Internet services. Such instruction shall include, but not be limited to, the dangers of posting personal information online, misrepresentation by online predators, how to report inappropriate or offensive content or threats, behaviors that constitute cyberbullying, and how to respond when subjected to cyberbullying."

There is a definite need for digital citizenship training. SGUSD in accordance with CIPA has drafted an easy to access curriculum on digital citizenship for K - 12 which will begin implementation September of 2017.

The district Internet Acceptable Use Policy was revised in 2016 to reflect the new acts, policies of the board, and the changes in the technology community at large.

How are students using online communication technologies, including but not limited to social networking and instant messaging?

Students utilize Google Classroom as an online communication tool, in addition to Google chat embedded in Google Docs and Slides.

Students also use a variety of messaging and social media applications (Instagram, Twitter, Tumblr, Snapchat, Facebook, kik, QQ).

What materials will be used to instruct students about Internet safety, including how to use technologies to protect themselves and their privacy online?

Common Sense Media K - 12 curriculum will be used to educate students of Internet Safety, Privacy and Security, Relationships and Communications, Cyberbullying and Digital Drama, Digital Footprint and Reputation, Self-image and Identity, Information Literacy, Creative Credit and Copyright.

What materials/resources will be used to explain and illustrate examples of the concept and purpose of copyright, the fair use doctrine and other rights to use copyrighted works appropriately, potential penalties for use of copyrighted works without permission, distinguishing lawful from unlawful downloading, and how to avoid plagiarism (to meet AB307)?

Common Sense Media and Creative Commons resources are used.

How will the library/media center staff assist in ensuring students become effective users of information technology?

Library/media center staff at Jefferson Middle School is not tasked with instruction on information technology. The librarian at Gabrielino High School has assisted in developing and delivering information technology curriculum along with the 9th grade College Prep Transition Class.

How and when will teachers and/or librarians help students acquire Internet safety skills?

In concordance with Common Sense Media, as early as Kindergarten, students are introduced to school rules regarding responsible use of computers, the responsible use of technology, and are introduced to the perils of cyberbullying. By first grade, students are introduced to the importance of password protection and the risks of online communication. These skills are reinforced and mastered during their elementary education.

In secondary education, the skills previously mastered are expanded upon with the Acceptable Use Policy for 6-12 grade students. The ethical practice of internet usage, the training for assessing the validity of internet information, and the dangers of sharing personal data online are reinforced and mastered during these years.

What efforts (including technology-based solutions) will the library/media center undertake to prevent or deter unlawful downloading or unlawful uses of copyrighted works?

The school librarian, site technology coach, and teachers instruct students of copyright laws and unlawful downloading of files when they cover the topic of digital citizenship at the beginning of each school year. In addition, students are introduced to ethical and legal research skills, including information literacy and plagiarism.

How and when will teachers and students learn about the implications of legal/illegal file sharing?

Both teachers and students receive an Acceptable Use Policy at the beginning of each year, which includes the legal and ethical use of technology at SGUSD according to Board Policies and CIPA and FERPA acts.

How are teachers using online communication technologies, including but not limited to social networking and instant messaging?

In addition to Microsoft Outlook used for email at the District, teachers use a variety of online communication technologies that include but are not limited to: Remind App, Google Classroom, Google Hangouts, screencasts, Aeries parent portal, ClassDojo, and Skype.

How will teachers be trained to deliver Internet safety and ethical use content?

Teachers receive ongoing professional development on how to deliver Internet safety and ethical use content at the beginning of each year. K - 5 teachers are informed during grade level meetings in September. Secondary teacher trainings are often delivered during staff meetings or after school on an established schedule. These trainings are facilitated by the district Tech TOSA and Site Technology Coaches.

How will annual training for staff and who will retain proof required under CIPA compliance?

Annual staff trainings are tracked at school sites and at the District taking place during the staff development days. Proof of attendance is retained by office managers at each school site.

Is the LEA's acceptable-use policy for access to the Internet up-to-date?

