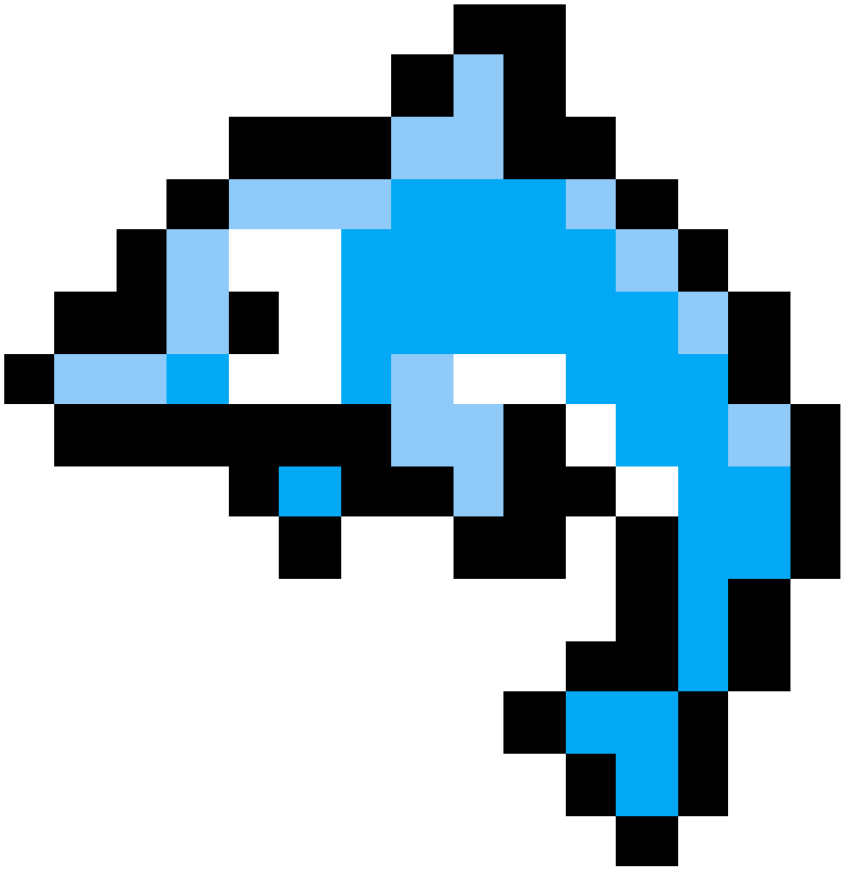
Building a Strong EdTech Ecosystem

PCHS Strategic Technology Plan 2022-2025



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Executive Summary

PCHS wholeheartedly believes technology can be a powerful tool to increase teacher efficiency and student learning and is committed to providing a strong edtech ecosystem that supports both. The number of digital tools in our school's portfolio has grown significantly in the past few years, and we need systems in place to make connections between needs, digital learning solutions, and actual impact on teaching and learning. To **build an efficient and effective edtech ecosystem**, we must be intentional in our decision making. Evidence is key, and this plan lays out goals to help us begin building and streamlining processes to make informed edtech decisions.

Building an equitable, efficient and effective technology ecosystem requires intention and precision. The following key ideas can help us leverage technology to support teaching and learning today:

1) *Open the lines of communication.* It is critical to have conversations about topics such as interoperability, data privacy, cybersecurity and bandwidth alongside discussions of tool effectiveness. Working to bridge the gap between teaching and learning, our technology, LTSP, PLC and budget teams help ensure all student groups and teacher interests are represented.

2) *Think about how to implement tools for the right groups of students at the right times.* Not all tools are right for all students – a formal process for the review and selection of edtech saves time, money and advances student outcomes. PCHS must validate their edtech program and tool choices to better support daily instruction.

3) *Keep the focus on student learning.* Some key questions to keep in mind as we dive into this work are: Does this program or tool align to instruction and support teaching practices? Is there evidence that use of this tool leads to desired outcomes?

During the 2021-2022 school year, the tech team initiated several projects to support the points above. These include, implementing *Edtech Impact*, an analytics tool deployed on school-owned devices to capture edtech usage and help to inform budget and training needs, a *Subscription Tracker* to manage current licenses and streamline renewals, and the *Pali Edtech Library* where available apps are located in one place along with related resources. These projects are a work in progress

and will be fully implemented in the 2022-2023 school year.

One of the primary needs for PCHS staff continues to be dedicated time for professional development built into the calendar year in order to plan a minimum of (9) mandatory hours of edtech professional development per teacher throughout each school year, with an additional 4 hours for the designated PLC edtech leaders. The goal is to use this designated time to support new technology integrations that will be launched in the 2022-2023 school year including, 1) *Performance Matters*, a comprehensive student assessment solution and integrated platform that empowers educators to analyze student performance data to inform personalized instruction and identify, address, and eliminate unfinished learning, and 2) *Promethean ActivPanel*s, digital interactive whiteboards for the classroom that will be purchased using Emergency Secondary School Relief (ESSR) funds.

It remains a goal of our tech team to ensure that teachers can rely on student access to devices in the classroom everyday. The ultimate student device vision is a 1:1 environment where all students are provided a school managed laptop. Due to budgetary restraints the current technology environment continues to utilize a “Hybrid” Bring Your Own Device (BYOD) loaner program until PCHS technology funds can reach yearly levels to sustain a 1:1 student device model. A portion of ESSR funding has been allocated to purchase spare student devices for each teacher.

Finally, to assist in evaluating the effectiveness of our technology program, we will continue to partner with BrightBytes, to deploy the *Modern Learning* survey to our students, teachers, administrators, and parents. This survey will provide insights into Access, Skills, Support, Professional Development, Instruction, and Social & Emotional Learning, including recommended strategies for growth by focus area. The overall goal of the district technology program is to incorporate technology in meaningful ways to advance the district’s long term strategic plan and schoolwide goals, and support learning outcomes that prepare our students for graduation and beyond.

1 Vision

The Palisades Charter High School mission and vision statements help to drive our current Education Technology plan by providing a lens through which technology goals and decisions can be made. These statements were the product of a collaborative process of key partners including students, parents, teachers, administrators, and community members.

PCHS Mission Statement

PCHS will empower our diverse student population to make positive contributions to the global community by dedicating our resources to ensure educational excellence, civic responsibility, and personal growth.

