



Technology Plan

2023-2024

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Phoenix Central School District
<http://phoenixcsd.org>

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Phoenix Central School's Vision & Mission

PCSD Vision

The Phoenix Central School District is dedicated to educating students to develop desired moral, ethical, and cultural values, to stimulate and expand a continual learning process, and to cultivate an understanding and appreciation of the rights and responsibilities of American citizens, which will enable them to function effectively as independent individuals in a democratic society.

PCSD Mission

The Phoenix Central School District is committed to a challenging educational program that promotes academic and personal growth for all students. Each student will become a confident, productive, responsible individual with a solid academic foundation and the ability to make positive ethical choices. Our goal is to cultivate a sense of pride, character, and accountability in our students and community. The Board of Education, staff, parents, students, and community share responsibility for this mission.

Introduction

PCSD Technology Committee

The PCSD Technology Committee is composed of stakeholders from around the district. On the current committee, there is representation from all three schools, one building-level administrator and one district-level administrator.

The committee met three times during the 2022-23 school year. The discussion at the 2022-23 Technology Committee evolved around Education Law 2D and the compliance required to satisfy the requirements of the New York State Education Department (NYSED). There was also discussion around software being used in schools for instruction, demonstrations of other software packages that the district is reviewing for future use, and best practices for integrating technology in instruction. Also, the committee discussed the upcoming hardware projects for the 2023-24 school year.

The focus of the committee in subsequent years will continue to be Education Law 2D Compliance, PCSD 1:1 Chromebook Initiative, and better communication of the tools available for teachers and students.

Committee Member Name	School	Role
Abbott, Helen	JCB	Admin
Foley, Michael	DO	Admin
Fredenberg, Tim	JCB	Teacher
Griffin, Katie	JCB	Teacher
Marriott, Anna	EJD	Teacher
O'Mara, Kelly	JCB	Teacher
Pento, Rich	JCB	Teacher
Ryan, Kristy	EJD	LMS
Spoto, Carrie	MAM	Teacher
Szykowski, Corey	EJD	Teacher

PCSD Information Technology Department

The PCSD Information Technology Department is headed by the Director of Data and Instructional Technology and supported by one Network Administrator and the LAN Technician (one in each building). The IT team is responsible for the network infrastructure of the district and the inventory, deployment, maintenance, and general care of all instructional technology. The IT team also supports other aspects within the district like maintaining the security camera system, the fuel system at transportation, the digital signage at each school, the live cameras in the gymnasiums, and the JCB stadium.

PCSD IT Vision

PCSD IT enables all staff, students, and community members to be effective end-users of technology through a secure ecosystem of information, collaboration, software, services, and technology.

Goals That Will Drive Attainment of the Vision

Goal 1	Transition to full implementation of the NYS Learning Standards for Computer Science and Digital Fluency.
Goal 2	Our goal is to sustain and expand our secure network that ensures students have reliable access to high-speed connectivity which will enhance their educational experience allowing educators to provide a rigorous 21st-century learning environment for all learners across socioeconomic, cultural, and linguistic differences, regardless of ability and need.
Goal 3	Implementation of supportive instruction as well as an understanding of ongoing technology that provides all faculty and staff an opportunity for professional development that will ensure a seamless transition to the integration of a complete district system for all stakeholders.

PCSD IT Mission

The PCSD IT Department will provide equitable, reliable, coherent information, software, service, and technology to all users of the PCSD network. The PCSD IT Department will provide timely, relevant, and accurate information to support student-focused decision-making while maintaining the safety, security, and usability of the network infrastructure for all users.

A successful delivery starts with building relationships and bringing partners together to discover the true business and educational needs. To drive strategic visioning and alignment, PCSD IT forms realization teams that transform organizational mindset, business processes, and technical assets into a fully developed solution.

IT Planning Process of Technology Plan

We have a variety of teams and committees that meet regularly throughout the year, which greatly impacted the development of our Instructional Technology Plan. The teams with the greatest impact on Instructional Technology Plan are our District Technology Committee and our Technology Department.

Our District Technology Committee comprises teachers, administrators, parents, IT staff, and community members. All of these folks have impacted the developing of the answers to the plan. Another group that has significantly impacted our Instructional Technology Plan is our Technology Department, which includes administrators, Network Administrators, LAN Technicians, Instructional Technology Trainers, and Teacher Assistants.

Both of these groups worked to create a unified vision of learning technologies for our district, which ultimately led to the writing of the goals and action steps in the Instructional Technology Plan. We also utilized data points in Digital Equity and analytics of programs we use to review if the current programming is sufficient or needs updating.

