

Technology Plan:  
**A Focus on Instruction**



Tracy Unified School District

July 1, 2022 - June 30, 2027

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### **Mission Statement**

*“Tracy Unified School District prepares our diverse student population to be college and career ready for the 21<sup>st</sup> Century by providing a quality-learning environment in safe, modern facilities equipped with the latest technological tools. Our world class, culturally proficient staff empowers students to reach their fullest potential and prepares students to solve real-world problems by utilizing best instructional practices and collaborating with the community, businesses and institutions of higher learning.”*

### **TUSD Technology Vision Statement**

Students and educators use digital technology effectively for learning, communication, social development and personal growth.

### **Values**

- We value equitable access to the use of technology.
- We use technology as a tool for learning. We intentionally choose technology tools so that students find, use, create, and share information.
- We use technology to make our community better by engaging respectfully with others
- We develop students’ ability to employ strategies for understanding and solving problems in ways that leverage the power of technology.
- We use technology strategically to differentiate to meet the needs of each student.

### **TUSD Strategic Goals**

Goal 1: Prepare all students to be well-rounded individuals with the knowledge and skills to pursue their college and/or careers.

Goal 2: Hire, support, develop, train, and sustain district employees who create a singleness of purpose focused on maximizing students' academic, social, and emotional potential.

Goal 3: Apply fiscal, operational and community resources to ensure a safe learning environment that supports staff and student goals.

**Enrollment and School Size (CALPADS Census Day - 2021)**

The Tracy Unified School District has a total student enrollment of approximately 14,392 in grades K-12. There are seven elementary schools, four K-8 schools, two middle schools, three comprehensive high schools, one alternative high school, one independent study charter school, one adult school, and one community day school. Fourteen out of 19 schools receive Title I funds. School size ranges from 300 to 800 at the elementary level, 500 to 900 at the K-8 level, 700 to 800 in middle schools, and 1,600 to 2,100 at the comprehensive high schools.

**Ethnicity (CALPADS –2021)**

Tracy Unified School District Enrollment Status by Ethnicity:

<b>Ethnicity</b>	<b>Female</b>	<b>Male</b>	<b>Other Gender</b>	<b>Total</b>	<b>Percent</b>
Hispanic or Latino	3,785	3,975	6	7,766	53.96%
White	1,102	1,131	4	2,237	15.54%
Asian	884	1,015	1	1,900	13.20%
Multi-Ethnic	399	433	2	834	5.79%
Black	382	393	0	775	5.38%
Filipino	299	385	0	684	4.75%
Pacific Islander	70	75	0	145	1.01%
American Indian	27	24	0	51	0.35%
<b>TOTALS</b>	<b>6,984</b>	<b>7,431</b>	<b>13</b>	<b>14,392</b>	

**Other Demographic Factors**

- As of November 2021, approximately sixty percent (60.43%) of the students (PK-12) qualify for the free and reduced-price school lunch.
- Thirteen percent (13.44%) or 1,935 students (K-12) received special education services as of CALPADS Census Day 2021.

**School Staff Data**

As of November 2021, this district has a total of 656 certificated teachers, 57 administrators, and 629 classified personnel, or a total of 1,342 staff members.

## 1. Plan Duration

### July 1, 2022 - June 30, 2027

The Tracy Unified School District Technology Plan will be in effect from July 1, 2022, through June 30, 2027. This plan will be used for planning and implementation of technological resources with focus on curriculum and instruction. This plan will be reviewed and revised annually as needed by the committee. (i.e., tech committee, cabinet, etc.)

## 2. Stakeholders

Committee	
Name	Position
Dr. Brian Stephens	Superintendent
Julianna Stocking	Associate Superintendent for Education Services
Tom Quiambao	Director of Information Systems & Educational Technology
Dr. Debra Schneider	Director of Instructional Media Services and Curriculum
Erin Quintana	Director of Professional Learning
Dean Reese	Director of STEM Curriculum and Local Assessment
Miguel Romo	Williams Middle School – Principal
Jon Waggle	Tracy High School – Assistant Principal
Roya Mahiddin	Kelly Elementary School – Assistant Principal
Joe Martocchio	Technology Coordinator of ISET
Kaleigh Felisberto	Teacher on Special Assignment – Professional Learning
Anne-Marie Mason	Teacher on Special Assignment – Professional Learning

This plan is an updated revision of the 2016-19 District Technology Plan. During the development of the Tracy Unified School District's five-year technology plan, a series of planning meetings were conducted. Information was collected from school site technology support advisors, site administrators, district administrators, and teachers. Additional information was also collected from school site plans. Businesses that provide technology equipment and services to the district provided insight for equipment refresh and future expansion, as well as technology updates to Information Systems and Educational Technology (ISET) staff. After review and comments/edits from the above groups, the plan will be posted on the district website for review and direct comment by the public. The plan will be taken to the Board of Education for approval on xxxxx. This plan will be a working document, reviewed and revised annually as needed.

### 3. Curriculum

- 3a. Description of teachers' and students' current access to technology tools both during the school day and outside of school hours.

All school sites have two 10-gigabit fiber access to the District Office Data Center. The Data Center maintains a 500MB InSBEP fiber dedicated internet connection to the San Joaquin County Office of Education for HR and Financial Software. All school sites provide wireless network connectivity for teachers and students using both district and personally owned computers. Infrastructure for Wireless Access Points (WAPS) in all classrooms have been installed for a more stable wireless coverage throughout every school site. All district staff network computers have access to Microsoft Office suite desktop applications, Microsoft SharePoint sites for file storage and sharing of information, and the Internet. All teachers and students have email accounts through the Office 365 (O365). All teachers have access to the district's student information system for daily attendance, grade books and communication with parents/guardians. The district and all school sites each maintain their own web site accessible by the public. Each school site maintains their own social media accounts for additional public communication.