PCHS Vision Statement

PCHS envisions itself as a national model of a rigorous college-preparatory educational program serving a diverse student population.Through shared responsibility, a student-centered curricular and co-curricular program, a standards-based and aligned curriculum, inclusive classes, and an extensive use of technology, the overarching goal is to create a highly enriched comprehensive secondary school. PCHS will educate all students to reach their intellectual, physical, psychological, and social potential in a safe, cooperative, and supportive environment. The educational program will prepare PCHS graduates for admission to four-year colleges, institutions of higher learning and post-secondary career fields.

This technology plan is grounded in the belief that technology not only enhances instruction but is vital to the development of skills students need to succeed in life. Because technology plays such an important role in education, having a vision of how our technology program will look in the future is important. For this reason we crafted specific PCHS Education Technology Mission and Vision statements that were developed by the LTSP technology committee members.

PCHS Educational Technology Mission Statement

Implement technology to create and support the best possible learning environment for students, staff, and community. Specifically, for all students and staff:

- To provide global access to information
- To meet the curricular needs of all learners
- To refine critical thinking skills and foster creativity
- To provide a medium for expression and communication
- To collect, assess, and share information on student learning
- To improve the effectiveness of administrative tasks
- To provide skills and proficiencies necessary for the 21st Century workforce

PCHS Educational Technology Vision Statement

We envision using technology to create an environment where:

Students are engaged in a challenging curriculum that is focused on inquiry-based, hands-on learning. Students are comfortable using technology. Students take responsibility for their own educational success. Students are empowered to realize their own unique talents.

Teachers use technology to support all learning across the curriculum. They function as coaches, mentors, advocates, and managers of information.

2 Curricular & Instructional Technology Environment

Palisades Charter High School offers a wide range of technology tools to support our community. Our aim is to create a learning environment where technology is universal, secure, stable, and relevant. The campus is currently multi-platform, supporting Windows, Apple and Google operating systems.

Teachers/Classrooms

Our teaching staff are provided with either laptop and/or desktop workstations, according to their instructional and curricular needs. All classrooms have at least one monochrome laser printer. Teachers are also provided with Google (G Suite) and Microsoft Office 365 accounts. Both of these include secure, cloud-native

collaboration and productivity apps such as Google Drive for file storage and document collaboration.

Each teacher is provided with access to our school's Learning Management System (LMS), Schoology. Schoology is an online LMS that allows teachers to organize curriculum, create lesson plans, and provide student assessment. The platform allows for peer collaboration and engagement through public or private discussion forums and groups. Classes are automatically created and students are enrolled into the LMS from our Student Information System (SIS), Infinite Campus. This platform is used to manage attendance, grades, and test scores. School-wide common assessments are administered using Schoology's Assessment Management Platform (AMP) tool.

Many teachers utilize additional Audio/Visual technology such as digital projectors, DVD players, and document cameras to supplement their instruction with visuals, and to provide alternatives to the whiteboard as a learning tool. There are two interactive whiteboards and one interactive projector on campus that were purchased as part of an ongoing pilot program.

PCHS employs a wide variety of online resources and educational technology to support academic content. During the 2021-2022, our EdTech Coordinator began entering all edtech subscriptions into a tracker that includes descriptions, costs, and expiration dates of each purchased tool, along with relevant invoices, purchase orders, and vendor contacts. The tracker is set up to send e-mail notifications (3) weeks prior to expiration dates so accounts can be renewed accordingly. Additionally, we've also started working on a Pali EdTech Library that will be added to our Pali High bookmarks where teachers can see all edtech applications and tools available to them along with resources such as tutorials, lesson plans, and implementation guides.

Tech Office

The technology department has two chromebook carts with (40) laptops each available for checkout. Audio/Visual technology resources including digital projector carts, PA systems, microphones, webcams, and DVD players are available for checkout from the tech office.

BYOD/"Access First" Device Loaner program

Palisades Charter High School is continuing to adopt a hybrid BYOD (Bring Your Own Device)/Loaner program. BYOD allows students to bring and use their own technology to access the PCHS high-speed wireless Internet network during the day in order to enhance their learning experiences. We expect all students to be responsible digital citizens and support the PCHS Responsible Use of Technology Policy. While Chromebooks are the most common BYOD device, Windows laptops/tablets, Mac laptops, and iPads can still be used if they meet the **BYOD minimum requirements** (Appendix A). The District's minimum requirements describe the technical needs of the device for connecting to and supporting instructional needs, which includes a physical keyboard and the ability to connect to our wireless network. Families review the **PCHS Responsible Use for Students and Families Policy** (Appendix B) as part of registration each year.

Students who do not have their own devices may then check out a PCHS loaner Chromebook from the school at the start of the year when they go to pick up their textbooks. Families with the financial means to purchase a device for their students are strongly encouraged to do so in order to help reserve the equity loaner pool of chromebooks for families that may experience financial hardship. In order to check out a loaner students must have their parents fill out and sign the **Release of Technology Equipment and Financial Responsibility Form** to turn in at the time of device checkout. Ninth and tenth grade students have priority access to PCHS Chromebook loaners during the first few weeks of school. After that any PCHS student may check out a loaner depending on the number of devices remaining.

Computer Labs

Student accessible computers are located in nine computer labs across campus. These include two general purpose spaces, seven classroom labs, and mobile labs dedicated to specific curriculum.

These labs include:

Library	Two carts MacBook Airs
Mobile	Journalism, Virtual Entrepreneurship, Virtual Academy, and Music
E101	Photography/Yearbook
E203	Programming
J100	Makers Space
J101	Environmental and Spatial Technology (EAST)

J108	Film/Video Production
G104	Web/Graphic Design
J123	Game Design

The devices located in these labs come with a basic suite of tools that include Microsoft Office. Certain labs contain programs like Python, C++, Adobe Creative Cloud, Finale, Final Cut Pro, iMovie and others that are installed to meet curriculum requirements. Our two general purpose spaces, the Library and Study Center, house a total of (75) computers that are accessible to students before and after school, during nutrition, lunch breaks, and 7th period. During the 2021-2022 school year, a portion of ESSR funds were allocated to modernizing the Study Center with brand new furniture and equipment upgrades. Special Education students have additional access to (125) mobile and (15) fixed devices dedicated for student use.

PCHS provides high-speed wireless Internet access to all students on campus. Each student must sign a Responsible Use Policy that outlines Digital Citizenship practices and expectations for students throughout their time at Pali. Students have multiple accounts providing them access to many edtech tools including: Google Apps for Education (G Suite), Microsoft Office 365, Infinite Campus, Schoology, Atomic Learning, WeVideo, Albert.io, and many others.

