

Panama Central School District Technology Plan



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Panama Central School District
41 North St.
Panama, NY 14767
Mrs. Brynne J. Hinsdale
Director of Technology
p. (716) 782-4456
bhinsdale@pancent.org

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District Mission Statement

Where we work, learn and grow together through shared effort and support.

Introduction

Panama Central School District is housed in one building on a campus located in Panama, New York. The on-going goal of the Panama Central School District is for our students to be technology literate in preparation for graduation.

Panama's district administrative staff consists of a Superintendent, Director of Instruction, Treasurer, and a Director of Technology. Building level administrative staff include a PK-6 Principal and a 7-12 Principal. Panama Central School employs approximately 70 instructional staff, which includes teachers, teacher assistants and aides, one school counselor and a School Psychologist.

The purpose of this technology plan is to provide our staff and community with information regarding the district technology plans and priorities as determined by the PCS CDEP Committee. The contents are intended to be a working document for teachers, grade levels, departments, teams and committees, as curriculum is planned and designed to enable students to achieve the outlined technology objectives. The use of technology by students and staff for instructional and management applications will be a key to enabling the District to realize its vision and ensure that students achieve the New York State Learning and Assessment Standards.

The Panama Central School District, striving to provide the best educational climate for its students, believes that instructional technology is a cornerstone of an effective school that meets the needs of the students for the future. Technology is not only a product of our culture; it also shapes the culture that created it. Studies have shown that technology makes instruction more student-centered, encourages cooperative learning and stimulates increased student/teacher interaction. The majority of classrooms at Panama are equipped with current technology, including projectors and some have interactive whiteboards as well. Administration, teachers and students are utilizing current workstations in all areas of the building. Panama also participates in Distance Learning, including hosting courses, as well as receiving them.

It is simply not feasible for teachers to know or teach everything a student needs to know to succeed in life. We must teach an information-based inquiry process which meets the demands of this new age. This is a new challenge for the world's most important profession. To this end, we believe that technology exists as a very powerful, essential tool in the education process for both students and staff. Technology is not a separate curriculum, but an appropriate part of every curriculum at every level of instruction. In order to make this a reality, Panama staff is very active in technology professional development of all types. The majority of this training is provided through CSLO/Model Schools from Erie 1 BOCES.

This plan will provide the blueprint for incorporating instructional technology into the overall district educational plan.

Acknowledgments/Stakeholders

This plan and the vision needed to create a viable technology blueprint for Panama Central School District is the product of the Panama Central School District Comprehensive District Education Plan Committee members.

The CDEP Committee is comprised of the following:

- Danielle Cook - 7-12 Principal
- Fran Frey - PK-6 Principal & CSE Chair
- Emily Harvey - Director of Instruction
- Brynne Hinsdale - Director of Technology
- Patricia Lundquist - Librarian
- Lisa Minton - Kindergarten Teacher
- Ashley Stevens - Parent
- Pam Warner - Middle School Teacher
- Chad Wakeley - Secondary Social Studies Teacher

Vision & Goals

District Technology Vision Statement

The vision of Panama Central School District is to empower the students, staff and community to become highly effective in a technological world. Utilizing technology will enhance academic growth, expand curriculum and enable the students to become lifelong learners.

Goals for Technology Use:

- 1- Increase State and Regents test scores with the usage of computer-based interventions.
- 2- Ensure that the district has the capacity, infrastructure, staffing, and equipment to meet academic and business needs for effective and efficient operations.
- 3- Professional Development for the success of all learners. Continue to integrate PD within all content areas and grade levels. Continue to provide ongoing PD due to the simultaneous learning of how to use technology, the integration of technology in instruction, and the continual development of new and improved technologies and practices.
- 4- Assist students with special needs through the use of technology.
- 5- Support technology leaders to enable our staff to continue to integrate technology for 21st learners and discover ways to increase equitable access for students outside of the classroom.