All student computers maintain a variety of educational software and online resources that support developing core academics skills. Some of these include: O365, Microsoft desktop applications, Microsoft Teams, Adobe Acrobat, CAASPP Browser, to name a few. Accelerated Reader and STAR Reading is used by fourteen schools for reading improvement. Edgenuity is used at the Tracy Independent Study Charter School (TISCS) and Stein High School for independent studies and credit recovery.

Interactive projectors are used in most classrooms among 7 out of 19 TUSD schools. Document cameras are used in multiple classrooms at all schools. LCD Projectors are available in all classrooms with 25% of these being ceiling-mounted connected to an integrated sound system. 90% of the school's libraries have a ceiling-mounted LCD projector with an integrated sound system. Webcams and Bluetooth headsets are also available for most classrooms. Administration offices and some classroom buildings are equipped with high speed Riso copiers and Ricoh large capacity network printer and scanner. 3D printers are available at Tracy High School and West High School and will be purchased for Kimball High School in the 2022/2023 school year as part of the PreK12 STEM Project.

All schools have a minimum of one computer lab with the age of computers varying from school to school. Most libraries have between 25 and 40 computers that are networked with Internet access available to students and teachers throughout the day. Currently, library labs are being transitioned into wireless lab environment. The libraries with teacher librarians are open 30 minutes before school begins and are open 30 minutes after school depending on availability of staff.

All students from 4<sup>th</sup> to 12<sup>th</sup> grade have district issued HP x360 laptop and an option to check out T-Mobile hotspots with unlimited data plan. All classrooms at the TK – 3 grade levels have a class set of HP x360 laptops in smart-charging carts

**Student Access to Technology:**

Type of Access	Time of Day for Access
Elementary labs	During the school day and in after school programs
Secondary labs	During the school day and in after school programs
Classroom laptops in carts for grades K - 3	During the school day and in after school programs
District-issued laptops for grades 4 –12	Laptops are issued for school and home use
Hotspots	Hotspots are issued for home use upon request
Library computers	During the school day
Wired and wireless Internet	During the school day and in after school programs

**Teacher Access to Technology:**

Type of Access	Time of Day for Access
Laptop with docking station and monitor	Laptops are issued for school and home use
Document cameras/projectors	Before, during and after the school day
Computer labs and library labs	Before, during and after the school day
Wired and wireless Internet	Before, during and after the school day

3b. Description of the District's current use of hardware and software to support teaching and learning.

**TEACHERS**

Technology increases staff productivity for classroom instructional and school management. Teachers use Aeries, the district Student Information System, to manage daily attendance and maintain their grade reporting and available for gradebook which provide the teachers and the students with instant and continual knowledge of a students’ progress in academic areas. Aeries is also used by school site office personnel to track demographics, contact information and other information needed by California Longitudinal Pupil Achievement Data System (CALPADS).

Teachers currently use technology in a variety of ways to enrich their teaching and meet the needs of all students.

Teachers communicate and collaborate with students, parents, staff and colleagues via email or Microsoft Teams. Meeting agendas, district and school notices, emergency notes, and other educational related documents are communicated electronically or by postings in the district’s internal file repository platform called Staff Portal. Technology is readily available in the schools, serving in every facet and enhancing what the school can do for students and parents.

Teachers share course content, information, assignments, feedback and collaborate with students through Microsoft Teams. All teachers have auto-rostered Teams synced with the Student Information System (Aeries). Calendar invites, announcements, external website resources, digital class materials, schedule of assignments, links and discussions are posted on Teams for further learning.

Teachers use Illuminate / FastBridge, an assessment data system, for developing and analyzing student curriculum assessments and standard state tests. Scores are tracked and maintained through this assessment system which also allows for comparisons and study of progress.

Teachers use the internet to research and to enrich their curriculum. Web-based educational software is used for lesson plan preparation and instruction. Access to visual, supplementary materials supports concept instruction for students with limited prior knowledge of content. Different sites purchase digital materials to address specific needs for their sites' students, such as English Language Learners, students with low literacy skills, and students with learning disabilities and other special needs. Teachers have access to digital professional development resources, including electronic books, digital access to vetted unit development sites, archived webinars and tutorials, and live webinars.

Teachers monitor student computer use to provide safety, security and feedback. GoGuardian is a software system designed to extensively to monitor student usage of technology in the classroom. The monitoring and recording subroutines make it easy to document student behavior. GoGuardian provides immediate control over student access and behavior, allowing the teacher to redirect the students as needed.

Teachers make use of LCD projectors to deliver curriculum content in most classrooms. Document cameras are used to present visuals to students in the classroom. Some school sites are equipped with an Epson Interactive Projector – a highly advanced projector system that is capable of full interactivity via pen or touch and has the ability to save work “written on the board” for future reference. The system provides a set of teacher tools to enhance student learning.

**Teacher Uses of Technology:**

Technology Being Used	How it is Used
HP x360 1040	Computer device used in the classroom
Monitor, keyboard and docking station	Used in conjunction with the computer device

Epson Interactive Projector	Select classrooms have this technology used for enhancing instruction through the use of the interactive features of the project (similar to a smartboard)
Document Cameras	Used to project documents to the projector screen or whiteboard
Microsoft Desktop Applications	Productivity tools
O365	Microsoft online productivity tools
Teams	Digital collaborative classroom hub for teachers and students
Aeries	District-approved Student Information System used for grading, and parent communication
OneDrive	Used for data storage and file collaboration.
TUSD Staff Portal	Internal file-sharing storage used for collaboration
GoGuardian	Teacher-controlled mobile device management to monitor student laptop usage
Illuminate / FastBridge	Assessment Software to support instruction in grades K -12.