As of March 1, 2016, the District's Acceptable Use Policy is up-to-date. All students and parents of younger students read and sign the SGUSD AUP during registration

How is access to only appropriate educational online resources accomplished?

District-wide firewall is in place. The District is responsive to developing needs as they arise.

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

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

How does your LEA regularly assess teachers' and administrators' personal technology proficiency skills?

The staff was surveyed in 2016 by BrightBytes to assess current levels of technology skills. A similar survey will be repeated each year to determine new areas of need for Professional Development.

How does your LEA regularly assess teachers' ability to utilize technology in a standards-based curriculum?

New material purchased to align curriculum with the Common Core State Standards includes a component of technology. training packages are purchased from the company to ensure teacher ability in instructing that material. Tech TOSA, Site and Instructional coaches support teachers throughout the year.

Do teachers have the classroom management strategies to work with the amount of technology actually available in the classrooms?

- School Branch extension license is provided by the District to enable teacher/student Chromebook interaction and collaboration.
- Apple Classroom app is deployed on all iPads to enable classroom management at K - 2 and High School iPad user classrooms.
- HP Classroom Management app was installed on all classroom Pcs.
- Tech TOSA and Site coaches share and model classroom management strategies.

What do teachers and administrators consider as their needs for professional development?

Based on the 2016 BrightBytes survey:

- 25% teachers expressed the need for PD in improving their basic skills in using technology
- 57% teachers have expressed need for PD in using Multimedia
- Teachers share the continuous need for support in integrating new technologies into their curriculum in order to enhance learning for All students

In addition to above survey:

- Training on Aeries Gradebook
- Google Classroom and Drive
- Integration and best practices of use of technology in improving student achievement

After collecting and analyzing professional development needs, what are the local, regional, and online professional development opportunities to meet identified needs?

- Site coaches are available to support teachers on daily basis
- A Google Classroom called "SGUSD Tech PD" was created to post and share all the training material and resources for teachers (teachers became students in this class)
- Tech TOSA has drafted an annual PD plan based on teacher feedback and interest
- Teachers are encouraged to attend local and regional Tech Conferences

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

San Gabriel Unified embraces technology across the subject areas to help teach literacy. The tech tools we use allow us to differentiate our literacy instruction. For

example, Google Classroom and Drive allow students to collaborate with their peers and teachers to increase their instructional time and quality of learning. We can focus on helping our struggling learners and challenge our more advanced learners through such applications. Literacy can now be taught more visually and more interactively, and many of the resources we use promote greater integration of different subject areas. The tech tools we use also allow for greater teacher collaboration and a more targeted focus on vertical articulation throughout our K-12 school district. Our use of technology builds from one grade level to the next to enhance our instruction of literacy using developmentally appropriate researched-based strategies.

The district has invested in staff development and continues to do so recognizing the essential role PD plays in making technology an instructional tool. A full-time Ed Tech TOSA position has been created to provide opportunities to support teachers in using technology. In addition, sites have access to a certificated Tech Coach for trainings and support as needed. A full time classified tech support is also available to help troubleshoot and resolve device issues at each site.

As the district moves forward with the 1:1 initiative, the focus remains as:

“Using a 1:1 (one device per child) classroom model, students will develop the college and career readiness skills of Creativity, Communication, Collaboration, and Critical Thinking in order to meet the 21st Century Common Core Content and Technology Standards.”

Now that students have access to 1:1 devices in grades K-12, it is essential that a wide variety of professional development opportunities be made available to help teachers meet the instructional goals and begin practicing the TPAC (The TPAC model values the correlation of Technology, Pedagogy, and Curriculum to ensure effective teaching and learning with technology) and the SAMR (model designed to help educators infuse technology into teaching and learning. Popularized by Dr. Ruben Puentedura, the model supports and enables teachers to design, develop, and infuse digital learning experiences that utilize technology) models in integrating technology with curriculum.