I. Curriculum

A. Curriculum Integration

Goals & Strategies:

1. Utilize a mastery-type computer intervention program (I-Ready) at the elementary level for the purpose for of implementing Response to Intervention (RtI), which includes diagnostic screening, progress monitoring, and skills-based intervention.
2. Teachers in High School Social Studies will use and employ technology applications to facilitate student learning and prepare students for Regents exams.
3. Continue our Distance Learning commitment. We will work to provide our students opportunities to network with teachers and students across the state. We hope to increase the number of college credits available to the high school students via Distance Learning.
4. Continue to move toward a technology rich 1:1 computing environment that provides all teachers and students with the tools and access to information they need to excel academically.
5. Investigate and encourage paperless classrooms in all grade levels.
6. Introduce and increase the technological tools, including interactive whiteboards and iPads, available to Secondary Mathematics classrooms.
7. Offer faculty and staff targeted professional development around New York State Common Core Learning Standards and opportunities for technology integration.

Identification & Promotion:

We will continue to use CSLO through Erie 1 BOCES and the Erie 2 Model Schools service, technology conferences and consortiums, and technology publications to help identify new strategies for increasing our student's technology literacy. As new instructional technology resources emerge, they will be presented to faculty via staff meetings, in-service days or email.

B. Student Achievement

Teachers will be consistently encouraged to include technology in their curriculum work. Because technology is essential in satisfying New York State Common Core Learning Standards, it is necessary to integrate technology and the available tools in all curriculum areas.

We will integrate the ISTE standards for students, teachers and administrators developed by the International Society for Technology in Education (ISTE). The ISTE web site is <http://www.iste.org>

By incorporating the ISTE standards and the ISTE performance indicators for student learning,

we will start bridging the curriculum – technology gap. Teachers will be encouraged to incorporate the following ISTE standards for technology literate students.

The following are the general ISTE standards and the ways they are being implemented:

1.Creativity and Innovation: Students demonstrate creative thinking, construct knowledge and develop innovative products and processes using technology. Students create projects in various subjects using laptops and the Prezi, iMovie, ect. The end project demonstrates their knowledge about a particular subject.

2.Communication and Collaboration: Students use digital media and environment to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Teachers will offer the use of online systems for communication and collaboration, such as Google Classroom.

3.Research and Information Fluency: Students apply digital tools to gather, evaluate and use information. Students make use of Internet databases subscribed to by the district for research throughout all grades and content areas.

4.Critical Thinking, Problem Solving, and Decision Making: Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate digital tools and resources.

5.Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Internet Safety, plagiarism awareness, & cyber bullying are integrated into all content areas throughout all grade levels. Responsible Online behavior is promoted at all grade levels.

6.Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems, and operations. Beginning in Kindergarten, students are introduced to: basic computer components and operations, keyboarding skills, troubleshooting and using online resources. In middle school, students progress to studying basic graphic design, spreadsheet and database design and analysis. At the high school level, students study advanced graphic design, digital photography and advanced video editing.

Action Plan

The success of curriculum integration will be assessed yearly in the following manners:

- Administrators will make note of technological integration during instructional observations
- Administrators and peer review of technology integration into teacher’s curriculum.
- Teacher self evaluation as part as annual performance review

We will use the above strategies to continuously evaluate our progress with an eye toward adjusting our vision.

C. Technology Delivery

We will work to increase our distance learning courses and offerings.

We will also continue to work with teachers in our building to schedule video conferences with other districts or organizations to enhance our students' view of the world. We will provide a list of virtual field trips to teachers to help them know what is available to them.

We will continue to offer college courses to high school students with local teachers as well as through the use of our Distance Learning technology.

We also continue to implement and enhance our 1:1 program for all students.

D. Parental Communications & Community Relations

The technology plan will be uploaded to our school website. A hard copy will also be available at a community member's request. The website is maintained on a daily basis and includes upcoming events, news and other information. Staff members are continually working to include more items on the webpage that will help parents and community members. We will also continue to work to create a greater Panama Central School presence on social media.

