Lompoc Unified School District

Educational Technology Plan

For school years 2021 – 22, 2022 – 23, 2023 – 24

Presented to the Board of Trustees on June 22, 2021

Board of Trustees:
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Background and Context

District Mission

The Board of Education is committed to district-wide actions which lead students to develop the skills, knowledge, and character traits necessary to become responsible, thriving and contributing members of society.

Educational Services Vision

We believe that all students have the right to a high-quality education that will lead to opportunities for a successful life. As an educational team, it is our mission to use our data, expertise, hard work, and shared experiences to create an equitable path that meets the diverse needs of all students.

Board of Education Goals

1. Academic Achievement & Instruction: Maximize academic achievement of all students and provide instructional programs and educational opportunities to challenge our students to reach their full potential.

2. Communication: Promote positive, effective communication among our community, District, students, staff, and stakeholders.

3. Professional Learning: Develop capacity of all staff to meet the academic needs of all of our students through ongoing professional development and collaboration.

4. Culture/Safety: Provide a safe and respectful learning environment where each student, parent/guardian, and staff member is valued.

5. Commitment to Excellence: Commit to excellence in education and awareness of Board responsibilities.

a. Participate in annual professional learning.

b. Maintain ongoing review and development of pertinent policies.

c. Monitor student and system performance.

Appropriate Use of Educational Technology

We believe that educational technology, whether as curriculum, educational applications, educational extensions, visual aids, hardware, or instructional assistance devices are most effective and most beneficial to student's academic success when they are integrated into well-conceived and implemented lesson plans. A 21st century professional does not arbitrarily stop using a pen and paper because it is now computer learning time. A computer, smart phone, note pad, and instructional manual all live and work on the same desk, table, or work bench. So should be the case for our students for whom we desire a future as a 21st century professional.

For our instructional staff to be able to reach this level of integration, she must first have trust in the product. This comes from proper training in the use of, and understanding of, the strengths and weakness inherent to every tool. Further, it requires the district and site administration to ensure we pick the correct tools with a track record of reliability, ease of use, and functionality to suit the needs of the instructional plan. Finally, the infrastructure upon which the tool is placed must be sufficient to the task, allowing dependable and predictable use of the chosen tool, to ensure outcomes are met. When all

of these factors are considered, and correctly addressed, our instructional staff can make maximal use of educational technologies to greatly impact our student's achievement.

It is the goal of the Educational Technology Plan to address each of these areas of need, so that LUSD instructional staff can meet the highest levels of technology integration, feeling confident with its uses to ensure student outcomes.

Plan Objectives and Duration

The Educational Technology Plan is designed to set a goal for the district educational technology, both technology infrastructure and educational hardware and software, and then ensure the District takes all steps necessary to reach that goal. Knowing that as educational technology progresses and new technologies emerge, our "how" may change or evolve, but the "why" of the plan remains singularly focused on creating technologically savvy graduates able to tackle 21st challenges, as well as aiding our staff to view technological resources as benefits to quality instruction rather than daunting challenges to overcome.

To this end, the plan will address technological infrastructure as it is the backbone of any technology services department. Also, the plan will acknowledge the need to keeping educational learning hardware up to date and functioning proficiently to ensure student use is not interrupted by old or failing devices. Finally, the plan will address professional development and instructional support to allow the district's instructional staff capacity to grow and develop with current and emerging educational hardware and software. This is especially important at a time when the majority of core curriculum comes with an educational technology portion, and some are entirely technology based.
The Lompoc 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, 2024).

The Director of Information and Technology, Executive Director of Education Services, and the Superintendent are responsible for monitoring implementation of this plan. The plan will be reviewed and revised on an annual basis. The Director of Information and Technology will then work with the Superintendent and Executive Director of Education Services to implement any required revisions directly with site-based administrators.