## STUDENTS

Students use technology to consume and create information. In classrooms and computer labs, they study, practice skills, take tests, make presentations, and create products for course assignments.

For our students in Special Education, a part of every Individual Education Program (IEP) is assessing the need for assistive technologies. For some students this might just be access to a classroom computer. For others, it might be a variety of Apple iPad OS applications such as Proloquo2, Readtogo, BOSS, to name a few.

Parent and student access to information regarding their classroom assignments, attendance and grades is provided digitally through AERIES Parent Portal.

### Student Uses of Technology:

Technology Being Used	How it is Used
HP x360 ProBook	Computer device used in the classroom by K-12 students
Apple iPad	Used by some students with learning disabilities
Software and hardware related to the implementation of STEM units of study	2-12 grade students use these types of technologies in science and math to help further investigate the content.

Cameras and Multimedia Equipment	6-12 grade students use these types of technologies in our Video Production and Multimedia classes.
Aeries Parent and Student Portal	Used to monitor their grades, attendance and other basic student information.
Microsoft Desktop Applications	Productivity tools
O365	Microsoft online productivity tools
Teams	Digital collaborative classroom hub for teachers and students
iRead, Read180, Digits, Study Sync, Cengage, Science as adopted	District adopted digital curriculum
Renaissance Learning Adobe Cloud Turnitin.com Auto CAD IMac Lab Music software	District Supplemental digital content to support instruction
Illuminate / FastBridge	Assessment Software to support instruction in grades K -12.
Destiny and Online databases	Facilitated by the library and teaching staff to support learning in grades K-12.
CAASPP Browser and TestNav	State Assessment platform

3c. Summary of the district's curricular goals that are supported by this tech plan.

The following are the District Strategic Goals as indicated in the LEA Plan:

Goal 1: Prepare all students to be well-rounded individuals with the knowledge and skills to pursue their college and/or careers.

Goal 2: Hire, support, develop, train, and sustain district employees who create a singleness of purpose focused on maximizing students' academic, social, and emotional potential.

Goal 3: Apply fiscal, operational and community resources to ensure a safe learning environment that supports staff and student goals.

The following are the LCAP Goals as indicated in the LEA Plan:

Goal 1: Prepare all students for college and careers and ensure all students meet grade level standards with a focus on closing the achievement gap between all student groups using accelerated learning and tiered supports.

Goal 2: Provide a safe and equitable learning environment for all students and staff.

Both the District LEA Plan and Local Control Accountability Plan (LCAP) recognize that students are faced with rigorous graduation requirements; the district support students in taking more college preparatory classes. The goals of the LEA and LCAP require that a strong foundation in literacy, math, science, technology, social science and the arts prepares students to be successful in college or careers upon graduation. Our commitment is to assure that all students progress at increasingly complex levels of thinking and production. Many of the strategic imperatives in the LEA Plan are developed and supported through educational technology. Educational technologies prompt learners to raise important questions, formulate opinions and engage in problem solving and critical thinking. Technology provides a link to the real world, offering new reason to communicate and new sources of feedback on ideas. Educational technology provides equal access to high level and high interest learning for all students. This technology plan addresses the specific goals and objectives, and the growth phases a system must go through to achieve the vision that is in our LEA and LCAP Plan as well as each site's School Plan for Student Achievement (SPSA). As we annually update our LEA Plan and SPSAs, this plan will also be updated to reflect any changes.

### 3d. Teaching and Learning – Technology

#### **District Goals**

TUSD's tech plan aligns to the District's three Strategic Goals. In this section, Goals 1 and 3 are addressed in this section; Goal 2 is addressed in section 4 on Professional Development.

##### **District Strategic Goal 1.**

Prepare all students to be well-rounded individuals with the knowledge and skills to pursue their college and/or career goals.

##### **District Strategic Goal 3.**

Apply fiscal, operational and community resources to ensure a safe learning environment that supports staff and student goals.

#### **Students develop skills to use technology for acquiring content knowledge and for creating and sharing evidence of this knowledge appropriately in support of CA curriculum standards.**

- Students and teachers use standards-aligned, district-adopted core and supplemental instructional materials in the core content areas that include digital materials
- Digital technology supports learning in and beyond the classroom walls: “anytime, anywhere” learning and non-traditional learning opportunities
- Digital technology supports student learning through involvement with authentic challenging tasks
- Students create creative and original student work artifacts using digital technology

**Students use digital technology safely and responsibly.**

- Learn and use digital citizenship instruction in each grade K-12 at sites with TLs and Ed Tech TSA (i.e. Common Sense Education)
  - Explore programs that use certification (i.e. digital badging) for middle and high school students
  - Demonstrate ethical use of technology in class and out of class
- Learn and use information literacy instruction in each grade K-12 at sites with TLs and Ed TSA's
  - Demonstrate legal use of information with regard to copyright laws

**Administrators and teachers access and use student information for data-driven decision-making to improve digital instruction and student academic achievement. TUSD provides digital technology to**

- Increase methods of access to learning materials, content-related information, and opportunities to create evidence of learning
- Assess students' learning, with formative and benchmark assessments, as well as for the State's online CAASPP system.
- Create aggregated and disaggregated reports that drive decision making to improve instruction and student achievement

**All families have a variety of ways to access school and student information and communicate with school and district personnel.**

- TUSD provides digital access to a variety of communication methods.
- Teacher, parent and student access to digital citizenship materials, course assignments and lessons online facilitate communication between home and school to support student learning.