PALI Virtual Academy

Our mission is to provide Palisades Charter High students with a progressive alternative to the traditional classroom within the PCHS framework. All courses offered are Common Core State Standard and A-G UC aligned. Students work independently to access the curriculum while adhering to the PCHS calendar and the PCHS Virtual Academy policies and guidelines.

This program serves all learners who need to independently access the curriculum. (Appendix D). These students may be, but are not limited to, those working, pursuing a professional athletic or art career, accruing excessive on-site attendance concerns, those with scheduling problems or individual learning styles not met in the traditional classroom, and those working to make up deficient credits. Students follow the California State Education Code Attendance Policy for Independent Study students.

Atomic Learning

PCHS provides all members of our community access to structured online tutorials for hundreds of technology tools through the **Atomic Learning System**. Every student has their own account, enabling them to learn new tools like GAFE, Office 365, Photoshop, and 3D modeling in a self-paced environment. Parents may also use the Atomic Learning tutorials for personal enrichment or professional development.

GAFE / G Suite

At PCHS we believe in the power of collaboration. Google Apps for Education (aka G Suite) aims to foster peer collaboration through unified email communication, shared file storage in the cloud and free access to core academic productivity tools (Docs, Sheets, Slides, Forms and Drawings). We provide G Suite accounts for all our students and integrate GAFE with Schoology, our LMS, to expedite completion and submissions of assignments. In addition, our Temescal Academy is a 1:1 touchscreen Chromebook classroom environment. We also provide Chromebooks for our 9th grade students. More information about GAFE in schools can be found on the **Google for Schools** site.

OneRoster 1.1 School Data Sync

During the 2021-2022 school year, PCHS implemented the **IMS Global OneRoster 1.1 standard** to sync Schoology gradebooks to Infinite Campus Gradebooks. A **Loom tutorial** was provided to teachers for the initial setup, and the Edtech Coordinator and tech coaches supported those who needed additional guidance and/or troubleshooting assistance. Overall, the sync has been relatively successful with room for improvements in both training and technical enhancements. Our Edtech Coordinator and Database Manager have been in contact with Schoology and Infinite Campus representatives to share suggestions for improvements. More detailed setup and troubleshooting guides will be created for the 2022-2023 school year. We anticipate future improvements to this technology and recommend continued implementation of this tool for syncing grade data.

PLC EdTech Leaders

During the 20-21 school year, each PLC designated an edtech leader to serve as the main conduit between our technology team and their respective PLC's. PLC edtech leaders are identified as having advanced technological skill proficiencies based on their own perceptions of self-efficacy and the recommendations of other members

within the PLC. The goal is for these individuals to attend technology PD's, tech coaches meetings, product demonstrations, and/or individual training sessions, and then relay pertinent information to their team during designated group meetings. This "decentralized" approach will help support the PLC model that the school charter was built on. Below are the current PLC EdTech Leaders:

PLC	Leader(s)	EdTech Leader
Algebra 1	Cheryl Onoye	Cheryl Onoye
Algebra 2	Stephen Matthews	Boris Tsap
AP History PLC	Chris Berry	
Biology	Julie Benke	
Chemistry	Kevin Kung & Jane Curren	
English 9	Sarah Rosenthal	Sarah Rosenthal
English 10	Evelyn Rivera & Alaina Voccio	
English 11	All members are leaders	Michele Green
English 12	Lisa Saxon	Lisa Saxon
Geometry	Perisha Bellinger	Cheryl Onoye
Gov/Econ	Peyman Nazarian	
Grading for Equity: English	Stephen Berger	Lisa Saxon
Math Analysis	Cheryl Rivin	Boris Tsap
Performing Arts	Michael Turnblom	
Physical Education	Adam Licea	Adam Licea
Sociology	David Pickard	Peyman Nazarian
Spanish 1	Laura Vladika	
Spanish 2	Laura Bachrach	
Spanish 3	Laura Vladika & Patricia Perez	Maggie Nance
Special Education	Paula Anderson	
Study Skills	Myrna Cervantes	
Tech Ed	Alice Kim	Alice Kim
U.S. History	Katie Pawlik	Katie Pawlik
Visual Arts	Ellen Unt	Ellen Unt
World History	Kyle Thomas	

3 Curriculum Review & New Technology Integration

— 2022-2023

Assessments & Student Data

Goal 1 *Improve infrastructure for common assessments and comprehensive student data.*

How? Replace AMP with Powerschool's **Performance Matters**, a comprehensive student assessment software solution built to identify unfinished learning and inform whole-child instruction.

During the 2021-2022 school year , the PCHS tech team in collaboration with school administration identified a need for more comprehensive student data and an improved online assessment platform that could be accessible from a single location. The tech team began an extensive research and vetting process of replacements for Schoology's Assessment Management Platform (AMP), where formative and summative assessments can be given across PLC's, grade levels, and departments. The goal was to find a system that would not only integrate with our SIS and LMS, but also make it easier for teachers to develop common assessments that could provide useful data related to student mastery of standards. Additionally, it was important that the chosen platform provide overall student data for administrative and counseling purposes, including assessments, behavior, attendance, intervention/IEP/504, etc.

The tech team's recommendation was to replace AMP with Powerschool's **Performance Matters**, a comprehensive student assessment software solution built to identify unfinished learning and inform whole-child instruction. Performance Matters is the leading student assessment software that provides K-12 schools and districts with a holistic view of instructional gaps to support better student outcomes. One of the main benefits is that it is an integrated platform that empowers educators to analyze student performance data to inform personalized instruction and identify, address, and eliminate unfinished learning. Assessment data provided by the platform will be used to compare standards-aligned benchmark data in all core subject areas.