Stakeholders

- The stakeholders of this technology plan include:
- Teachers
- Administrators
- Parents
- Students
- District Office Staff Members

Technology Advisory Committee

The Technology Advisory Committee was not able to be assembled in a typical manner due to Covid-19 shutdowns, as well as the significant time crunch placed on teachers and district staff to move learning to fully remote and then to hybrid. However, this plan is written with the input of teachers, administrators, and families gained from direct conversations, email correspondence, and multiple surveys conducted over the last year.

It is our intent to reform the District Technology Advisory Committee for the 21-22 school to meet quarterly. That committee will review the plan to ensure we are making sufficient progress toward our goals. It is our desire to establish a committee of comprised of IT staff, site principals, lead instructional staff, and a maximum of two school board members.

Current Assets and Supports

Infrastructure

Infrastructure Objectives

- Upgrade infrastructure to meet site and district needs, primarily switches, access points, and servers.

- Review bandwidth usage regularly and determine annually if bandwidth needs to be increased to meet site and district needs.

- Maintain expanded network backbone of 40Gbps communication speeds to the Education Center network hub. Maintain expanded WiFi connections to support 10 Gbps communication speeds to every site. Until recently the speeds were 10Gpbs to the Education Center and 1Gbps to the sites. IT staff believes the move to expanded WiFi usage as well as the increased usage of educational technology necessitates maintaining the increased speeds.

- Replace broken/deprecated network equipment.

Infrastructure Overview

Lompoc 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 11,000 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 reassigned to an appropriate location, or surplussed when it is past end of life. This helps us target needs across our district and ensure that we are maximizing the value of our equipment.

The district currently supports more than 300 network switches, accommodating 4 – 8 network ports per classroom. Over the past several years the district has moved from LAN based desktop computers to chromebooks, and to laptops for teachers and instructional staff. This change in hardware has necessitated a move to a more robust WiFi enabled network. To that end the district has made substantial investments in updating switches to power over ethernet plus (POE+) capabilities, which allows for more robust WiFi access points (AP's) to be used. While this represents a cost to the district, overtime it will allow the district to reduce the number of network ports required, which will represent a savings as well.

The current wide-area data network is supplied by managed fiber optic network provided by Comcast in a hub and spoke pattern, with the hub located at the District Office. From the main hub, each of the other school sites are connected by a Fiber Optic Link at 10Gbps. The central hub location is connected to our ISP at 40Gbps. All essential central network equipment is powered through uninterruptible power supplies with battery backup. Non-essential hardware is supported with line conditioners to minimize damage during power surges. The network is provided by Comcast at three locations, which provides redundancies should one link be interrupted by cyber-attack.

Switches

Over the last 16 months the district has made a significant investment in increasing its network capacity and resiliency. The move to remote learning made this a necessity, but we believe the increased usage of educational technology will require we continue this process until the entire network backbone is renewed. The first step in the renewal was to replace our current aging Cisco switches with new Juniper switches. Cisco switches are high quality, but as with all Cisco products, the licensing has built in obsolescence. While it is important to continually renew network hardware, Juniper licensing will allow

the district to replace switches in the future only when they are defective, or an upgrade is necessary to continue network.

In the last sixteen month the district has replaced dozens of switches to power over ethernet plus (POE+) switches which allow more power wireless access points (AP's) to be used. As of the writing of this place, there are 57 more switches that will need to be added or replaced over the next three years. (See budget in appendix A, 3 Year Spending Plan)

Servers

The district replaced all of the servers at the Education Center during the 20 – 21 and 21 – 22 school years. In May of 2021 the District voted to place a new server at each school site. This means for the next five to seven years the district should have fast and functional servers that help move data between the sites and the Education Center. (This assumes the board approves on Tuesday)

Access Points

All district sites currently have a WiFi network in place, but this plan's goal is to increase capacity and robustness of the network by moving all high traffic classroom and offices to a 1:1 room to AP ratio. Lower volume classrooms and offices can move to a 1.5:1 room to AP ratio. The lowest volume sites will move to a 2:1 room to AP ratio.
Current Ratio at sites:

Site	Room to AP Ratio	Site	Room to AP Ratio
Buena Vista	2:1	Vandenberg MS	2:1
Clarence Ruth	2:1	Lompoc Valley MS	2:1
Crestview	2:1	Maple HS	2:1
Hapgood	3:1	Cabrillo HS	1.25:1
La Canada	2:1	Lompoc HS	1.25:1
La Honda / MV	3:1	Forinash CDS	3:1
Los Berros	3:1	Adult Ed	3:1
Miguelito	3:1	Education Center	3:1

Proposed Ratio by 2023 – 24

Site	Room to AP Ratio	Site	Room to AP Ratio
Buena Vista	1:1	Vandenberg MS	1:1
Clarence Ruth	1:1	Lompoc Valley MS	1:1
Crestview	1:1	Maple HS	1:1
Hapgood	1.5:1	Cabrillo HS	1:1
La Canada	1:1	Lompoc HS	1:1
La Honda / MV	1.5:1	Forinash CDS	2:1
Los Berros	1.5:1	Adult Ed	2:1
Miguelito	1.5:1	Education Center	2:1

Increasing the number of access points will require an increase in the capacity and licensing volume of our current wireless controller hardware. The current Cisco WIZM controller will meet end of life in June of 2022, so we are already planning this upgrade. Currently the District is capped at 500 APs, but it is our intent to increase that cap to 750 licenses to ensure we meet the goal of access points per site. (See Appendix A, 3 Year Spending Plan)

Security Software

The district deploys a variety of security software solutions designed to provide cyber security and assist in monitoring the use and functionality of the network and related hardware. Firewall software from Palo Alto prevents students from accessing inappropriate materials on the internet as well as providing

security from hackers looking to access our network. F5 provides security for our Student Information System Q, SolarWinds provides the help desk support as well as network monitoring, and Incapsula provides protection against DDOS attacks on the network.

LUSD ITS Security Software	
Software Vendor	Description
Palo Alto	Network Firewall
Incapsula	DDOS attack prevention
F5	Network protection for Q SIS
SolarWinds	Help Desk and Network Monitoring
VMWare	Cloud data security software
GoGuaridan	Student device use monitoring software

Our current F5 system is both software and hardware. The hardware component is a decade old and at its end of life. The district has a choice between replacing the F5 device and upgrading the F5 software licensing agreement or moving the entire Q SIS to be hosted by Aequitas. Both pricing options are listed in the three-year spending plan in Appendix A.

Educational Hardware

Hardware Overview

Lompoc Unified School District commits to a minimum level of technology access in all district classrooms. This level is currently defined as encompassing the purchase, installation, maintenance, repair, and retirement of the below resources:

- 1 Teacher Laptop Computer
- 1 Interactive TV or LCD
- 1 Document Camera/Stand
- 1 VOIP Telephone
- 1:1 Student to Device ratio (Chromebook or iPad)

Chromebooks

Currently LUSD has 12,500 chromebooks in inventory, so one can assume the district is in good shape for a 1:1 chromebook to student ratio in grades 2 – 12. However, due to the way the chromebooks were initially purchased, the district must content with two large chromebook retirements. On 9/1/2021 2,691 chromebooks will pass licensing and can no longer be used for students. On 6/1/2022 another 6,011 chromebooks expire licensing. Chromebook licensing will always expire after 5 years, therefore the district will work to get a regular inventory turnover process in place. For the three years in this plan, the district will endeavor to create an inventory pattern that will allow a consistent number of chromebook retirements and replacements each year. Our goal is to always have 8,000 chromebooks in inventory, which in a perfect inventory cycle would mean retiring 1,600 chromebooks retired each year, and 1,600 purchased each year.

Current chromebook inventory and replacement cycle for District inventory.