Professional Development to Build Capacity in Educators and Administrators

We must provide an appropriate professional development plan for educators and administrators to attain the instructional technology vision. Therefore, we will provide various training throughout the school year and during the summer that will be voluntary and mandatory, depending on what is being instructed. Training will be available for teachers and administrators, before and after school, during professional development days, and regularly throughout the summer. One-on-one technology training is also available via our three instructional technology trainers.

Analysis of Goals and Progress of IT

Instructional technology goals will be measured and evaluated during and after implementation. We will collect various data sources to ensure that we understand the performance through the lens of our different stakeholders. We will collect some tools or

metrics: surveys, My Learning Plan professional development tracker, Google Analytics, and ratings using the SAMR model.

Policies and Procedures

The Technology Department is governed by School Board policies and Superintendent procedures that outline how to implement those policies. Listed are key policies that have a direct impact on technology. The policies and procedures may be updated from time to time.

Board Policies that are related to PCSD Technology Services

<u>1125</u>	Information Security Breach and Notification
<u>1126</u>	Data Network and Security Access
<u>1505</u>	Use of School-Owned Materials and Equipment
<u>4510.1</u>	Instructional Technology
<u>4510.2</u>	Children's Internet Protection Act: Internet Content Filtering/Safety Policy
<u>4510.3</u>	Acceptable Use Guidelines for Technology Use
<u>4510.4</u>	Student Use of Personal Technology
<u>4510.5</u>	Privacy and Security for Student Data, Teacher and Principal Data
<u>4526-1R</u>	Computer-Assisted Instruction Regulation
<u>4720</u>	Testing Programs
<u>5311.4</u>	Care of School Property by Students
<u>5431-R</u>	Suicide Prevention Regulation
<u>6900</u>	Disposal of District Property
<u>8213</u>	Use of Video Surveillance Cameras for Physical Security & Safety
<u>8630</u>	Data Management

Technology Plan Overview

Technology planning is divided into three components:

- **Full Implementation of NYS Learning Standards for Computer Science and Digital Fluency:** Transition to full implementation of the NYS Learning Standards for Computer Science and Digital Fluency.
- **Sustain and Expand Our Secure Network:** Our goal is to sustain and expand our secure network that ensures students have reliable access to high-speed connectivity, which will enhance their educational experience allowing educators to provide a rigorous 21st-century learning environment for all learners across socioeconomic, cultural, and linguistic differences, regardless of ability and need.
- **Ongoing Professional Development:** Implementation of supportive instruction as well as an understanding of ongoing technology that provides all faculty and staff an opportunity for professional development that will ensure a seamless transition to the integration of a complete district system for all stakeholders.

Technology does not stand alone but aligns with the district's priorities. Likewise, each component builds on the other. **Ongoing Professional Development** provides the foundation for staff to support learners. **Sustain and Expand Our Secure Network** run on the infrastructure and supports student learning. Ultimately, **Full Implementation of NYS Learning Standards for Computer Science and Digital Fluency** will lead to students being ready for college and careers and will enable them to function effectively as independent individuals in a democratic society.

Full Implementation of NYS Learning Standards for Computer Science and Digital Fluency

Work with our Technology Committee and district-level curriculum departments to fully implement the NYS Learning Standards for Computer Science and Digital Fluency.

The initial steps will be to explore the Common Sense Media Digital Citizenship Curriculum (K-12) and the NYS Science Curriculum (K-12), determine what is already being taught, and how to address those not covered areas. Implement at K-12 the Common Sense Media Digital Citizenship Curriculum or similar model. Implement PLTW Gateway at the Middle School, including App Creators and Computer Science and Makers classes for all seventh and eighth-grade students. Continue to implement the PLTW Computer Science curriculum at the high school and encourage all students to take at least one programming course during high school.

When all programs are up and running, and the NYS Learning Standards for Computer Science and Digital Fluency are being met, we will have met our goal and then can adjust as necessary to meet the needs of our students.

NYSED Goal that Best Aligns with this Goal:

Increase equitable access to high-quality digital resources and standards-based, technology-rich learning experiences.