Upon the recommendation of the tech team PCHS will be switching from AMP to Performance Matters for school-wide common assessments starting in the Fall of 2022. Teachers and staff will have access to AMP throughout the remainder of the 2021-2022 school year. A preliminary Performance Matters implementation plan has been generated:

Implementation Session	Topics	PCHS Attendees	Powerschool Attendees
Pre-Planning (30 mins)	• Review SOW • Schedule Planning Phase • Identify Risks • Identify PCHS Project Team • Session Guide Deep-dive • Determine Blackout/ Availability date • Complete Implementation Questionnaire	Edtech Coordinator Tech Coaches	Project Manager
Kick Off (60 mins)	• Project Kick Off • Introduce team • Outline expectations • Complete Discovery Questions survey • Determine who will install plugins (if applicable) and create and schedule exports • Demo by SSC	PCHS Implementation Project Team and anyone who can support basic technical set up	Project Manager Application Specialist (AS) Strategic Solutions Consultant (SSC)
Core SIS Data (120 mins)	• Guided session to pull core files, grades,	Edtech Coordinator	Project Manager Application

	attendance, discipline, student enrollment • Discuss SSO options • Review assessment data layouts • Discuss color coding grades and • assessments • Review Project Plan & Dashboard	SIS data admin	Specialist
Core Data Review (60 mins)	• Review core data • Review grades, attendance, and discipline • Discuss student login file • Discuss custom user file • Discuss custom filter file • Review scanner setup • Review integrations	Edtech Coordinator Data team	Project Manager Application Specialist
Assessment Configuration (120 mins)	• Assessment Configuration Call • Review Project Plan & Dashboard • Walk through and set up platform (including permission levels and assessment platform)	Edtech Coordinator Curriculum team	Project Manager Strategic Solutions Consultant (SSC) AS (optional)

	• Review training plan		
Status Check-In (30 mins)	• Review implementation status • Core data, SSO, Assessments • CTO	Edtech Coordinator Additional team members as needed to fulfill the agenda	Project Manager Application Specialist
Early Warning System (60 mins)	• Review Early Warning System (EWS)	Edtech Coordinator Relevant team members	Project Manager SSC
Status Check-In (30 mins)	• Review Project Plan & Dashboard • Review assessment data • Review custom filters • Confirmation of SSO login staff and student	Edtech Coordinator Relevant team members	Project Manager Application Specialist
Intervention (60 mins)	• Q&A session follow up from Intervention • Introduction video • Determine next steps for intervention roll out to stakeholders • Review Intervention training options	Edtech Coordinator Intervention Specialists	Project Manager SSC
Final Data	• Status Check in	Edtech	Project Manager

Overview (60 mins)	and Final Data Overview • Data Q&A • Request Technical Contacts	Coordinator Data team	Application Specialist
Admin Functionality Walkthrough (60 mins)	• Review Project Plan & Dashboard • Admin Functionality Overview • Introduce project close process and next • steps	All Admin	Project Manager SSC
Transitions (60 mins)	• Project completion sign-off • Introduction to Support • Introduction to Post Implementation • Services	Edtech Coordinator Relevant team members	Project Manager SSC

For a more **detailed Performance Matters Implementation plan** please see (Appendix H).

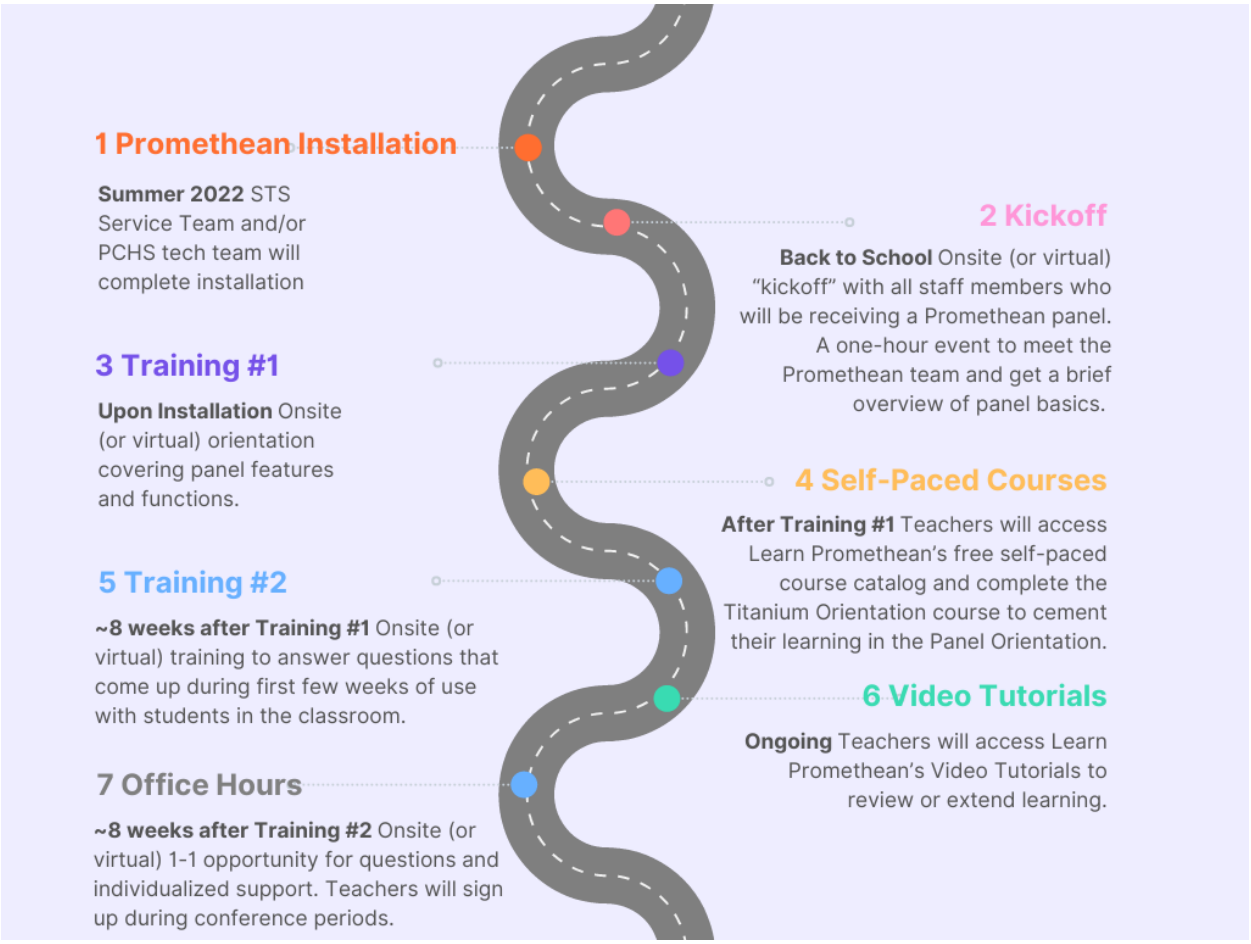
Classroom AV Updates

Goal 2 *Update classrooms with modern audio-visual components to support teachers with student learning aids.*

How? After reviewing and receiving demo's for several different options, the team is proposing that Promethean Interactive Displays be installed in classrooms on a voluntary basis up to the 2022-2023 budgeted amount for AV updates and repairs.