**New technologies and electronic resources that enhance teaching and learning will continue to be explored.**

- TUSD's approved list of educational technology programs, apps and devices will be revised as technology develops.

3e. Description of the district policy or practices that ensure equitable technology access for all students.

Current TUSD practices give students access to technology at all sites, including the use of district-issued laptops and wireless access. With the increased technology demands from both staff and student as described in Section 3a, we are constantly working to find ways to support the acquisition of new equipment, updated software, SaaS (Software as a Service), and cloud technology. Through modernization efforts, classrooms have been brought to a level of technological capacity which can include LCD Projectors, Interactive Projectors, document cameras, web cams, and external headsets at most sites. Wireless access has been provided to all classrooms, gyms, MPR (Multi-purpose Rooms), and some outdoor quad areas.

3f. The continuous improvement process will be used to monitor the implementation of Sections 3d and 3e.

Specific evaluation and monitoring for each curriculum goal is included with each goal above. The overall strategy for evaluating and monitoring our curriculum goals is as follows.

The curriculum component of this plan will be monitored by the Educational Services Department and shall be reflected with the LCAP and school site plans. Projects related to educational technology and curriculum are standing items on the agendas of these meetings. The Director of ISET will take the responsibility of collecting and presenting data and chairing the discussion and decision making based on the data. Members of the Ed Services Team will play major roles in the monitoring and evaluation of the curricular component of the plan. Annual revisions will be the responsibility of the Director of ISET. Students, teachers, parents, and the community will also have annual opportunities to review and comment on the technology plan.

#### 4. Professional Development

4a. Summary of teachers' and administrators' current technology skills and needs for professional development.

During the 2019-2020 SY, a survey on a site's technology needs assessment was completed by all school sites. The purpose of the survey is to help guide the district's technology planning decisions. Here are some excerpts from that report pertaining to the current needs assessment for classroom technology software and other curriculum-based needs of teachers.

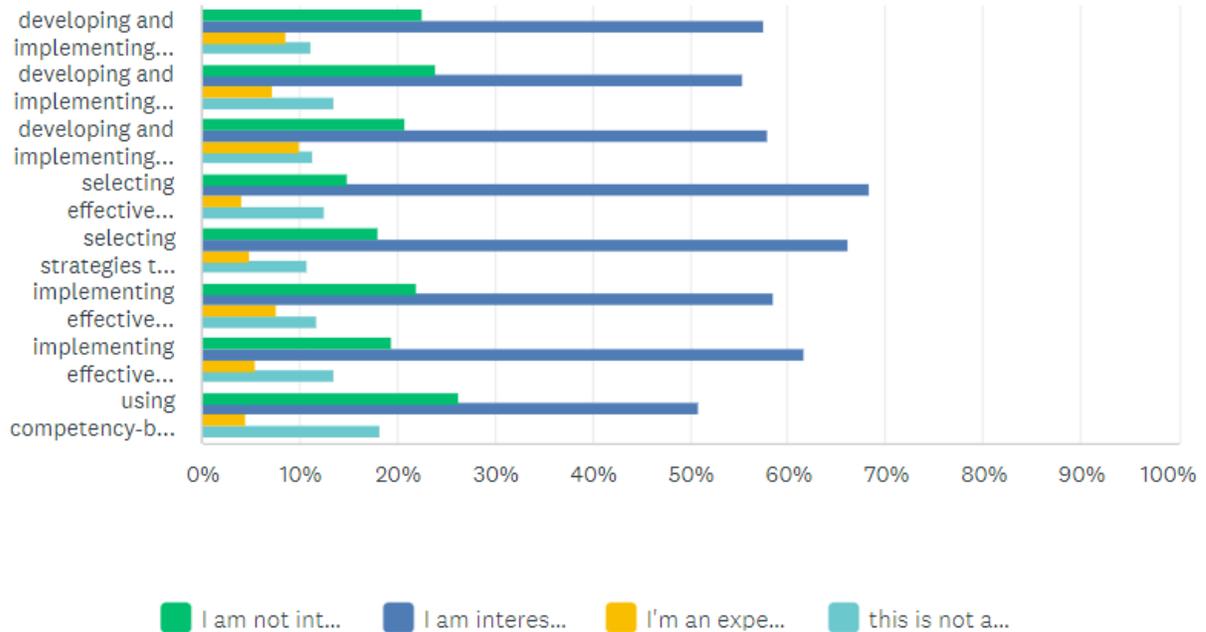
I know how to access Teams through the app and/or internet and how to create and/or join a Team							
Answer Options	Help!	I need some assistance	I just need time	I got this!	I'm an expert	N/A	Response Count
	6	18	30	140	26	2	222

Developing and implementing strategies for building teacher-to-student and student-to-student relationships					
Answer Options	I am not interested at this time	I am interested	I'm an expert	N/A	Response Count
	46	128	22	25	221

Selecting effective digital tools for students to find, use, create, and share information					
Answer Options	I am not interested at this time	I am interested	I'm an expert	N/A	Response Count
	33	151	9	28	221

## Consider your needs in designing engaging distance learning experien...

Answered: 222 Skipped: 0



Fall 2020 Educator Professional Learning Needs Survey

0

Using Technology in the Classroom. Areas that show professional development needs are:

- Enhancing learning and teaching with new technology tools and electronic resources.
- Instructing students in the area of digital citizenship and safety in all grade levels at all schools.
- Using computer applications to manipulate and analyze data as a tool for assessing student learning and planning for differentiated instruction.