Target Student Population(s)

- ✓ All Students
- ✓ Early Learning PreK-3
- ✓ Elementary/Intermediate
- ✓ Middle School
- ✓ High School
- ✓ Students with Disabilities
- ✓ ELL/MLLs
- ✓ Migrant Students
- ✓ Homeless Students
- ✓ Economically Disadvantaged Students
- ✓ Students Ages Between 18-21
- ✓ Targeted Students for Dropout Prevention or Credit Recovery Programs
- ✓ Other

Action Steps that Correspond to Goal 1:

	Category	Description	Responsible Stakeholders	Anticipated Date of Completion
Step 1	Collaboration	Work with our Technology Committee and district-level curriculum departments to fully implement the NYS Learning Standards for Computer Science and Digital Fluency.	Curriculum and Instruction Leader	August 2023
Step 2	Curriculum	The initial steps will be to explore the Common Sense Media Digital Citizenship Curriculum (K-12) and the NYS Science Curriculum (K-12) and determine what is already being taught and how to address those not covered areas.	Curriculum and Instruction Leader	August 2023
Step 3	Curriculum	Implement at K-12 the Common Sense Media Digital Citizenship Curriculum or similar model and PLTW at the middle and high school levels.	Curriculum and Instruction Leader	Director of Technology

Sustain and Expand our Secure Network

This goal is divided into three large projects. Benchmarks and data points used will be from the NIST SP 800-53 or better and CISA v8 Controls to be IG2 compliant by the end of this plan. An IG2 enterprise employs individuals responsible for managing and protecting IT infrastructure. These enterprises support multiple departments with differing risk profiles based on job function and mission. IG2 enterprises often store and process sensitive client or enterprise information and can withstand short service interruptions. Safeguards selected for IG2 help security teams cope with increased operational complexity. Some Safeguards will depend on enterprise-grade technology and specialized expertise to properly install and configure.

1. Replacing the network Wifi controllers will allow us to offer Wifi 6 capabilities to the growing list of devices compatible with that technology.
2. Replacing and updating the current firewall will assist in the ever-changing cybersecurity landscape. The new appliance and the redundancy will act as a line of defense from attacks from the outside of our ecosystem. This, tied with the MS-ISAC programs that keep our appliances updated with the current threats, will help protect our internal end-users and infrastructure.
3. Refining and strengthening our cyber security training and practices for all users will help improve our overall cyber security.

Additionally, we will continue to offer students who do not have access to the internet outside of school Chromebooks with built-in Kajeets so they are able to access their work outside of school.

NYSED Goal that Best Aligns with this Goal:

Provide access to relevant and rigorous professional development to ensure educators and leaders are proficient in the integration of learning technologies

- ✓ All Students
- ✓ Early Learning PreK-3
- ✓ Elementary/Intermediate
- ✓ Middle School
- ✓ High School
- ✓ Students with Disabilities
- ✓ ELL/MLLs
- ✓ Migrant Students
- ✓ Homeless Students
- ✓ Economically Disadvantaged Students
- ✓ Students Ages Between 18-21
- ✓ Targeted Students for Dropout Prevention or Credit Recovery Programs
- ✓ Other

Action Steps that Correspond to Goal 2:

	Category	Description	Responsible Stakeholders	Anticipated Date of Completion
Step 1	Infrastructure	Ongoing professional development at various levels to update skills and technology advancements.	Network Administrator/ LAN Techs	November 2022
Step 2	Infrastructure	Replacing and updating the current firewall will assist in the ever-changing cybersecurity landscape. The new appliance and the redundancy will act as a line of defense from attacks from the outside of our ecosystem.	Network Administrator/ LAN Techs	February 2023
Step 3	Cybersecurity	Refining and strengthening our cyber security training and practices for all users will help improve our overall cyber security.	Director of Technology & Instructional Technology Coaches	June 2025
Step 4	Cybersecurity	Work with school social workers and guidance offices to determine which students need additional devices to support learning outside of the school buildings.	Director of Technology & School Social Workers	June 2025

Ongoing Professional Development

By working with our educational technology itinerant teachers and others, we will work to support the platforms we have in place and those we decide to move to in the future. Providing teachers and staff with appropriate professional development is essential to ensure all users have access to and knowledge on using the products we are investing in as a district.

We will use ClassLink Analytics and Alynatics + to monitor the use of software and determine what programs are being utilized with fidelity. Furthermore, we will work with our department curriculum groups to identify changes to the current menu of options and make changes using the data provided by ClassLink.

Our goal is not to have redundant programs and allow teachers and staff time to become proficient with a platform and then make determinations over a period of time on the effectiveness of that platform.

NYSED Goal that Best Aligns with this Goal:

Design, implement and sustain a robust, secure network to ensure sufficient, reliable high-speed connectivity for learners, educators, and leaders.