Lompoc Unified School District Chromebook Inventory Plan				
Inventory Date	**6/30/2021**	**6/30/2022**	**6/30/2023**	**6/30/2024**
Starting Count	12,675	11,709	8,050	8,400
Expected Retirement	2,691	6,011	0	400
Expected Replacement	2,500	2,500	500	500
Final Count	12,484	8,198	8,550	8,500
Loss Adjustment	11,709 (Covid)	8,050	8,400	8,350
Total Cost of replacements	$812,500	$812,500	$162,000	$162,000

Proposed chromebooks replacement cycle to remain 1:1 at each site.

Lompoc Unified School District Chromebook Inventory by Site					
Site Name	**Current Inventory**	**Retiring 9/1/21**	**Retiring 6/20/22**	**Total Required**	**New Inventory Required**
Buena Vista	619	219	199	390	200
Clarence Ruth	423	89	171	330	170
Crestview	781	401	88	420	140
Hapgood	852	132	320	450	60
La Canada	798	130	493	430	270
La Honda / MV	615	181	266	330	140
Los Berros	427	65	204	313	170
Fillmore	647	136	303	420	230
Miguelito	680	0	391	320	35
Vandenberg MS	668	95	283	680	400
Lompoc Valley MS	1160	137	758	860	645
Maple HS	199	83	45	95	26
Cabrillo HS	1034	209	439	1160	813
Lompoc HS	2160	268	1388	1650	1200
Forinash CDS	35	0	0	35	0

iPads

The district purchased 2,200 iPads for grades TK – 1 or 2 depending upon the site. Since iPads do not have a preset retirement date and often can last for 7 years of use, this plan does not include a replacement schedule for the iPads. It is anticipated that the district will replace broken iPads for the next five years but will then begin a 3-year replacement cycle beginning in the 2027 – 28 school year and ending on during the 2029 – 30 school year.

Learning Resources

Learning Resources Objectives

- Integrate technology into each classroom and each curricular area.
- Review educational applications each year to ensure we are using the most up to date and best suited to meet the district's educational needs.
- Ensure that staff has proper training to make proper and efficient use of the educational technology provided.
- Ensure the learning hardware and learning software are integrated as well as possible.

Learning Resources Overview

Available software provided by or supported by the district. Each educational app, extension, e-book curriciulum, organizational tool, and communication tool should be evaluated each year to ensure efficacy of the product, proper training for staff, and sufficient instructional staff use is occurring.

District Services Supports	Curriculum / District Apps	Site Apps and Extensions
G Suite for Education	Ren Place	Pear Deck
Office 365 / Outlook	Kami	Screencastify
Clever	Ed Puzzle	Reading Plus
Aequitas Q SIS	Lexia	IXL
CAASPP	Alegra Joy Learning	Nearpod
ELPAC	Paper Tutoring	Suite 360
Parent Square	MClass Amplify	iStation
Final Site Web Site Support	Twig Science	iReady
Airwatch MDM	McGraw-Hill (MyMath, StudySync, Wonders)	ALEKS
Palo Alto Firewall	Amplify Middle School Science	Reflex Math
GoGuardian	Illustrative Math	

Digital Citizenship and Online Safety

It is imperative that all LUSD students meet the requirements detailed by CDE to learn and understand about digital citizenship and cyberbullying prevention. Each student should receive at least one lesson per school year specifically targeted toward digital citizenship and cyberbullying prevention each school year. The student handbook prescribes specific rules for proper use of technology at school and online, and each student is required to read and sign the handbook each year. The District also employs technology tools to prevent cyberbullying and harassment such as STOPit Solutions, and Go Guardian to allow teachers and families to monitor student technology use.