During the 2020-2021 school year , the PCHS tech team identified a need for classroom AV updates & repairs that were partially funded for the 2021-2022 school year. During the 2021-2022 school year, PCHS received approximately $3.2 million of Emergency Secondary School Relief (ESSR) funds, $900K of which was allocated to Technology. The Edtech Coordinator along with the tech coaches conducted a thorough research and vetting process of replacements for classroom projectors, speakers, monitors and document cameras that are currently used in most classrooms. The goal was to find a solution that would be more economical in the long-term and more modern and engaging for instruction.

The team reviewed product specifications and attended virtual demos for digital interactive whiteboards produced by **SMART**, **Promethean**, **ViewSonic**, and **Google, Inc**. On-site meetings were then organized for teachers and tech coaches to attend, where there was an opportunity for more thorough in-person demos and staff feedback of smart boards from Promethean and SMART. Upon a debrief by the Edtech Coordinator and Tech Coaches, the team's recommendation was to move forward with **Promethean ActivePanel** and a budget of $250,000 was allocated to this project for the 2022-2023 school year. A preliminary Promethean implementation plan has been generated:



For **product specifications** please see (Appendix I) and for a more **detailed implementation plan** can be found in (Appendix J).

Edtech Subscription Management

Goal 3 *Organize current and ongoing Edtech subscriptions for more efficient management and inventory control.*

How? Enter all Edtech subscriptions into a tracker with embedded notifications for contract renewals.

During the 2021-2022 school year the EdTech Coordinator began entering all edtech subscriptions into a tracker called **TrackMySubs**, a subscription management and tracking tool used by small businesses. *Details logged in the tracker include:*

- Tool name
- Description
- Payment Date
- Expiration Date
- Billing Cycle
- Cost
- Vendor URL
- Payment Method
- Vendor Contact(s)
- Tags (Funding Source, Department)

Reminder alerts are set up to be emailed to the Edtech Coordinator (21) days before the expiration date to review for renewal purposes. Additionally, all relevant documentation, including purchase orders, invoices, implementation plans, spec sheets, etc. are attached to each entry.

— 2023-2024

Digital Literacy

Goal 1 *Improve students' ability to use technology to find, evaluate, create, and communicate information. Along with a working knowledge of computer software and hardware, students should have an understanding of a wide range of applications (e.g., word processing, presentations, web-based resources). With software applications becoming so mainstream, it is vital to be fluent in their use when entering the workforce.*

How? This goal can be achieved by delivering Google's free ***Applied Digital Skills*** course beginning with ninth grade pods (Appendix E). Lessons that correspond to specific skills in the categories below can be divided among PLC's and/or departments to be delivered each year beyond grade nine.

Although today's students are digital natives with many skills in social networking, many of them lack the ability to apply complex technology skills to everyday challenges. Classrooms that prepare students for college and career seamlessly integrate technology into daily instruction in a way that intentionally scaffolds students' technology skills. In order to meet students where they are, technology instruction must be infused in every subject area. PCHS has adopted the **Digital Literacy in the K-12 Classroom Scope and Sequence** to help guide PLC's and departments integrate technology into their current curriculum standards.

Each section of this document focuses on scaffolding Digital Literacy skills from Kindergarten through 12th grade, as we endeavor to prepare our students for success in college and career. It presents guidelines, not a curriculum, for teachers as they support their students in learning to use technology. It should not dictate when

students can and cannot experience technology content. However, teachers may find this useful in guiding instructional choices. Skills are noted as introductory and mastery at each grade level and organized into eight specific categories:

- Basic Computer Operations
- Word Processing
- Spreadsheet (Tables, Charts, and Graphs)
- Mathematical Applications
- Presentation and Multimedia Tools
- Acceptable Use, Copyright, Plagiarism, and Online Safety
- Research and Information Gathering
- Communication and Collaboration

Digital Citizenship

Goal 2 *Use digital citizenship lesson plans to address timely topics and prepare students to take ownership of their digital lives.*

How? This goal can be achieved by delivering Common Sense Media's ***Digital Citizenship Curriculum*** in English classes beginning in grade nine. A total of six digital citizenship lessons will be taught in each school year in the following categories:

- Media Balance & Well-Being
- Privacy & Security
- Digital Footprint & Identity
- Relationship & Communication
- Cyberbullying, Digital Drama & Hate Speech
- News & Media Literacy

— 2022-Ongoing

Edtech Analytics

Goal 1 *Improve data collection surrounding the use of paid edtech subscriptions, apps, and/or platforms to better inform budgeting, spending, and/or training decisions.*

How? Deploy an analytics tool on school-owned devices to capture edtech subscription usage for students, teachers, and/or departments.

During the 2021-2022 school year the Budget & Finance Committee raised questions surrounding edtech usage and subscription budgets. A need for more comprehensive data related to the actual use of paid subscriptions, to help make more informed budgeting decisions, was identified. The Edtech Coordinator along with the tech coaches conducted a thorough research and vetting process of various edtech analytics tools including, **Learn Platform**, **Clever Analytics**, **LightSpeed Analytics**, and **EdTech Impact**.

After weighing the pros and cons of the options above, the tech team decided to partner with Brightbytes to implement their Edtech Impact tool on school-owned devices. This was successfully deployed in March 2022 with the assistance of our Director of Technology and Database Manager. A detailed **deployment guide** and the required **edtech data specifications** can be found in (Appendices K & L). This tool will help measure digital application usage and efficacy within specific conditions to determine return on investment. Major benefits of implementing this include:

- Tie the usage of 2500+ edtech apps with student achievement data from any system
- Discover which programs and apps impact student achievement and ROI
- Inform plans to replicate, scale, or adjust resources accordingly

It must be noted that only data on school-owned devices can be captured since this tool cannot be installed on student-owned devices. However, with the approval of the Director of Technology, PCHS has agreed to 'beta' a new analytics tool from Brightbytes that can capture usage data via our web filter, thereby helping us to get a more complete picture of our tech use.

Edtech Library & Web Presence

Goal 2 *Communicate available edtech apps with teachers , parents, and staff, and provide resources around using each tool.*

How? Build an edtech library using Microsoft Lists and add it to our Pali Bookmarks folder. *Additionally, build a new Pali EdTech website with more detailed tech descriptions, tutorials, and lesson plan resources for parents, teachers, and staff.*

A common question posed by teachers to the EdTech Coordinator and tech coaches is, “How do I find the apps available to me as a teacher?” or “What apps do we have access to?”. To make it easier for teachers and staff to see what apps are available, the Edtech Coordinator began building a ***Pali Edtech Library*** using *Microsoft Lists*, a Microsoft 365 app that helps you track information and organize work. This library is a work in progress, with the goal being to complete it by the end of the 2022-2023 school year.