Target Student Population(s)

- ✓ All Students
- ✓ Early Learning PreK-3
- ✓ Elementary/Intermediate
- ✓ Middle School
- ✓ High School
- ✓ Students with Disabilities
- ✓ ELL/MLLs
- ✓ Migrant Students
- ✓ Homeless Students
- ✓ Economically Disadvantaged Students
- ✓ Students Ages Between 18-21
- ✓ Targeted Students for Dropout Prevention or Credit Recovery Programs
- ✓ Other

Action Steps that Correspond to Goal 3:

	Category	Description	Responsible Stakeholders	Anticipated Date of Completion
Step 1	Collaboration	Work with our department curriculum groups to identify changes to the current menu of options and make changes using the data provided by ClassLink.	Curriculum and Instruction Leader	June 2025
Step 2	Professional Development	Utilize our educational technology itinerant teachers and others, we will work to support the platforms we have in place and those we decide to move to in the future.	Instructional Technology Coaches	June 2025
Step 3	Collaboration	Use ClassLink Analytics and Alynatics + to monitor the use of software and determine what programs are being utilized with fidelity.	Curriculum and Instruction Leader	June 2025

High Priority Cybersecurity Actions

Inventory and Control Hardware Assets - CIS Control 2 - v8¹

Overview: Actively manage (inventory, track, and correct) all software (operating systems and applications) on the network so that only authorized software is installed and can execute, and that unauthorized and unmanaged software is found and prevented from installation or execution.

Why It Matters: A complete software inventory is a critical foundation for preventing attacks. Attackers continuously scan target enterprises looking for vulnerable versions of software that can be remotely exploited.

¹ Department of Homeland Security, CIS Controls (n.d.). <http://www.cisecurity.org/controls/>

Data Protection - CIS Control 3 - v8

Overview: Develop processes and technical controls to identify, classify, securely handle, retain, and dispose of data.

Why It Matters: Data is no longer only contained within an enterprise's border; it is in the cloud, on portable end-user devices where users work from home, and is often shared with partners or online services that might have it anywhere in the world. In addition to sensitive data an enterprise holds related to finances, intellectual property, and customer data, there also might be numerous international regulations for the protection of personal data. Data privacy has become increasingly important, and enterprises are learning that privacy is about the appropriate use and management of data, not just encryption. Data must be appropriately managed through its entire life cycle. These privacy rules can be complicated for multi-national enterprises of any size; however, there are fundamentals that can apply to all.

Access Control Management - CIS Control 6 - v8

Overview: Use processes and tools to create, assign, manage, and revoke access credentials and privileges for a user, administrator, and service accounts for enterprise assets and software.

Why It Matters: CIS Control 6 focuses on managing what access these accounts have, ensuring users only have access to the data or enterprise assets appropriate for their role, and ensuring that there is strong authentication for critical or sensitive enterprise data or functions. Accounts should only have the minimal authorization needed for the role. Developing consistent access rights for each role and assigning roles to users is a best practice. Developing a program for the complete provision and de-provisioning access is also important. Centralizing this function is ideal.

Continuous Vulnerability Management - CIS Control 7 - v8

Overview: Develop a plan to continuously assess and track vulnerabilities on all enterprise assets within the enterprise's infrastructure, in order to remediate, and minimize, the window of opportunity for attackers. Monitor public and private industry sources for new threat and vulnerability information.

Why It Matters: Cyber defenders are constantly being challenged by attackers who are looking for vulnerabilities within their infrastructure to exploit and gain access. Defenders must have timely threat information available to them about software updates, patches, security advisories, threat bulletins, etc., and they should regularly review their environment to identify these vulnerabilities before the attackers do.

Understanding and managing vulnerabilities is a continuous activity, requiring the focus of time, attention, and resources.

Security Awareness and Skills Training - CIS Control 14 - v8

Overview: Establish and maintain a security awareness program to influence behavior among the workforce to be security conscious and properly skilled to reduce cybersecurity risks to the enterprise.

Why It Matters: The actions of people play a critical part in the success or failure of an enterprise's security program. It is easier for an attacker to entice a user to click a link or open an email attachment to install malware in order to get into an enterprise than to find a network exploit to do it directly.

Users themselves, both intentionally and unintentionally, can cause incidents as a result of mishandling sensitive data, sending an email with sensitive data to the wrong recipient, losing a portable end-user device, using weak passwords, or using the same password they use on public sites.

No security program can effectively address cyber risk without a means to address this fundamental human vulnerability. Users at every level of the enterprise have different risks.