In addition, Ed Services has adopted the K-12 Technology Skills Scope and Sequence from The Fresno County Office of Education and is focused on the ISTE Standards (1. Creativity and Innovation, 2. Communication and Collaboration, 3. Research and Information fluency, 4. Critical Thinking, Problem Solving, and Decision Making) to support the California Common Core State Standards. A K-12 Technology Literacy Continuum with sample programs and activities were drafted based on the above to support the use of technology in the classroom.

Current level/skills/needs of teachers across the district

Considering the fact that San Gabriel Unified is a GAFE (Google Apps for Education) district and over 80% of teachers use Chromebooks, Google Drive trainings are offered regularly both at the district and the sites.

Google Apps for Education: The district signed a contract with the Ed Tech Team to deliver Level 1 and Level 2 Google Certification Bootcamps during the months of June

and July of 2016. The goal of the district is to continue similar bootcamps and encourage certification to reach all its employees.

iReady, an assessment program with a diagnostic module was piloted January of 2017. Teachers are trained and encouraged to use the lessons in iReady to discover specific needs and monitor growth in K-8 classrooms and Del Mar High School.

Digital Citizenship has become an integral need in education due to the rise of access to digital tools and social media. San Gabriel Unified is committed to educating its teachers, pupils, and parents in the effective and safe use of technology. A team of site coaches with the leadership of the district Tech TOSA drafted a Digital Citizenship Scope and Sequence by using the resources available in Common Sense Education to be shared and implemented district wide.

The topics include: Internet Safety, Privacy & Security, Relationships & Communication, Cyberbullying and Digital Drama, Digital footprints & Reputation, Self-Image & Identity, Information Literacy, Creative Credit & Copyright.

This scope and sequence is available to teachers via a shared Google sheets document, giving them easy access to lesson plans, conversational pieces, visuals, and educational resources. San Gabriel Unified in accordance with California Department of Education will dedicate a week every year in October to “Digital Citizenship Week” in order to insure that ALL students receive proper training in mastering the skills needed in using technology safely and effectively.

Weekly after school trainings: These 2 hour after school trainings are offered every Tuesday and Thursday beginning September to December of each school year. Tech TOSA, Site Coaches, and any teacher who is willing to offer their expertise, meet after school at various sites to share best practices using technology.

Annual District Wide PD: SGUSD has secured 3 district wide pupil free days in the year. The 3rd day in January is dedicated to a professional development day across grades K – 12. Teachers are given an opportunity to articulate and collaborate in addition to attending sessions that are offered by other teachers in the areas of their expertise.

Coding and Robotics: In order to prepare our students for the careers of 21st century, SGUSD realizes the need and supports the teachers in implementing and integrating coding and robotics into their everyday curriculum. To raise interest and awareness in the community, SGUSD has held a Robotics Tournament at Jefferson Middle School annually for the past 10 years. The Tech TOSA will continue supporting and training the site teachers in using coding and robotics throughout the year. Programs such as code.org, scratch.mit.edu, and CS First are used for coding. Students mostly use EV3 Robots by Lego Education and compete at the FIRST Lego League Tournaments.

Conferences: Teachers are reminded and encouraged to attend annual conferences such as CUE and San Gabriel Valley CUE (Computer Using Educators), Arcadia Summit (usually held during summer), and local offerings as they become available.

Topic	TimeLine	Facilitator	Monitoring & Evaluation
Google Bootcamps	June 2016 – 2020 Summer Sessions	Tech TOSA and Site Coaches	Certification Teacher Survey
iReady	Ongoing beginning January 2017	Vendor & TOSAs	Reports generated by the program
Digital Citizenship Curriculum	Ongoing beginning September 2017	Tech TOSA and Site Coaches	Teacher Survey & Classroom Visits
After School PD	Tuesdays & Thursdays September- December	Teachers and TOSA across the district	Teacher in-house Survey
District Wide Training	Once a year in January (pupil free day)	Teachers	Teacher Survey
Coding & Robotics	Ongoing	Tech TOSA and Site Coaches	Teacher and Student Feedback and Observations
Conferences	Throughout the school year	Arcadia Summit, CUE Annual Conference, San Gabriel Valley Annual Conference and 2 mini workshops	Teacher Feedback
Vendor training	Ongoing	Microsoft Apple	Teacher Feedback Administrator observation

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

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

School inventories are updated automatically as inventory changes at each site thus providing an overall perspective of hardware available district wide.