For any District school sites wishing to further enhance their digital citizenship efforts, the ITS department recommends the use of Digital Citizenship Curriculum provided free of charge by Common Sense Media. Detailed lesson plans for grade K – 12 are provided on their website at https://www.commonsense.org/education/digital-citizenship/curriculum

Distance Learning and Educational Technology Instruction

The California State Board of Education recently adopted the Distance Learning Curriculum and Instructional Guidance Project plan. This document brings new elements to distance learning support as well as the usage of instructional technology and educational technology curriculum at school sites. The plan has many facets, but two important areas of interest are the alignment of the International Society for Technology in Education (ITSE) standards with the Substitution, Augmentation, Modification, Redefinition (SAMR) model of learning strategies. This will provide several opportunities for ITS and C&I to work collaboratively to implement plan aligned curriculum and instructional practices to sites. The plan also addresses specific teaching modalities and practices for Students with Disabilities. This will also allow crossover between ITS and Student Services.

The Distance Learning and Educational Technology Instruction plan also addresses the concerns of equity in distance learning. LUSD purchased more than 400 hotspots during the 20 – 21 school year to help offset some of the inherent inequities in our community. While we anticipate far fewer students accessing distance learning for the three–year duration of this plan, we will continue to plan to supplement home WiFi with hotspots and assist families in gaining upgraded home WiFi through various grant funding opportunities. The district is also working with an outside vendor to create a WiFi mesh network in and around the city of Lompoc which will help offset some of the inequities in access to broadband WiFi as well.

To learn more about the Distance Learning and Educational Technology Instruction plan click below.
SBE Item 02-Distance Learning Curriculum and Instructional Guidance Project

Technical Support

Technical Support Objectives

- Ensure that all students reach and maintain a 1:1 student/device ratio.
- Ensure that all administrators and instructional staff have mobile computing devices for maximum flexibility in working conditions.
- Ensure that all sites maintain sufficient bandwidth to maximize the use of all educational technology.
- Assist instructional staff with the implementation and use of educational tools.
- Assist school site staff in maintaining electronic records.
- Ensure the District has all required materials posted on the district website.
- Ensure that students are rostered in all curriculum and software required for academic success.
- Assist site and Education Center administrators in choosing the best hardware and software to meet their unique needs.
- Ensuring that the district provides hardware and software to meet all state testing and reporting requirements in CALPADS.

Technical Support Overview

The Information Technology Services department has fifteen full time employees, including two certificated positions and thirteen classified positions. Currently the department has a certificated Director, Information and Technology, one certificated Educational Technology Specialist, one Lead Engineer, two Network Engineers, five Computer Network Technicians, one Administrative Assistant, and three data specialists.

The Directors role is to oversee the entire department, meet with site staff, STSA staff, DO Staff, and represent ITS in Education Services Meetings. The Educational Technology Specialist primarily supports educational technology by training and supporting site staff, but also works with Curriculum and Instruction to support educational curriculum and support benchmark and CAASPP/ELPAC testing. The three network engineers are tasked with ensuring all aspects of the network hardware and software infrastructure and security are maintained, as well as finding new and better alternatives. With the move to more WiFi based devices, the network engineers have been essential in the process of redesigning the network. The five Computer Network Technicians work to maintain the districts hardware, support teachers, learn and help implement software, as well as advise on the use and implementation of peripheral devices such as document cameras, monitors, and port replicators. The three data technicians work to maintain District student information system, Q, our single sign on software, Clever, and maintain our data reporting to the CDE through CALPADS.

In addition to the ITS staff based out of the District Office, each school site has a part-time Student Technology Site Assistant to assist with basic technology maintenance and student and staff assistance on site.

Educational Technology Goals

Overview of Goals

1. The district will use technology to increase communication and facilitate use of data to drive instruction.
2. Students will have increased use of educational technology in all content areas.
3. Provide teachers with training to incorporate technology into teaching of all content areas.
4. Provide administrators with training to improve technology proficiency at all sites.
5. Increase use of mobile devices for all staff.
6. Allow use of 1:1 devices at home for grades 4 – 12. Monitor use for indicators of proficiency.
7. Continue use of 10Gbps speeds to all sites. Implement 40Gbps speeds at the DO and monitor to determine appropriate needs going forward.
8. Increase the number of WiFi access points across the district.