The training should be updated regularly. This will increase the culture of security and discourage risky workarounds

E-Rate

The FCC's E-Rate program makes telecommunications and information services more affordable for schools and libraries. With funding from the Universal Service Fund (fcc.gov/general/universal-service-fund), E-Rate provides discounts for telecommunications, Internet access, and internal connections to eligible schools and libraries.

The ongoing proliferation of innovative digital learning technologies and the need to connect students, teachers, and consumers to jobs, life-long learning, and information has led to a steady rise in demand for bandwidth in schools and libraries. In recent years, the FCC refocused E-Rate from legacy telecommunications services to broadband, with a goal to significantly expand Wi-Fi access. These steps to modernize

the program are helping E-Rate keep pace with the need for increased Internet access. (Learn more about the modernization of the E-Rate program: [fcc.gov/e-rate-update](https://www.fcc.gov/e-rate-update).)² Category One and Category Two products and services support all schools and apply to construction and infrastructure at schools opening in the future, as well as central infrastructure and other non-end-user components. In the plan, network, wireless, and data center equipment at all school sites are eligible for discounts and the budget anticipates this support.

The mechanism for E-Rate application submission is complex and closely monitored and routinely audited by OSPI, USAC, and the FCC. The Phoenix Central School District is provided administrative support from the CNYRIC for E-Rate.

The Phoenix Central School District has applied for and has received approval or is currently awaiting funding commitment notification for the following:

See Next Page for Table

² "E-Rate: Universal Service Program for Schools and Libraries." Federal Communications Commission, 16 Sept. 2020, www.fcc.gov/consumers/guides/universal-service-program-schools-and-libraries-e-rate.

Current Funding Year	ID	Amount Requested	Qty	Total Amount Requested	Amount Awarded
2022-23	HPC Optics 40 G SFP+ LR	\$3,961.44	6	\$23,768.64	Pending
2022-23	Extreme Networks 10 G SFP+ SR	\$465.36	10	\$4,653.60	Pending
2022-23	HPC Optics 40 G SFP+ SR	\$1,493.52	6	\$8,961.12	Pending
2022-23	Palo Alto PA3220	\$16,632.00	2	\$33,264.00	Ordered 2022-2023
2022-23	Palo Alto Premium Support	\$2,728.00	2	\$5,456.00	Ordered 2022-2023
2022-23	Palo Wildfire 4PA-3020 Subscription License	\$3,180.60	2	\$6,360.00	Ordered 2022-2023
2022-23	Ruckus Controller	\$5,217.75	2	\$10,435.50	Pending
2022-23	Ruckus AP-R850	\$762.75	10	\$7,627.50	Pending
2022-23	Ruckus AP-R650	\$492.75	30	\$14,782.50	Pending
2022-23	Dell iSCSI Switch	\$5,090.67	2	\$10,181.34	Pending
2022-23	Northland Fiber Project from EJD to JCB	\$30,000	1	\$30,000.00	Pending
	(5 Yr Budget - \$274,882.00) Total Remaining after 2021-22 - \$119,391.18			\$155,490.20	

Previous E-Rate Projects	Status	Funding Commitment	Comments
Total for 2022-2023	Filed Late Due to Consultant Issues, Held Up by USAC Audit, Approved (Many items EOL)	\$68,719.52 Began Parital Project in 22-23 SY \$12,044.77 (Remaining to be used in 23-24)	Partial project in 22-23 due to late approval. The remainder of the project will be complete once replacements for EOL equipment are found and requoted.
Total for 2021-2022	Not Filed Due to Consultant Issues	NA	Cancelled 2020-21 eRate and carried over all orders to 2021-22 FY - July 22 Start Due
Total for 2020-2021	Approved	\$7,102.04	Access Points
Total for 2019-2020	Approved	\$1,383.48	Access Points

NYSED Initiatives Alignment

Instructional technology works hand in hand with our teaching and learning departments. We do not purchase educational technology platforms unless we as a district have decided it aligns and supports teaching and learning. Ongoing professional development for teachers is one of our goals and is paramount to the continuous improvements in utilizing educational technology tools and improved teaching and learning.

In addition, we are seeking to assist our students in becoming better consumers of technology and how to use educational technology tools to assist them in their daily lives. Students need to become better consumers and understand the risk involved with the digital world to help protect them now and in the future. The K-12 adoption of the Common Sense Digital Citizenship will assist with that and renew those topics for staff teaching it to the students.