4b. List of clear goals, measurable objectives, and an implementation plan for providing professional development opportunities based on your district needs assessment data (4a) and the Curriculum Component objectives (sections 3d through 3f) of the plan.

The following are the District Strategic Goals as indicated in the LEA Plan:

Goal 2: Hire, support, develop, train, and sustain district employees who create a singleness of purpose focused on maximizing students' academic, social, and emotional potential.

We will focus our teacher professional development around three goals:

- 1) Enhancing learning and teaching with new technology tools and electronic resources.
- 2) Instructing students in the area of digital citizenship and safety in all grade levels at all schools.
- 3) Using computer applications to manipulate and analyze data as a tool for assessing student learning and planning for differentiated instruction.

Goal 4b.1: Teachers will use digital technologies with students as they become available including but not limited to laptops, document cameras, interactive projectors.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Trainings and training resources will be provided throughout the year for new district technology tools and electronic resources, and computer applications	Beginning August 2022 and ongoing as needed.	Director of ISET, Professional Learning, Site Administrators	Director of ISET, Educational Services Team, site administrators	Agendas, sign in sheets, Go Sign Me Up (GSMU)

Goal 4b.2: Teachers will model digital citizenship and safety.

Goal 4b.3: Teachers and administrators will use the district Assessment Platform (DnA FastBridge and Illuminate) and Student Information System (i.e. Aeries Grade Reporting) to inform instruction and communicate with parents and students.

TUSD common formative assessments will be entered into the district Assessment Platform (DnA FastBridge and Illuminate) so that teachers and administrators can use the data from formative assessments to monitor progress, inform instruction, and communicate with students and parents.

Implementation Plan				
Activity	Timeline	Person(s) Responsible	Monitoring & Evaluation	Evaluation Instrument
Trainings and training resources will be provided on the district Assessment Platform (DnA Fastbridge and Illuminate) and how it can be used to inform instruction to meet individual student needs and current implementation phase	Beginning in August 2022 and ongoing after that.	Director of STEM and Assessments, Site Administrators	Director of STEM and Assessments, Site Administrators	Usage data from the district Assessment Platform (DnA Fastbridge and Illuminate), professional development survey data

4c. Sections 4a and 4B’s four phases of implementation (according to the [NIRN](#)) will be monitored with the continuous improvement process.

Tracy Unified School District will monitor the professional development activities throughout the year and evaluate the progress at the end of each school year. All certificated staff will complete the district's technology survey annually. District administrative staff will review current staff development plan for technology skills and integration of technology into the curriculum along with the technology survey reports and update the plan in preparation for the next year of training.

## 5. Infrastructure, Hardware, Technical Support, and Software

- 5a. Describe the existing hardware, Internet access, electronic learning resources, and technical support already in the district that will be used to support the Curriculum and Professional Development Components of the plan.

### Existing Hardware:

#### K-5

Each K – 5 elementary school maintains a 1 to 1 laptop count per student. K – 3 classrooms house laptops in a smart charging cart when not in use. Students in grades 4 – 5 are assigned a device for use in class and at home. There is a minimum of 1 computer lab per school site with an average of 30 computers.

#### K-8

Each K – 8 elementary school maintains a 1 to 1 laptop count per student. – 3 classrooms house laptops in a smart charging cart when not in use. Students in grades 4 – 8 are assigned a device for use in class and at home. There is a minimum of 1 computer lab per school site with an average of 30 computers in each lab for student use.

#### 6-8

The two middle school sites maintain a 1 to 1 laptop count per student. Students are assigned a device for use in class and at home. There is a minimum of 1 computer lab per school site with approximately 30 computers in each lab for student use.

#### High Schools

Each comprehensive high school maintains a 1 to 1 laptop count per student. There is an average of 8 computer labs per school site with approximately 30 computers in each lab for student use. Each school maintains a network file server.

The district has approximately 20,000 desktops and mobile devices supported by a team of 13 site technicians, 3 network technicians, 2 voice/bell systems technicians and 1 Student Information System / CALPADS technician, and a Technology Coordinator. All desktops and laptops run Windows 10 and have the client version of Microsoft Office 365 installed.

The district provides a solid wired and wireless infrastructure. Each classroom is equipped with a CISCO Wireless Access Point 3702 to create a microsystem within each classroom. All WAN/LAN system components are under service contracts to ensure usability at all times to minimize downtime. Two 3Par Storage Area Network (SAN) has been added to our existing structure for

future expansion. An HP C7000 chassis systems is in place virtualized expired servers. Switches and Surveillance Systems are under a service contract for maintenance, error-prevention, cleaning and replacement cycle. This significantly reduced are camera downtime. Microsoft Azure Cloud Services are \being used for Disaster Recovery with the intent of adding this to an offsite service.

The Information Systems and Educational Technology Department (ISET) have standardized on Cisco products for all routers, switches, and phones. The Surveillance system is standardized across all school sites and district office buildings on the Avigilon system. The wiring standards are currently Cat 6 with fiber (Gigabit) backbones to the classrooms. Lit Fiber is installed at all sites. Each site has been provided with two 10 Gbps link to the ISET Data Center. The school district currently maintains Cisco VOIP phone system. Call Manager provides the administration console for our VOIP while Cisco Unity provides voicemail to our hybrid hosted email system.