The district also offers a Parent & Student Portal through our student management system, PowerSchool. This portal assigns parents a username and password and they are able to login to see their children's schedules, progress reports, report cards, assignments, cafeteria account balance and attendance. Parents have found this system extremely accessible and easy to use.

Panama also subscribes to School Messenger, which is a rapid calling system. We use this system to communicate with parents for emergency situations, such as school closings, as well as reminders of school events. This program also allow text messages to be sent to parents and family members who opt into the service.

The district produces a community newsletter monthly throughout the school year. Each newsletter is full of student activities and information about what the students are learning in their classrooms during the school day.

II: Professional Development Strategy

E. Professional Development

The Panama Central School District believes that instructional technology resources can only be fully utilized by teachers that have competency in using the technology. With the current changes to the New York State Common Core standards, it has become increasingly difficult for teachers and administrators to incorporate the technology the new standards require without sufficient professional development.

Professional development is accomplished by at least 3 different avenues. In-house training sessions will be taught by coworkers or outside trainers, teachers will attend CSLO & Model Schools workshops throughout the year and the Director of Technology will provide just-in-time, one-on-one training that is designed for specific needs of teachers. Often, the just-in-time training may be a follow up to a more formal training session in which the teacher participated. Other trainings may be offered through various agencies if necessary. Teachers will be made aware of all opportunities for trainings through the Director of Technology, Director of Instruction and/or their building principals.

All levels of district users are targeted by the current training offered by the school district. Staff members are continually encouraged and supported to learn more about technology and how to better integrate it into their lessons.

CSLO (Common Set of Learning Objectives) Workshops

Participation in the CSLO Service through the WNYRIC (Western New York Regional Information Center) provides Panama with four in-service days each year. Panama has 8 teacher-days of technology in-service. CSLO is instrumental in helping our teachers integrate technology into their curriculum through developing learning experiences. As part of the 3 day regional trainings offered by CSLO, teachers are required to collaborate with teachers from other districts.

Model Schools Workshops (Coser 566)

Panama currently also participates in the Erie 2 Model Schools Coser. This service is designed to provide access and training to both hardware and software that support student learning. The Erie 2 IEST (Integrated Education Service Team) is able to design and implement customized trainings for teachers to utilize technology tools in their classrooms.

Panama In-House Courses

The in-service courses may be applied towards the hours required for staff development. Some of the different courses offered include courses on PowerSchool, i-Ready, integrating iPads 1:1 & Internet Use.

III: Infrastructure, Hardware, Technical Support, & Software

F. Network & Equipment Status

At present, Panama Central School has a Gigabit connection to the Western New York Regional Information Center (WNYRIC). There are over 350 PC and Mac computers with Internet access in the building. We have 9 servers online to meet our current needs:

2 Mac OS servers for data storage for staff and students & Alexandria Library system

2 Windows 2012 servers for the Active Directory Domain

Windows 2008 server for the WebSmartt (cafeteria management system) & SNAP (Health Office Software)

Windows 2008 server hosting PowerSchool

2 Windows 2003 servers hosting the building's digital camera system

Virtual server hosting the wireless management software

The entire campus of Panama Central School is wireless. There are approximately 98 wireless access points.

Each classroom and office has a VOIP telephone for internal and external use.

Each administrator, secretary and teacher are assigned either a Mac or PC computer, either laptop or desktop. Students have the use of 10 computer labs, both mobile and room contained.

Students in grades K-11 are issued a 1:1 iPad for their own educational use. Students in grade 12 are issued a MacBook computer for the school year 18-19 only. For the 19-20 school year, all students K-12 will be issues an iPad.

Long Term Plan for Equipment & Networking Needs

Of the district's computers, approximately 90% of them are no more than 5 years old. Each year the oldest machines are replaced with newer computers based on the current rotation plan. Sometimes this is based on the user's need for their computer and what type of capacity they need.

Due to the increased iPad purchases and usage, we will also follow a replacement plan for those devices as well.