Our short-term solution to providing digital access to students everywhere is to continue to give those students without access to Chromebooks with built-in Kajeets. We have purchased Chromebooks with built-in cellular service through a third-party vendor, Kajeet. This initiative allows students off-campus to utilize cell service to reach the

internet and improve accessibility. Then when the students are on campus, the same device uses our WiFi to connect to the internet. Since our students bring the same Chromebook back and forth to school, this assures the student can have access at home and school.

This solution has successfully allowed those students without access at-home access. However, we continue to monitor areas of our district with limited cellular service, and we must, in the long term, work with regional providers to expand their footprint so all regions of our community have cellular service. We cannot do this work alone and will need support from our BOCES, RIC, and local government representatives to ensure all students have equitable digital access.

We as a district are 1:1 at K-12, and the Technology Department works in coordination with the Special Education Department and Curriculum Department to ensure all students have access to what they need to be successful. The Special Education Department has reached out several times in the past year to inquire how we can better support students, and collaboratively we work together to determine what students' needs are and how best to meet those needs. We also work with our BOCES service providers and provide any special requests they may have to best support our students.

How the district utilizes technology to address the needs of Students with Disabilities to ensure access to instruction:

- ✓ Class lesson plans, materials, and assignment instructions are available to students and families for 'anytime, anywhere access (such as through class website or learning management system).
- ✓ Direct instruction is recorded and provided for students to access asynchronously (such as through a learning management system or private online video channel).
- ✓ Technology is used to provide additional ways to access key content, such as providing videos or other visuals to supplement verbal or written instruction or content.
- ✓ Text to speech and/or speech to text software is utilized to provide increased support for comprehension of written or verbal language.
- ✓ Assistive technology is utilized.
- ✓ Technology is used to increase options for students to demonstrate knowledge and skill.
- ✓ Learning games and other interactive software are used to supplement instruction.
- Other

Professional development that will be offered to teachers of Students with Disabilities will enable them to differentiate learning and to increase their students' language and content learning with the use of technology.

- ✓ Technology to support writers in the elementary classroom
- ✓ Technology to support writers in the secondary classroom
- ✓ Research, writing, and technology in a digital world
- ✓ Enhancing children's vocabulary development with technology
- ✓ Reading strategies through technology for students with disabilities
- ✓ Choosing assistive technology for instructional purposes in the special education classroom
- ✓ Using technology to differentiate instruction in the special education classroom
- ✓ Using technology to increase options for students with disabilities to demonstrate their knowledge and skills
- ✓ Multiple ways of assessing student learning through technology
- ✓ Electronic communication and collaboration
- ✓ Promotion of model digital citizenship and responsibility
- ✓ Integrating technology and curriculum across core content areas
- ✓ Helping students with disabilities to connect with the world

How the district utilizes technology to address the needs of English Language Learners/Multilingual Learners to ensure equitable access to instruction, materials, and assessments?

- ✓ Class lesson plans, materials, and assignment instructions are available to students and families for 'anytime, anywhere access (such as through the class website or learning management system)
- ✓ Direct instruction is recorded and provided for students to access asynchronously (such as through a learning management system or private online video channel).
- ✓ Technology is used to provide additional ways to access key content, such as providing videos or other visuals to supplement verbal or written instruction or content.
- ✓ Text to speech and/or speech to text software is utilized to provide increased support for comprehension of written or verbal language.
- ✓ Home language dictionaries and translation programs are provided through technology.
- ✓ Hardware that supports ELL/MLL student learning, such as home-language keyboards, translation pens, and/or interactive whiteboards, is utilized.

- ✓ Technology is used to increase options for students to demonstrate knowledge and skill, such as through the creation of a product or recording an oral response.
- ✓ Learning games and other interactive software are used to supplement instruction.

Does our district's technology plan address the needs of English language learners/Multilingual learners to ensure equitable access to instruction, material, and assessments in multiple languages?

- ✓ Yes (In the five (5) most spoken languages)
- No

Professional development will be offered to teachers of English language learners/Multilingual learners that will enable them to differentiate learning and to increase their students' language and content learning with the use of technology.