### **Existing Internet Access:**

Currently, all sites are connected with two 10 Gbps fiber. All sites connect back to the ISET Data Center and goes out to the Internet from this point. Our internet provider is AT&T with a current speed of 8 GBps. The district provides content filtering via a Palo Alto Firewall. Email is filtered by a Barracuda appliance and Office 365 A5 Security. The district also provides support and houses district-wide application servers which serve a variety of purposes.

Security is provided by Microsoft Security Endpoint System via Microsoft A5 Security which provides virus protection, software firewall and protection from outside threats. This provides barriers to incidental access from the outside to the private internal network. The district has built-in redundancies for security not just for compliance but for a complete protection system.

### **Existing Electronic Learning Platforms:**

- Office 365
- Aeries Student Information System
- HMH Central
- McGraw-Hill
- Savaas
- Edgenuity
- Illuminate Education / FastBridge
- Follett-Destiny
- Accelerated Reader
- Adobe Creative Cloud
- AutoCAD Software
- Unreal Engine
- Starfall
- Cengage

### **Existing Technical Support:**

The Tracy Unified School District currently provides technical support to all school sites. Each K – 8 school, Middle School, and comprehensive High School has a dedicated on-site technician. Each K – 5, and charter has an available shared tech centrally located at the district service center. All site technicians report to the Technical Coordinator for escalations or project direction. The technical staff also includes, three Computer Network Technicians, two VOIP/Bell Systems Technician and one Student Information System Technician, who are all part of the Information Services and Educational Technology (ISET) department. The district's Technology Helpdesk is monitored by the Secretary to the Director of ISET and supported by an in-house technician each day to handle all support calls, troubleshooting, and assisting staff members, students, and parents with their technology needs.

Training and attending conferences to increase and enhance technical knowledge is always encouraged and supported.

- 5b. Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed by the district's teachers, students, and administrators to support the activities in the Curriculum and Professional Development Components of the plan.

### **Hardware Needed:**

- All classrooms are equipped with an LCD projector, pull-down screen and laptop (equipped with district standard software) in order to effectively integrate technology into the classroom. A phase-in a replacement plan will be set in place for all end-of-life (EOL) LCD projectors and convert approximately 370 classrooms to Interactive Projectors.
- All classrooms are equipped with a minimum of 6 Ethernet ports for bandwidth intensive programs.
- Explore wireless video for the projections systems.
- Phased-in approach to refresh and replace all teacher laptops. High school and middle school teachers will be on Phase 1 and Elementary teachers will be slated for Phase 2.
- Provide a 12% student laptop replacement per year for lost, damaged or end-of-life laptops.
- Provide devices to students in grades 4 – 5 for home and school use. (Grades 6 -12 have devices issued)
- Provide hotspots for students' home use in grades 4 – 12.
- Refresh all legacy UPS systems.
- Upgrade Surveillance backend to include critical safety analytics
- Replace expired or expiring switches.

### **Electronic Learning Resources Needed:**

- Explore and implement a Learning Management System that integrates with the Student Information System, Assessment platform and Microsoft Teams.
- Integrate the current assessment platform with the Student Information System.

- Implement digital interactive textbooks and instructional materials.
- Explore adaptive learning resources that support students with disabilities.
- Implement a two-way messaging system for teacher-student communication.

**Networking and Telecommunications Infrastructure Needed:**

- Replace HP C7000 Chassis and 3PAR storage solutions with next generation cluster solution and migrate virtual environment.
- Replace HP rackmount virtual hosts with next generation rackmount hosts for housing core infrastructure servers.
- Upgrade legacy server systems for Microsoft Windows 2019.
- Replace current Cisco 3702 wireless access points with next generation access points in all areas of access.
- Upgrade Cisco UCS chassis that houses telecommunications, and security systems with next generation hardware
- Investigate additional cloud solutions for on premise hosted systems to provide additional security and redundancy

**Technical Support Needed:**

- Improve site technician support response time for office staff, teacher, student and parent support.
- Utilize ED Teachers on Special Assignments (Ed TSA) specifically for curriculum technology support.

5c. List of clear annual benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components as identified in Section 5b.

<b>Year 1 Benchmark:</b> Obtain hardware, infrastructure, learning resources and technical support		
<b>Recommended Actions/Activities</b>	<b>Timeline</b>	<b>Person(s) Responsible</b>
Explore Learning Management Systems	2022-2023	Tech Committee
Leverage ERATE to Wireless Access Points, Switches, and UPS	2022-2023	ISET Department
Leverage ERATE to upgrade TISCS physical infrastructure to current standard	2022-2023	ISET Department
Configure newly installed Wireless Access Points (WAP) to create a microcell classroom.	2022-2023	ISET Department
Replace HP C7000 Chassis and 3PAR storage solutions with next generation cluster solution and migrate virtual environment	2022-2023	ISET Department
Replace HP rackmount virtual hosts with next generation rackmount hosts for housing core infrastructure servers.	2022-2023	ISET Department

Replace Cisco UCS Chassis with Avigilon rackmount appliances for physical security	2022-2023	ISET Department
Add modern UCS Chassis for hosting Call Manager, Unity and Emergency Response System	2022-2023	ISET Department
Purchase 5,000 student devices for 4 <sup>th</sup> and 5 <sup>th</sup> grade students including provision for replacing lost, damaged and EOL devices K-12	2022-2023	ISET Department
Purchase 1,000 staff devices for 6 <sup>th</sup> to 12 <sup>th</sup> grade teachers	2022-2023	ISET Department
Implement phase-in plan to replace legacy LCD projectors to Interactive Projectors at THS, KHS and SHS	2022-2023	ISET Department
Purchase a multi-year SmartNet contract.	2022-2023	ISET Department