The Pali EdTech website that was previously at paliedtech.org is currently down and needs to be rebuilt from scratch. The current plan is to do this using Microsoft Sharepoint, a web-based collaborative platform that integrates with Microsoft Office. The website should include resources for students, teachers, parents, and staff on commonly accessed tools such as Schoology, Infinite Campus, Performance Matters, Promethean ActivPanels, and our paid edtech apps.

4 Edtech Professional Development

Research from the International Society of Technology Education (ISTE) reveals that high-quality professional development is job embedded, personalized, and designed to promote skill transfer. Professional learning experiences must respond to a teachers’ interests, needs, and classroom settings. In many cases, these types of learning experiences can extend beyond the traditional school in-service setting to include webinars, live chat support, learning experience courses, and virtual PD. Most importantly, professional development experiences for teachers must be sustained and of high quality for improved learning outcomes to be realized. Effective professional development of teachers needs to be content-based, collaborative, coherent, and sustained for long periods of time.

New Technology Integration

It is the recommendation of the tech team that PCHS should dedicate mandatory pre-service training days to support the school wide rollouts of Performance Matters and Promethean ActivPanels. A portion of PD funds awarded in the 21-22 school year will be allocated to support technology integration of planned software and hardware rollouts in the 22-23 school year. The bell schedule and school calendar should be structured in a way that allows for embedded PD throughout the year, not only at the beginning of each semester. Only prolonged, sustained PD with ongoing support, feedback and collaborative reflection will yield the type of tech integration spelled out in our vision.

Leveraging Survey Data

Brightbytes survey data will be used to gather information on technology training needs and major instructional goals for the year. Being aware of teachers' skills profiles and interests with technology can greatly inform the development of a cohesive, integrated professional development plan that will enhance student learning outcomes. Adequate technology support can alleviate teachers' trepidation about engaging with and integrating technology into their classrooms. Teachers who perceive that the quality of technology support is high are more likely to try new lessons or learning activities with technology.

Employee Onboarding

Every year PCHS acquires new teachers that need to be onboarded. This process starts even before the first day of school and is meant to get new teachers operational as quickly as possible. Using our online Atomic Learning software we can create custom PCHS specific pathways and learning modules for new teachers to learn school policies, procedures and technology tools. PCHS can assign prebuilt Schoology, Office 365, and G Suite learning modules along with custom modules directly to new teachers through their Atomic Learning accounts. These modules include assessments and can administrators can generate reports to see the progress of each teacher as they move through the onboarding modules. It also allows teachers to print certificates of completion after they have completed each module if needed.

Learning Experience Courses

In addition to the onboarding courses above, the PCHS tech coaches along with the Education Technology Coordinator can create online self-paced learning courses for teachers and staff members to develop and expand skills related to our ongoing tech tools/platforms.

Below are some of the proposed courses to be produced:

- Schoology 101(Beginner)
- Schoology Deeper Dive (Intermediate/Advanced)
- Infinite Campus 101
- Power BI
- Google Apps
- Digital Storytelling with Adobe Spark

- Nearpod 101(Beginner)
- Nearpod Deeper Dive (Intermediate/Advanced)

Beyond the above PD sessions and course offerings, our tech team will continue to create video tutorials and/or help documentation for adopted EdTech tools, to aid staff in learning and troubleshooting tasks as needed. All materials can be posted either to Atomic Learning, EdTech Enthusiasts Schoology course, Plaid EdTech YouTube channel, or our new Pali EdTech website. Teachers and staff can also use Zoom or the Microsoft Teams app to chat with our EdTech coordinator for live virtual support throughout the school day.

Certifications, Coaching, and Conferences

Our tech team proposes that a portion of PD funding be allocated to fees for certification courses that teachers can take to earn PD hours such as (not an exhaustive/complete list):

Certification courses:

- **Google Certified Educator Level 1 & 2**
- **Grow with Google**
- **Microsoft Certified Educator (MCE)**
- **Adobe Certified Associate (ACA)**
- **Albert Certification Level 1 & 2**

Conferences:

- **Educating for Careers**
- **CUE**

Coaching:

- **Building Excellent Schools**

The three main themes that emerge when looking at what defines effective professional development are, (1) a dedicated focus on content knowledge, (2) opportunities for active learning, and (3) coherence with other learning activities and teacher goals. These three elements will be considered when developing edtech PD opportunities for the PCHS staff.

5 Edtech Pilot Framework

The PCHS Edtech Pilot Framework provides a step-by-step process to help our team run successful educational technology pilots. This framework is being applied for our Promethean ActivPanel integration beginning in the 2022-2023 school year. Steps 1-2 have been completed for this project, and the tech team can resume with Step 3 after the budget has been approved and the purchase order has been completed.

Step 1 Identify Need

Articulate the specific need or challenge our school is trying to address so we can determine if the piloted edtech meets that need. The more specific this problem is, the easier it is to determine whether a product successfully meets that need.

Step 2 Discover & Select

When reviewing potential products, we must consider the IT environment, the scope of the pilot, the users' level of experience using technology, existing research about the product, privacy features, and available funding, so that we can choose a product that matches our need(s). Additionally, our tech team will aim to involve teachers in product selection to see higher levels of engagement and technology implementation.

Step 3 Plan

Create specific goals to ensure a shared vision, identify data that will be used to determine success, and create shared expectations. When planning a pilot, we must clearly articulate what we are trying to achieve and how we will collect evidence to make an informed decision. Pilots produce the most useful results when everyone involved can answer the questions, "What does success look like?"

Step 4 Train & Implement

Ensure teachers are provided training, technology support, and instructional coaching to enable a strong implementation of the new tool. Before the pilot begins, we will allow time to establish student accounts, orient educators to the tool's features, and provide information about troubleshooting and supporting services. To encourage consistent implementation, we will designate a pilot coordinator to conduct weekly or bi-wekly check-ins with educators to gather data and encourage use.

Step 5 Collect Data

Collect quantitative and qualitative data through surveys, interviews and more to determine whether the pilot goals are met. The edtech pilot size dictates the types and amount of data needed for participants. Consider gathering information from educators, leaders, students, and the product itself to best understand user experiences and learning outcomes. We will review academic calendars and testing schedules, so students and teachers are not overburdened by the data collection process.