- ✓ Technology to support writers in the elementary classroom
- ✓ Technology to support writers in the secondary classroom
- ✓ Research, writing, and technology in a digital world
- ✓ Writing and technology workshop for teachers
- ✓ Enhancing children's vocabulary development with technology
- ✓ Writer's workshop in the Bilingual classroom
- ✓ Reading strategies through technology for English Language Learners
- ✓ Moving from learning letters to learning to read
- ✓ The power of technology to support language acquisition
- ✓ Using technology to differentiate instruction in the language classroom
- ✓ Using technology to increase options for students with disabilities to demonstrate their knowledge and skills
- ✓ Multiple ways of assessing student learning through technology
- ✓ Electronic communication and collaboration
- ✓ Promotion of model digital citizenship and responsibility
- ✓ Integrating technology and curriculum across core content areas
- ✓ Web authoring tools
- ✓ Helping students connect with the world
- ✓ The interactive whiteboard and language learning
- ✓ Use camera for documentation

How the district uses instructional technology to facilitate culturally responsible instruction and learning environments:

- ✓ The district uses instructional technology to strengthen relationships and connections with families to assist in building a culturally responsive learning environment to enhance student learning.
- ✓ The district uses instructional technology to facilitate classroom projects that involve the community.
- ✓ The district uses instructional technology to develop and organize coherent and relevant units, lessons, and learning tasks that build upon students' cultural backgrounds and experiences.
- ✓ The district uses instructional technology to assist in varying teaching approaches to accommodate diverse learning styles and language proficiencies.
- ✓ The district uses instructional technology to enable students to communicate and collaborate with students in different schools or districts in New York State, the United States, or with different countries.
- ✓ The district uses instructional technology to facilitate collaborative classroom projects among heterogeneous student groups.
- The district does not use instructional technology to facilitate culturally responsive instruction.
- Other

How the district utilizes technology to address the needs of students experiencing homelessness and/or housing insecurity to ensure equitable access to instruction and learning:

- ✓ McKinney-Vento information is prominently located on individual school websites, as well as the district website.
- ✓ If available, online/enrollment is easily accessible, written in an understandable manner, available in multiple languages, and accessible from a phone.
- ✓ Set enrollment forms to automatically provide the McKinney-Vento liaison with contact information for students who indicate possible homelessness and/or housing insecurity
- ✓ Create a survey to obtain information/about students' living situations,/contact information,/access to internet and devices for/all/students in/the/enrollment processes/so the district can/communicate effectively and/evaluate their needs.
- ✓ Provide/students/experiencing homelessness/and/or housing insecurity with tablets or laptops, mobile hotspots, prepaid cell phones, and other devices and connectivity.

- ✓ Provide students a way to protect and charge any devices they are provided/with/by the district.
- ✓ Replace devices that are damaged or stolen/as needed.
- ✓ Create individualized plans for providing access to technology and the internet on a case-by-case basis for any student experiencing homelessness and/or housing insecurity.
- ✓ Have/resources/available to/get/families and students step-by-step instructions on how to/setup and/use/their districts Learning Management System or website.
- ✓ Class lesson plans, materials, and assignment instructions are available to students and families
- ✓ Direct instruction is recorded and provided for students to access asynchronously (such as through a learning management system, DVD,/ or private online video channel)
- ✓ Technology is used to provide additional ways to access key content, such as providing videos or other visuals to supplement verbal or written instruction or content.
- ✓ Conduct regular educational check-ins with all students experiencing homelessness and/or housing insecurity and secure any help needed to keep up with course work.
- ✓ Adjust assignments/to be completed successfully using/only/the/resources students have available.
- ✓ Create in-person and web-based tutoring/programs/spaces/and/or live chats/to assist with assignments and technology/issues.

How the district uses instructional technology to facilitate culturally responsive instruction and learning environments:

- ✓ The district uses instructional technology to strengthen relationships and connections with families to assist in building a culturally responsive learning environment to enhance student learning
- ✓ The district uses instructional technology to facilitate classroom projects that involve the community.
- ✓ The district uses instructional technology to develop and organize coherent and relevant units, lessons, and learning tasks that build upon students' cultural backgrounds and experiences.
- ✓ The district uses instructional technology to assist in varying teaching approaches to accommodate diverse learning styles and language proficiencies.
- ✓ The district uses instructional technology to enable students to communicate and collaborate with students in different schools or districts in New York State, the United States, or with different countries.

- ✓ The district uses instructional technology to facilitate collaborative classroom projects among heterogeneous student groups.