<b>Year 2 Benchmark:</b> Obtain hardware, infrastructure, learning resources and technical support		
Recommended Actions/Activities	Timeline	Person(s) Responsible
Pilot a Learning Management System at selected school site(s)	2023-2024	Tech Committee and ISET Department
Explore and implement additional tools for digital learning	2023-2024	Tech Committee
Implement phase 2 plan of the UPS replacement project districtwide.	2023-2024	ISET Department
Implement phase 2 plan of the Switch replacement project districtwide.	2023-2024	ISET Department
Purchase replacement datacenter equipment as necessary for replacing EOL hardware	2023-2024	ISET Department
Purchase 2,000 student devices to replace lost, stolen, or EOL devices K-12	2023-2024	ISET Department
Purchase 1,000 staff devices for K to 5 <sup>th</sup> grade teachers	2023-2024	ISET Department
Implement phase 2 plan to replace legacy LCD projectors to Interactive Projectors at WMS, MVMS, KES, FES	2023-2024	ISET Department

<b>Year 3 Benchmark:</b> Obtain hardware, infrastructure, learning resources and technical support		
Recommended Actions/Activities	Timeline	Person(s) Responsible
Implement a Learning Management System at all school sites	2023-2024	ISET Department
Explore and implement additional tools for digital learning	2024-2025	Tech Committee

Implement phase 3 plan of the UPS replacement project districtwide.	2024-2025	ISET Department
Implement phase 3 plan of the Switch replacement project districtwide.	2024-2025	ISET Department
Implement phase 1 plan of the camera replacement project districtwide.	2024-2025	ISET Department
Purchase 2,000 student devices to replace lost, stolen, or EOL devices K-12	2024-2025	ISET Department
Implement phase 2 plan to replace legacy LCD projectors to Interactive Projectors at PCES, MES, BES, HES	2024-2025	ISET Department
Continue to purchase a multi-year SmartNet contract.	2024-2025	ISET Department

5d. Describe the process that will be used to monitor Section 5b.

The Information Services and Educational Technology (ISET) Director and Technology Coordinator will be primarily responsible for monitoring the activities in section 5. Data will be analyzed from the district's Management Meetings, Staff Development Trainings, Continuous Improvement Team, Curriculum Council, and Buy-back Day training on an annual basis to determine the effectivity of this plan. The Technology Committee will revisit and revise the technology plan on an annual basis as needed.

## 6. Funding and Budget

6a. List of established and potential funding sources.

### Established Funding Sources:

- District general funds
- ESSER
- LCAP
- Title 1 funds
- E-rate
- District Facilities fund
- Deferred Maintenance funds
- Grants (district and site level)

6b. The annual technology budget from various sources for SY 2020-21 is estimated at \$ 7,830,000. The chart below is an annual estimated incremental funding allocation cost to implement the projected changes outlined in Sections 3 and 4.

Item Description	Current Budget SY 2021 - 22	Year 1 SY 2022 - 23 Incremental Funding Needed	Year 2 SY 2023 - 24 Incremental Funding Needed	Year 3 SY 2024 - 25 Incremental Funding Needed
<b>2000 - 2999 Classified Salaries</b>				
Classified Employees Salaries for Technology Department	\$ 474,000	\$ 30,000	\$ 31,200	\$ 32,448
Classified Employees Salaries for Technology Department	\$ 1,176,000	\$ 187,000	\$ 194,480	\$ 202,259
<b>3000 - 3999 Classified Benefits</b>				
Classified Employees Benefits	\$ 220,000	\$ 14,000	\$ 14,560	\$ 15,142
Classified Employees Benefits	\$ 510,000	\$ 136,000	\$ 141,440	\$ 147,098
<b>4000 - 4999 Materials and Supplies</b>				
Basic Classroom Technology equipment	\$ 50,000	\$ 20,000	\$ 30,000	\$ 40,000
<b>5000 - 5999 Services, Contracts, and Operating Expenses</b>				
E-rate Category 1 (Connectivity)	\$ 750,000	\$ 50,000	\$ 60,000	\$ 70,000
E-rate Category 3 (UPS, Switches)	\$ 600,000	\$ 50,000	\$ 75,000	\$ 100,000
Service Contracts and Licenses	\$ 1,000,000	\$ 200,000	\$ 225,000	\$ 250,000
CISCO Smartnet Contract	\$ 300,000	\$ 10,000	\$ 25,000	\$ 25,000
Cloud-hosted Services (SaaS – Software as a Solution)	\$ -	\$ 100,000	\$ 100,000	\$ 100,000
Learning Management System (based on \$8 per ADA)	\$ -	\$ 56,000	\$ 120,000	\$ 120,000
<b>6000 - 6999 Laptops, Peripherals, and Network Equipment</b>				
Refresh student devices	\$ 750,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
Refresh staff devices	\$ -	\$ 1,200,000	\$ 1,200,000	\$ -
Upgrade of Network Equipment	\$ 2,000,000	\$ 100,000	\$ 150,000	\$ 200,000
Interactive projectors, document cameras, and peripherals	\$ -	\$ 200,000	\$ 225,000	\$ 250,000
Wireless Display – networked solution	\$ -	\$ 500,000	\$ -	\$ -
<b>Incremental Funding Needed</b>		\$ 3,853,000	\$ 3,591,680	\$ 2,551,947
<b>Total</b>	\$ 7,830,000	\$ 11,683,000.00	\$ 11,421,680.00	\$ 10,381,947.20