Instructional Program Goals

Goal 1

Develop and implement a suite of instructional and communication tools to allow administration and instructional staff to use technology to monitor student academic progress at both the site and district level and communicate that progress more effectively with families and communities.

Rationale: Increased use and proficiency with learning management tools such as Google Classroom, communication tools, such as Parent Square, and increased use of data monitoring and assessment tools will allow facilitate increased use of data to drive instruction, and increased understanding of District progress with use of specific targeted data.

Checkpoints:

- By June 30, 2022, the LUSD Educational Technology Committee establish a baseline level of proficiency with use of LMS, communication, and data monitoring tools district wide. The Committee will work with existing District initiatives to increase usage by 15% each year.

- By June 30, 2023, the LUSD Educational Technology Committee will evaluate staff feedback to determine the goal of a 15% increase over baseline usage has been reached compared to baseline levels.

- By June 30, 2024, the LUSD Educational Technology Committee will evaluate staff feedback to determine if the goal of a 15% increase over the 2022 – 23 reported levels has been reached.

Goal 2

Teachers will continue to integrate the use of technology for research, critical thinking, decision-making, communication, collaboration, creativity, and innovation.

Rationale: Technology as a standalone educational tool is limited in its effectiveness, but technology as in integrated tool used for all aspects of thinking and learning expands all student's ability to achieve academically.

Checkpoints:

- By June 30, 2022, the LUSD Educational Technology Committee will set a baseline level for perceptions of student engagement and academic achievement using benchmark test data and survey results.

- By June 30, 2023, the LUSD Educational Technology Committee will show increases of five percent in perceptions of student engagement and academic achievement from 21 – 22 results.

- By June 30, 2024, the LUSD Educational Technology Committee will show increases of five percent in perceptions of student engagement and academic achievement from 22 – 23 results.

Professional Learning Goals

Goal 3

Provide teachers and instructional staff with training to incorporate technology into teaching of all content areas.

Rationale: By empowering teachers and instructional staff and with the knowledge of how educational technology can be used to improve student achievement and assist in the development of the skills to act on that knowledge, we will help them raise the engagement with and use of site technology.

Checkpoints:

- By June 30, 2022, teacher results feedback will be evaluated by the LUSD Educational Technology Committee will show increases in administrator technology tools used for work, more positive attitudes regarding the use of technology, and greater engagement with technology tools.

- By June 30, 2023, teacher results feedback will be evaluated by the LUSD Educational Technology Committee will show increases in administrator technology tools used for work, more positive attitudes regarding the use of technology, and greater engagement with technology tools, than in 2021-22.

- By June 30, 2024, teacher results feedback will be evaluated by the LUSD Educational Technology Committee will show increases in administrator technology tools used for work, more positive attitudes regarding the use of technology, and greater engagement with technology tools, than in 2022 – 23.

Goal 4

Provide administrators with training to improve technology proficiency and use in order to support instructional staff and better direct local technology initiatives.

Rationale: By empowering administrators and with the knowledge of how educational technology can be used to improve student achievement and assist in the development of the skills to act on that knowledge, we will help them raise the engagement with and use of site technology.

Checkpoints:

- By June 30, 2022, administrator results feedback will be evaluated by the LUSD Educational Technology Committee will show increases in administrator technology tools used for work, more positive attitudes regarding the use of technology, and greater engagement with technology tools.

- By June 30, 2023, administrator results feedback will be evaluated by the LUSD Educational Technology Committee will show increases in administrator technology tools used for work, more positive attitudes regarding the use of technology, and greater engagement with technology tools, than in 2021 – 22.

- By June 30, 2024, administrator results feedback will be evaluated by the LUSD Educational Technology Committee will show increases in administrator technology tools used for work, more positive attitudes regarding the use of technology, and greater engagement with technology tools, than in 2022 – 23.

Infrastructure and Equipment Goals

Goal 5

Continue the migration toward mobile devices for all administration and instructional staff.