Chromebooks, iPads, laptops, desktops, printers, document cameras, projectors and/or

interactive TV/whiteboards are available in classrooms. All school sites and classrooms have Internet access via the Ethernet network and wireless connectivity. The system is operated and maintained by the Information Technology Services (ITS) with physical wiring support from Maintenance and Operations (M&O). In 2015-2016, the 1:1 initiative team made devices available to most classrooms by department request. Currently, about 90% of classrooms have access to a cart with digital devices ranging from iPads, Chromebooks, to PC and Mac laptops for student use. Every elementary school teacher has an iPad, document camera, projector, laptop, and an interactive whiteboard in his/her classroom. A few elementary school classrooms have interactive flat panel TVs. School sites purchase equipment each year using a set amount of funding from Title 1, Local Control Funding Formula (LCFF), PTA, community/business partners, educational foundation donations, and Bond funds. Additional equipment, as well as replacement equipment, is included in the purchases. A procedure for appropriate disposal of obsolete and irreparable hardware is in place and involves the site, the purchasing department and the warehouse where computers are collected and sent to a recycling center.

Existing Internet Access

School site bandwidth was upgraded from 50 MB (Elementary schools) and 200 MB (Middle and High schools) to 1GB connection to the District Office. The District Office has a 1GB connection to the Internet Service Provider (ISP) - Foothill Consortium. The District no longer has a T-1 connection to Los Angeles County Office of Education (LACOE). When connecting to LACOE, clients are required to connect to LACOE's VPN to access such applications such as Payroll and Human Resources data.

All school sites are equipped with their own local area network. The hardware, such as router, switches, wireless access points are anywhere from 1 to 6 yrs old. With the increase in mobile devices throughout the district about 70% of the classrooms have at least one access point.

Existing Electronic Learning Resources

All Windows and Apple based operating systems have, at minimum, Microsoft Office and Adobe Creative Suite. Chromebook's applications are mainly all web based. Most applications from Google Play are free, however, there have been a few occasions where applications were purchased. iPads are used throughout the District as well. The District supports purchasing of up to 2 apps per teacher per year. For the most part, iPads are used for grades K-2, whereas Chromebooks are used for grades 3 - 12. HS Math and Science departments chose to use iPads and Middle School Math department used PC laptops.

Financials (PeopleSoft and Smartetools), and other application software are installed where applicable. Web based applications such as Student Information Systems (SIS), work order system (OPRA), online grading (Aeries.net), and other applications can be accessed internally on the district's network. Other applications that district uses are fee based subscription from 3rd party vendors.

Existing Technical Support: The Information Technology Services (ITS) Department has 1 lead network technician, 1 lead technology support specialist, and 2 computer

support technicians, and 1 Director of Technology that supports eight schools, district office, and district resource center. In addition, each site has its own site technician that are mostly employed full time. The department fixes all computers and peripherals, installs software and hardware, troubleshoots network connectivity, content filter, and diagnose wiring problems. There is currently a work order system (OPRA) in place in order to create efficiency and respond to technology related issues in a timely manner.

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

Networking and Telecommunications Infrastructure Needed: The SGUSD is dependent on the daily operation of the district wide area network (WAN) and each individual site local area network (LAN) to communicate and provide resources to students, staff, and parents. The District has made considerable progress in this area by additional CAT 6 data drops, wireless connectivity district-wide, VoIP phone system, new switches, routers, and 1 GIG connection at every school site. The maintenance, upgrade, and implementation of these systems are crucial to our daily operations.

Hardware Needed: It is the goal of SGUSD to provide up to date hardware to all staff and students.

As budget permits, a defined percentage will be allocated to computer replacement each year as it becomes necessary to maintain operational quality.

As budget permits, Chromebooks, laptops, iPads, etc. will be purchased towards 1:1 initiative.