Item Description	Year 4 SY 2025 - 26 Incremental Funding Needed	Year 5 SY 2026 - 27 Incremental Funding Needed	Funding Source
<b>2000 - 2999 Classified Salaries</b>			
Classified Employees Salaries for Technology Department	\$ 33,746	\$ 35,096	ESSER / LCAP Funds
Classified Employees Salaries for Technology Department	\$ 210,350	\$ 218,764	General Funds
<b>3000 - 3999 Classified Benefits</b>			
Classified Employees Benefits	\$ 15,748	\$ 16,378	ESSER / LCAP Funds
Classified Employees Benefits	\$ 152,982	\$ 159,101	General Funds
<b>4000 - 4999 Materials and Supplies</b>			
Basic Classroom Technology equipment	\$ 50,000	\$ 60,000	General Funds
<b>5000 - 5999 Services, Contracts, and Operating Expenses</b>			
E-rate Category 1 (Connectivity)	\$ 80,000	\$ 90,000	General Funds, Erate
E-rate Category 3 (UPS, Switches)	\$ 125,000	\$ 150,000	General Funds, Erate
Service Contracts and Licenses	\$ 275,000	\$ 300,000	General Funds, Erate
CISCO Smartnet Contract	\$ 25,000	\$ 25,000	General Funds
Cloud-hosted Services (SaaS – Software as a Solution)	\$ 100,000	\$ 100,000	General Funds
Learning Management System (based on \$8 per ADA)	\$ 120,000	\$ 120,000	General Funds
<b>6000 - 6999 Laptops, Peripherals, and Network Equipment</b>			
Refresh student devices	\$ 1,000,000	\$ 1,000,000	General Funds, LCAP
Refresh staff devices	\$ -	\$ -	General Funds, LCAP
Upgrade of Network Equipment	\$ 250,000	\$ 200,000	General Funds, LCAP
Interactive projectors, document cameras, and peripherals	\$ 275,000	\$ 300,000	General Funds, Deferred Maintenance
Wireless Display – networked solution	\$ -	\$ -	General Funds

<b>Incremental Funding Needed</b>	\$	<b>2,712,825</b>	\$	<b>2,774,338</b>
<b>Total</b>	\$	<b>10,542,825.09</b>	\$	<b>10,604,338.09</b>

6c. Describe the district's replacement policy for obsolete equipment.

The Tracy Unified School District currently utilizes a “waterfall” system for replacement of obsolete equipment. The waterfall system is a sequential process that regularly replaces the oldest technology in the district. The waterfall system replaces technology when the technology is

non-usable or poses a security risk to the district network infrastructure. School sites purchase replacement computers from school site funds. Equipment purchased by the district systematically goes through updates to maintain current supported levels from the manufacturer or vendor. Obsolete technology hardware is removed from the district’s asset inventory system and classified as District e-waste. The Board of Directors approves all e-waste disposals with contracted third-party vendors per Board policies and state education codes.

Tracy Unified School District will begin to implement a phased-in approach for all hardware and network equipment and will apply a hardware refresh program to distribute the cost of replacing hardware and network equipment over a specified period of time.

6d. Describe the process that will be used to monitor Ed Tech funding, implementation costs and new funding opportunities and to adjust budgets as necessary.

Information and data are regularly obtained throughout the district in all curricular, student and business areas. The intent of the monthly meetings is to obtain, analyze and provide feedback to the appropriate groups regarding updated funding and budget decisions. The District Superintendent and the Director of Information Services and Educational Technology are responsible for monitoring the budget process and updating funding. New sources of funds will continually be sought to support future projects.

## 7. Monitoring and Evaluation

7a. Describe the process for evaluating the plan's overall progress and impact on teaching and learning.

Tracy Unified School District will monitor the Technology Plan so that modifications can be made accordingly. The monitoring and evaluation of the timeline, implementation and goals of the plan itself will be reviewed on a yearly basis. Annually the Educational Services Team, which includes the Director of ISET, will assess the plan based on results from data collection.

Monitoring and evaluating the timeline and implementation of the plan will be the responsibility of the following stakeholders:

### District

- Director, ISET
- Educational Services Team
- Technology Plan Committee

### School Sites

- Site administrators
- Teacher Librarians
- Ed TSA's

### Community

- Parents
- Students
- Business Partners

7b. Schedule for evaluating the effect of plan implementation.

As described above, the plan will be evaluated annually. The plan will also be an agenda item at Ed Services Directors meetings, and Management meetings. Feedback will be encouraged.

7c. Describe the process and frequency of communicating evaluation results to tech plan stakeholders.

The Tracy Unified School District carries out a regular and systematic process to monitor the progress of student learning and achievement. At the beginning of each school year, each school presents a comprehensive school site plan to a review committee composed of the Superintendent and Cabinet. The purpose of the presentation is to evaluate student learning and achievement, and to present a systematic approach to curricular improvement throughout the school year. Specific data is assessed on a year-to-year basis with significant benchmarks demonstrated throughout the year.

Teachers, parents and other stakeholders provide suggestions and opinions through parent club meetings, Superintendent's Advisory Committee, weekly school site staff meetings and meetings. The information obtained through the monitoring and evaluation process will be used as school and district data to improve student learning and modify curricular objectives.

Information will be shared with Board members, management, staff, parents, community and businesses through information posted on the district's public web site ([www.tracy.k12.ca.us](http://www.tracy.k12.ca.us)), through email communication, the district's telephone communication system, management team meetings and board meetings. Technology successes will be shared in the same methods.