Rationale: To take full advantage of asynchronous professional development opportunities, faculty requires the appropriate tools, including a mobile computer (laptop) to facilitate location changes and collaborative professional development sessions. While we do not anticipate more pandemics, Covid-19 has revealed the necessity of a District to be able to adapt quickly to changing learning environments. High quality, well maintained staff laptops allow increased capacity and flexibility.

Checkpoints:

- By June 30, 2022, 90% of all District instructional staff and administration will have and primarily use a mobile computer.

- By June 30, 2023, 95% of all District instructional staff and administration will have and primarily use a mobile computer.

- By June 30, 2024, 100% of all District instructional staff and administration will have and primarily use a mobile computer.

Goal 6

Provide students in grades 4 – 12 a 1:1 take home device. (Grade 3 based upon site admin and staff discretion.)

Rationale: To take full advantage of new learning opportunities, learning apps, cloud-based curriculum, and online learning resources, students require uninhibited use of a chromebook. Chromebooks are now considered equivalent to a textbook. **TK – 2 will also be 1:1, but devices will remain in the classrooms.**

Checkpoints:

- At the start of the 2021 – 22 school year, students in grades 4 and 12 will be issued 1:1 take home devices.
- During the 2022 – 23 school year, LUSD Educational Technology Committee will evaluate feedback to evaluate increased use of educational technology.
- At the start of the 2023 – 24 school year, LUSD Educational Technology Committee will evaluate feedback to evaluate increased use of educational technology.

Goal 7

Deploy and maintain 10Gbps backbone across all site LANs and increased speeds to the Education Center.

Rationale: Greater bandwidth on site will lead to faster network performance. The remote learning forced by Covid-19 lockdowns, increased instructional staff use of online learning apps and extensions and have dramatically increased demands of WiFi bandwidth. The district's network requires expanded bandwidth to maintain this use level when learning returns to campus.
Checkpoints:

- For all three years of this plan, the district will continue to maintain a 10G connection to all school sites.
- The district upgraded the connection to the Education center to 40G. ITS believes that will be required to maintain all the use on the network. However, each year ITS staff will evaluate network usage and determine if this speed is appropriate. The Director of ITS will make a recommendation to cabinet and the board based upon that evaluation.

Goal 8

Expand and upgrade WiFi access across all sites.

Rationale: As the use of portable WiFi based devices increase, in conjunction with increased use of educational learning apps and software, a more robust WiFi network, with failover capability becomes necessary to student's academic success. It will also build increased trust with the instructional staff to incorporate educational technology in day-to-day lesson building.

Checkpoints:

- By June 30, 2022, 33% of schools will have upgraded WiFi capability.
- By June 30, 2023, 66% of schools will have upgraded WiFi capability.
- By June 30, 2024, 100% of schools will have upgraded WiFi capability.

Monitoring and Evaluation

The Director of Information and Technology will be responsible for initiating the implementation of the Educational Technology Plan. Success indicators, as identified in the goals in the above sections, will be monitored and evaluated by the LUSD Educational Technology Committee. During the 2021 – 22 school year, the committee will hold quarterly meetings, with the goal of developing protocols and practices designed to set the baseline levels described in the plan goals. The Committee will also evaluate current educational technology initiatives to ensure proper implementation and efficiencies are in place.

The Director of Information and Technology will be responsible for evaluating progress toward Priority Actions on a quarterly basis with the support of the Executive Director of Education Services and the Educational Technology Committee. As applicable, items in this Educational Technology Plan that overlap with LCAP Goals and Success Indicators will be monitored, reviewed, and updated through the annual LCAP process. The Director of Information and Technology will work with appropriate Curriculum and Instruction staff to ensure LCAP technology related goals are being met as well.

In addition, a report on infrastructure and classroom impact will be made to the School Board on an annual basis.