Step 6 Analyze & Decide

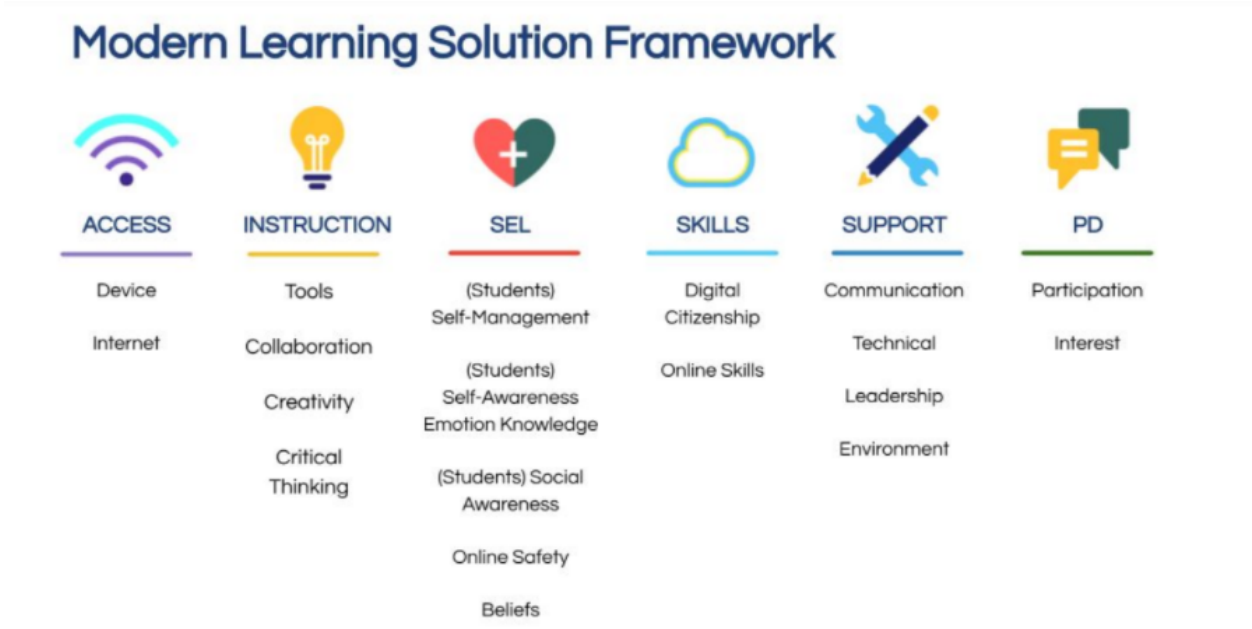
Analyze data to evaluate if the piltoed edtech tool met your goals and to determine whether to purchase, continue piloting, or discontinue use of the tool. We will consider the goal, size, and complexity of the pilot when deciding how to analyze data. We can make the strongest claims and clearest decisions by comparing outcomes for pilot participants with those for teachers and students who did not participate.

Step 7 Negotiate & Purchase

Work with edtech provider(s) to understand and negotiate the total cost of implementing the tool. We must remember to consider ongoing costs. When determining whether to continue or scale up product use, we will refer to the pilot data. We can leverage our pilot evidence to negotiate a tailored solution (e.g., partial purchase, second round pilots with additional users, etc.) with edtech providers. With open lines of communication, we can work with providers to reach mutually beneficial solutions.

6 Brightbytes Survey Data

During the 2021-2022 school year PCHS utilized BrightBytes' Modern Learning survey to gain data on our instructional environment, technology, social & emotional learning, and equity and access to better understand the needs of our campus. The Modern Learning Solution uses a research-driven framework that enables district leaders to evaluate their learning programs and resources by providing insights into the following areas: Access, Skills, Support, Professional Development, Instruction, and Social & Emotional Learning.



[TODO Insert 21-22 Survey Slide Deck]

For comparison purposes, the **2020-2021 BrightBytes Modern Learning Survey infographic** can be found in (Appendix O).

7 Budgeting & Rotation Plan

ESSR Funding

During the 2021-2022 school year, PCHS received approximately $3.2 million in Emergency Secondary School Relief (ESSR) funding, $900K of which was allocated to Technology. After thorough discussions within the LTSP Tech Committee it was decided to use this funding towards 21-22 unfunded infrastructure needs, AV updates, student devices, charging stations, license/subscription renewals, etc. A more detailed breakdown of the proposed funding can be found below:

Description	Amount Needed	Amount Proposed	Rationale of Expense
21-22 Infrastructure Needs	$ 235,000.00	$235,000.00	Upgrade campus technology infrastructure; storage, backup, and SAN data servers
Classroom Labs Refresh #1	$ 253,700.00	$253,700.00	E101, E203, and G104 labs have been deferred multiple years. These devices must be replaced.
AV Updates & Repairs	$ 1,000,000.00	$250,000.00	Update classrooms with modern audio-visual components to support teachers with student learning aids. The modern classroom can include a projector, flat panel, or smart board display device, microphone aided speech with a speaker system, and a casting device to share audio/video to the display device. Sometimes existing hardware can be reused but most existing hardware needs to be replaced. LAUSD regulations also preclude ceiling mounting devices in all original buildings, which increases cost. On average $8,000 - $10,000 per room, including additional electrical/networking work needed to support installs.
Faculty & Staff Device Refresh	$ 268,250.00	$67,062.50	99 devices are due for refresh. 68 are Faculty, 31 Classified/Administrative, 34 are desktops, 65 are laptops, 32 are Windows, 67 are Apple.