District and school site network servers and storage systems require updates to current hardware/software to handle curricular needs and student/teacher file storage capacities.

Purchase bulbs for projectors due to high usage of interactive whiteboards and general projectors used in the classrooms.

Replace legacy classroom projectors with flat panel interactive TVs.

Work with computer lab techs and vendors to identify dim, costly to maintain, and prone to fail projectors. Coordinate funding opportunities to replace bulbs and/or projectors with newer, cost-effective projector that will last 3 to 5 years.

Add additional wireless access points to enable seamless Internet connection.

Student adaptive learning devices will need to be purchased/updated, as specified in student Individual Education Plan (IEPs).

Explore video conferencing equipment needs with recording and search capabilities to expand long distance learning and training.

Expand surveillance cameras and digital signage to enhance school site safety.

Electronic Learning Resources Needed.

District and School site mobile Apps will continue to be explored and implemented for easier access to resources and improved communications.

Productivity software is included as part of the baseline package when computers are purchased and will need to be maintained and upgraded (Microsoft Office, Adobe Suite, etc.).

Continue to utilize web-based application such as Typing Agent, Brain Pop, Discovery Education, etc

Continue to explore applications that can support and manage student activities on digital devices (Such as Reflector, HP Classroom Manager, SchoolBranch, Apple Classroom).

Design and implement Microsoft System Center to better manage Windows-based devices and possibly Mac and Google devices.

Explore Single Sign-On (SSO) to make it easier to access resources such as Clever (one username/password).

Additional licenses on the wireless controller to accommodate the growing number of wireless access points.

Install a failover wireless controller to ensure redundancy so that there is minimal downtime.

Install IP-based security cameras at all of the elementary schools.

Replace existing Layer 3 firewall with Layer 7 firewall to prevent and/or reduce the probabilities of hacks, malware, and viruses getting into the District's network.

District and school site network infrastructures will require replacement for quicker throughput due to the increasing number of nodes connecting to the Internet.

Upgrade IP Telephony because Cisco no longer supports current call managers and unity.

Look at expanding bandwidth for internet connection from 1GB to 2+ GB.

Physical Plant Modification Needed: The District has completed an installation of a power generator to ensure the District Office server room has electrical power due to the many instances of blackouts in the City of San Gabriel.

The District continues to look at ways to maximize student learning space through a variety of products/services such as mounted projectors/speakers, screens or monitors, interactive flat panel displays, amplification systems, etc. on an as-needed base.

Technical Support Needed: Starting with the beginning of the 2016-17 school year, 90% of students will have access to a mobile device(s) while they are in class. The District will need to increase the number of hours for the elementary site technicians from 19 hours to at least 30 hours a week.

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

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

Process

The process of evaluating the Technology Plan's impact on teaching and learning will involve the Technology Committee Team with support from Curriculum Department staff. To aid in the process of tracking plan goals and implementation steps, a project management timeline will be developed, with space to check off progress steps and record comments from stakeholders. The Technology Committee Team will review and evaluate the implementation of the plan on a semi-annual basis using previously specified and any new pertinent data compiled by Curriculum and the ITS Department staff. Data will be compiled in a comparative structure to facilitate analysis. Upon review of the data, the team will adjust for necessary modifications or unforeseen needs or circumstances. On an annual basis, a technology status report will be provided to the Board of Education. The report will include conclusions reached through survey data regarding technology use and proficiency by staff and students as well as student achievement data such as the California Assessment of Student Performance and Progress (CAASPP) as indicated in this plan as well as the Local Control Accountability Plan (LCAP).

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

Schedule

To initially disseminate the Technology Plan to stakeholders, the Tech Committee will review the Plan, bring it to the Board, and deliver to all stakeholders via principals meetings, staff meetings, and parent meetings. Site administrators will discuss how to review the Plan with staff and parents and gather feedback from both. The District will promote the Technology Plan on the District website. Publications and communications highlighting instructional technology advancements will be provided to stakeholder groups through the District newsletter as appropriate.