Funding and Budget

The Lompoc Unified School District depends on California's Local Control Funding Formula (LCFF) to fund the district's budgets. It is the intent of this plan that all goals and initiatives detailed within be funded primarily if not exclusively with District funds. It is the district's belief that educational technology now plays a fundamental role in student achievement and 1:1 devices for students, increased WiFi capacity, and an. emphasis on mobile WiFi dependent devices for staff are necessary for equitable access to that role. The goal of this plan is to ensure these resources have equal and equitable distribution amongst all District students and staff.

However, sites will continue to have the ability to initiate local plans based on the District's LCAP Goals and Success Indicators. Each site principal will work with the ITS Department and interested site stakeholders (students, parents, staff, community, School Site Council, Parent Teacher Association, etc.) how to best meet local priorities not addressed in this plan.

The tables on the next page describe current budgeted amounts, and new projects proposed to support the implementation of this plan, on a year-by-year basis along with projected costs.

Lompoc USD ITS Department Three Year Budget			
Budget Object	**FY 2021 – 22**	**FY 2022 – 23**	**FY 2023 – 24**
Staffing			
Certificated Staff: Salary and Benefits	$98,185	$98,800	$99,500
Classified Staff: Salary and Benefits	$1,064.325	$1,090,994	$1,118,207
STSA Extra Assistance: Salary and Benefits	$3,000	$3,250	$3,500
Information Services			
Aequitas Q Student Information System (incl Lunch)	$50,442	$51,052	$51,895
Finalsite Website	$47,535	$47,535	$47,535
Website auto-translation	$2,500	$2,500	$2,500
Domain Fees and Security Certificates	$1,500	$1,600	$1,700
Security Software			
Palo Alto Firewall (25% discount on 3 year contract)	$0.00	$0.00	$118,000
VMWare	$32,327	$33,135	$33,964
F5	$7,999	$10,000	$10,000
Incapsula – Web based DDOS attack prevention	$44,047	$44,487	$45,155
Smart Net Licensing	$10,595	$10,728	$10,801
SolarWinds – Help Desk (added switch monitoring in 3yr plan)	$6,416	$6,554	$6,511
Learning Software			
Google Enterprise for Education	$18,288	$18,288	$20,000
Soft Choice Office 365, Microsoft Licensing	$60,968	$60,968	$60,968
AirWatch – Apple Mobile Device Management iPads	C&I	C&I	C&I
Monitoring Software			
GoGuardian student online monitoring suite	$56,000	$58,000	$60,000
Gopher Pack – Google site monitoring (STSA)	$1,916	$1,958	$2,004
Hardware Maintenance			
UPS Batteries and other site repairs	$5,000	$5,500	$6,000
Staff laptop repairs	$4,500	$4,750	$5,000
Chromebook Repairs – New budget previously site funds	$30,000	$31,000	$32,000
Consulting Services			
Aequitas – Assistance with Q changes	$5,000	$5,000	$5,000
Terra Wolf – Network upgrade consulting	$14,500	$15,000	$15,500
Amplified IT – Google Admin Console Consulting	$5,000	$5,000	$5,000
Amplified IT GFE Audit – Yearly Google Security	$3,600	$3,600	$3,600

Appendix A: 3 Year Spending Plan

This plan is for potential expenditures above and beyond those included in the yearly ITS Budget.

Spending Plan by Year				
Item Required	**20 – 21**	**21 – 22**	**22 – 23**	**23 – 24**
Chromebooks	$500,000	$812,500	$197,500	$197,500
Teacher Laptops	-	$37,500	$38,500	$40,000
Administrator Laptops	-	-	$15,000	$10,000
Aequitas Hosting	-	$45,000	$37,500	$37,500
WiFi Management Hardware	-	$60,850		
WiFi Management Licensing	-	$56,000	$12,000	$8,500
Cisco 3802 WiFi Access Points	-	-	$30,000 (e-rate)	$25,000 (e-rate)
SolarWinds Extended Switch Monitoring	-	$6,500	$6,500	$6,500
Total	$500,000	$977,850	$337,000	$325,000