			All devices are being replaced with a laptop, docking station, keyboard + mouse, and a monitor. 10 additional devices will be due next budget year. Special Education assistants are not currently provided devices but are daily borrowers and should be considered for device assignment.
Technology Professional Development	$ 300,000.00	$0.00	Funds to be used for training teachers on new and existing technology apps, platforms, and tools; PD to take place in person after-school, virtually, and some optional sessions
Learning Experience Courses	$ 100,000.00	$0.00	Create learning experiences courses on our Infobase platform that staff can take during their own time; coursework can be tied to salary point credit in accordance with HR guidelines
Classroom Student Devices	$ 187,500.00	$93,750.00	Each classroom will be issued (3) Student Devices to be used in cases where students don't have devices at school, their device is uncharged or malfunctioning. Devices can also be used for state testing (CAASPP, ELPAC, IAB, CAST, etc) and AP test prep curriculum.
Laptop Chargers	$ 16,000.00	$0.00	Each classroom will be issued (3) Chromebook chargers and (3) universal laptop chargers to be used in cases where students don't have chargers at school and need to power their devices
Charging Stations	$ 6,500.00	$0.00	Each classroom will be issued a multiple-port USB charging station for charging laptops, phones, tablets, etc.
Docking stations	$ 10,500.00	$5,250.00	50 docking stations are needed for faculty and staff that could not get one during the LLM device purchases.
Athletics - NFHS pixile cam	$ 10,000.00	$0.00	Ability to film and live stream gym games to school community. - LTSP vetted and approved
Smith - Dance	$ 3,700.00	$0.00	iPad Pro + apple care ($1,798.87), LaCie TB Rugged Thunderbolt/USB-C Mobile HDD

			($279.99), 2 Wireless around ear headphones w/mic & 2 licenses for the "loopback" computer program - one per dance teacher ($800)
Smith - Theater	$ 4,000.00	$0.00	Lighting instruments ($2,500), Rugged thunderbolt/USB-C mobile HDD ($279.99), Sound Equipment ($1,200)
Staff Monitors	$ 10,000.00	$0.00	Purchase additional monitors for staff that were lacking, to properly round out and support the teacher workstation.
Digital Art Classroom Tech Equipment	$ 26,040.00	$0.00	Replace & Update Pali Pro (PTV) streaming and filming equipment to include new hardware and software to support Graduations, Other Special Events, VAPA, Athletics, etc.
Powerschool Performance Matters Assessment	$ 100,000.00	$0.00	Provides up-to-date assessments and standards-aligned technology enhanced items that can be used to provide insight into student progress and mastery of skills. CASEL-aligned social-emotional learning (SEL) surveys can also be delivered to students – the results for which can be leveraged to get a clearer view of the “Whole Student.” Results are available immediately that provide valuable insight into mastery of skills, which can be viewed by student, question, standard, class, course, demographic group, grade, school, or across the entire school.
EdTech Licenses & Subscription Renewals	$ 150,000.00	$0.00	For subscriptions that are not included in General Fund or that are proposed after fund approval/allocation (ie Kami, Flocabulary, Nearpod, Kritik, TrackMySubs for EdTech subscription tracking, Clever for EdTech management & insights, AI-powered learning tools such as Thinkster for Math, SelectQ for SAT Prep), etc)
Student Technology Club Supplies	$ 100,000.00	$0.00	TARC Rocketry Kits, application fees, transportation to competitions. Arduino & Parallax robot kits for Girls Who Code,

& Fees			Minecraft: Education Edition licenses for Game Design, Makerspace equipment upgrades and tools, Lego NXT 2.0 and EV3 robots for Coding and Engineering clubs
Expansion of CS Course offerings	$ 75,000.00	$0.00	Partner with the TEALS Program ; TEALS (Technology Education and Literacy in Schools) is a Microsoft Philanthropies program that builds sustainable computer science programs in high schools, with a focus on serving students excluded from learning CS because of race, gender, or geography. Possible costs include: costs incurred by volunteers (e.g. background check), curricular resources (if using a partner curriculum provider that charges a cost), remote teaching equipment (as applicable)

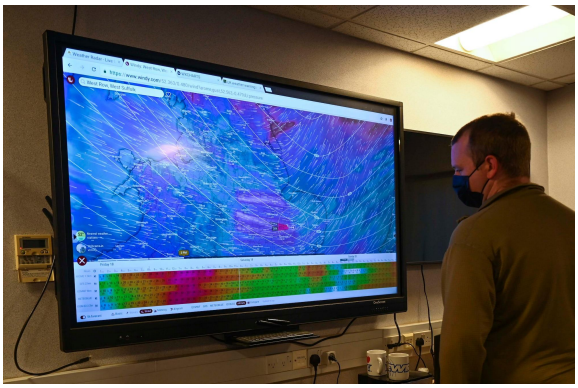
It should be noted that Technology Professional Development & Learning Experience Courses will be funded through the PD allocation of ESSR Funds. Laptop chargers and charging stations will be requested through the Booster Club.

Performance Matters

A **preliminary quote for Performance Matters** can be found in (Appendix M)

Promethean ActivPanels

A **preliminary quote for Promethean ActivPanels** can be found in (Appendix N)



EdTech Subscriptions

The table below shows a list of ongoing EdTech subscriptions along with the cost of each. This information was pulled from the 2021-2022 school year and can be used to estimate the cost of subscriptions for the following school year.

SUBSCRIPTION	COST
MAKEMUSIC INC - FINALE V26 LICENSE	$2,360
ACHIEVE 3000	$8,245
INTERNATIONAL ACADEMY OF SCIENCE - ACELLUS SOFTWARE	$26,425
IXL LEARNING	$12,656
NEWSELA	$750
ACTIVELY LEARN INC	
FLOCABULARY	
N2Y	$782
QUIZLET	$385
BOOKLIST	$170
BRIGHTBYTES INC.	$5,000
CALENDLY	$576
CDW GOVERNMENT, INC. - ADOBE CS, BARACUDA	$38,000
DESIGN SCIENCE INC. - MATHTYPE	$675
GALE CENGAGE LEARNING	$14,805
HOME CAMPUS	$595
HOONUIT, LLC - INFOBASE	$1,745
IMPERO SOLUTIONS INC	$4,727
INFINITE CAMPUS	$46,583
NAVIANCE	$7,959
PEAR DECK, INC	$4,760
RESPONDUS - LOCKDOWN BROWSER	$3,745
POWERSCHOOL GROUP LLC - SCHOOLOGY LMS	$49,770

TURNITIN, LLC	$11,762
U S GAMES - FITNESSGRAM	$348
ZOOM VIDEO COMMUNICATIONS, INC	$11,300
WEVIDEO INC	$4,125
SAVVAS LEARNING CO.	$2,900
EDPUZZLE, INC	$1,440
LEARN BY DOING INC - ALBERT.IO	$15,975
EXPLORELEARNING, LLC - GIZMOS	$9,703
DELTA MATH SOLUTIONS, LLC	$1,250
KAHOOT! AS	$5,130
GIMKIT	$250
ZAMBOMBAZO	$540
PRO-ED	$80
KUTA SOFTWARE	$404
SCIRRA LIMITED - CONSTRUCT 3	$825
STEM FUSE SD, LLC - GAME:IT	$2,000
KNOWLEDGE MATTERS	$5,390
CELTX, INC	$3,000
SCHOLASTIC READING INVENTORY	$220
TOTAL	**$307,353**