Administrative Management Plan

Staffing Plan

	Full-time Equivalent (FTE)
District Technology Leadership	1.00
Instructional support	1.50
Technical Support	4.00
Total	6.50

Investment Plan

Anticipated Item or Service	Estimated Cost	One-time or Annual Cost	Potential Funding Source
End-User Computing Devices (1:1 Chromebooks - 400 per year & Cases, other)	\$1,500,000	Annual	<ul style="list-style-type: none"> ✓ BOCES Co-Ser purchase ✓ District Budget <input type="checkbox"/> District Public Bond <input type="checkbox"/> E-Rate <input type="checkbox"/> Grants <input type="checkbox"/> Instructional Materials <input type="checkbox"/> Instructional Resources Aid <input type="checkbox"/> Smart Schools Bond <input type="checkbox"/> Other

Instructional Technology/Peripheral Devices	\$416,000	Annual	<input checked="" type="checkbox"/> BOCES Co-Ser purchase <input checked="" type="checkbox"/> District Budget <input type="checkbox"/> District Public Bond <input type="checkbox"/> E-Rate <input type="checkbox"/> Grants <input type="checkbox"/> Instructional Materials <input type="checkbox"/> Instructional Resources Aid <input checked="" type="checkbox"/> Smart Schools Bond <input type="checkbox"/> Other
Network and Infrastructure (Software and Hardware)	\$91,650	Annual	<input checked="" type="checkbox"/> BOCES Co-Ser purchase <input checked="" type="checkbox"/> District Budget <input type="checkbox"/> District Public Bond <input checked="" type="checkbox"/> E-Rate <input type="checkbox"/> Grants <input type="checkbox"/> Instructional Materials <input type="checkbox"/> Instructional Resources Aid <input checked="" type="checkbox"/> Smart Schools Bond <input type="checkbox"/> Other
Totals	\$2,007,650		

District Website

www.phoenixcsd.org

The website is primarily managed by the BOCES Public Relations Department. The District does have local access and makes changes as needed.

Information Security & Privacy

Responsible Party - Director of Data and Instructional Technology

The District's Director of Data and Instructional Technology is the Data Privacy Officer.

The District performs an information security and privacy audit every five years. This audit is performed by a third party and is scheduled to be performed in the 2021-22 school year.

The District is developing, in conjunction with [Common Sense Media a K-12 curriculum](#) for educating minors about appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms and cyberbullying.

The District has established a [Parent's Bill of Rights for Data Privacy and Security](#) (pages 9-11), and it is located on the [Data and Security page](#) of the district website.

The District's policy addresses the planned response to an information breach. It aligns with NYS Education Law 2D.

Sharing Innovative Educational Technology Programs

Topics selected below reflect an innovative technology program that has been implemented for at least two years at a building or district level.

<ul style="list-style-type: none"><input type="checkbox"/> Active Learning Spaces/Makerspaces<input type="checkbox"/> Culturally Responsive Instruction with Technology<input checked="" type="checkbox"/> Device Planning and Implementation (1:1; BYOD)<input type="checkbox"/> Digital Citizenship<input checked="" type="checkbox"/> Infrastructure<input type="checkbox"/> OER and Digital Curriculum<input type="checkbox"/> Personalized Learning<input type="checkbox"/> Pilots and Proof of Concept	<ul style="list-style-type: none"><input checked="" type="checkbox"/> Policy, Planning, and Leadership<input checked="" type="checkbox"/> Privacy and Security<input checked="" type="checkbox"/> Professional Learning<input type="checkbox"/> Project-based Learning<input checked="" type="checkbox"/> Other Topic A - Flipped Learning<input type="checkbox"/> Other Topic B<input type="checkbox"/> Other Topic C
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The District has intentions to implement a K-12 Digital Citizen Curriculum in the 2023-24 school year and is entering the third year of implementations of the project-based learning curriculum (Project Lead the Way) in engineering and computer science. Also, in the 2021-22 school year, the Instructional Technology department plans to transition the Flipped Learning initiative to include personalized learning themes throughout to make the program more robust for student learners.

PLTW Courses offered in the PCSD:

Middle School (Gateway Program)

- Automation and Robotics (7th Grade)
- Energy and the Environment (7th Grade) Beginning 2023-24 school year
- Design and Modeling (8th Grade)
- Green Architecture (8th Grade) Beginning 2023-24 school year

High School Program (Engineering)

- Introduction to Engineering and Design
- Principles of Engineering
- Computer Integrated Manufacturing - Beginning 2023-24 school year
- Cybersecurity
- Computer Science Essentials
- Computer Science Principles - Beginning 2023-24 school year

Appendix

[Item 1 - NIST Framework for Improving Critical Infrastructure Cybersecurity](#)

[Item 2 - 2020 Nationwide Cyber Security Review \(NCSR\) - PCSD \(Baseline Year\)](#)

[Item 3 - CIS Controls v8](#)