Students will continue to be assigned an iPad through our 1:1 iPad initiative. All new teachers and staff working with students will receive professional development in order to become adept at including the devices in their classrooms. Current teachers and staff will be continually exposed to new implementation strategies and will build on their current knowledge set.

Network switches will continue to be replaced during the next three years using Smart

Schools Funding. Currently all network switches are gigabit, however, some of the equipment currently being used was received from another school district during their replacement plan and should be updated to the latest networking technology available.

The wireless access system was installed in 2017 and will be slated for replacement during the 20-21 school year. We will investigate the availability of Priority 2 E-rate funds to help fund the replacement as well as apply for the SMART Schools funding.

We will continue to evaluate and add new software packages as needed and Apple apps that relate to our curriculum at all grade levels.

Technical support

The district employs a Director of Technology and one Technology Assistant.

G. Increase Access

One of our goals for the next three years to increase access would be to investigate funding initiatives to increase Internet access at home for students who may not have access now.

Panama will also investigate the most appropriate way to provide public access to our network for Internet access to create a hassle-free experience for parents and community members when they need to access the district's Wi-Fi.

We are regularly seeking out new technologies that will help our Special Education students learn and excel based on their individual needs. Especially for those students with difficulty typing, reading and expressing their own thoughts through the use of technology.

IV. Monitoring and Evaluation

H. Evaluation

The technology plan goals will be reviewed bi-annually by the CDEP. Goals that are not attained will be reevaluated for relevance. If the goal is deemed valid, a plan of action will be created to ensure attainment. Goals that have been achieved will also be reviewed and appropriately expanded. The Board of Education will be briefed on the status of the Technology Plan and the District's technical status annually, at a mid-year meeting.

The action plan on the following pages outlines how we will evaluate whether we have met each goal listed for in this plan.

Action Plan

Goal 1: Increase State and Regents test scores with the usage of computer-based interventions.

Description	Category	Responsible Stakeholder	Anticipated month of Completion	Anticipated Year of Completion	Anticipated Cost
Include technology component in curriculum to improve students' technology literacy	Curriculum	All teachers & administration	June	2021	\$6,000
Use of computer based adaptive assessments to obtain student performance levels		Classroom Teacher			\$20,000
Design K-2 STEM Lab for teachers to supplement science instructions aligned to the Next Generation Science Standards	Implementation	Educational Staff & Leadership	September	2020	\$8,000

Goal 2: Ensure that the district has the capacity, infrastructure, staffing, and equipment to meet academic and business needs for effective and efficient operations.

Employ appropriate number of technical staff as need to provide quality support	Staffing	Superintendent	June	2021	\$300,000
Monies placed in the local budget from State Aid funding	Budgeting	Business Official/Treasurer	June	2021	\$114,000
Monies placed in BOCES budget for various technology projects					\$150,000
Implement comprehensive equipment rotation plan for all equipment	Infrastructure	Director of Technology	June	2019	\$0
Upgrade VOIP phone system with current technologies and security features.	Implementation				\$92,000

Goal 3: Professional Development for the success of all learners. Continue to integrate PD within all content areas and grade levels. Continue to provide ongoing PD due to the simultaneous learning of how to use technology, the integration of technology in instruction, and the continual development of new and improved technologies and practices.					
Provide staff in-service training	Professional Development	Curriculum and Instruction Leader	June	2021	\$15,000
Participate in the CSLO service & Model School Coser from BOCES.	Budgeting	Superintendent			\$36,000
Exposure to technology use in other districts	Collaboration	Curriculum and Instruction Leader			\$5,000
Provide Professional Development to grow new STEM program throughout grades K-12	Professional Development	Curriculum and Instruction Leader	September	2020	\$20,000
Goal 4: Assist students with special needs through the use of technology.					
Provide adaptive technology to Special Education students through Interactive Whiteboards & 1:1 iPad implementation	Implementation	Directory of Technology	June	2020	\$50,000
Partner with the local BOCES to perform PD with special education teachers regarding proper adaptive technology on an as needed basis.	Professional Development	Curriculum and Instruction Leader	June	2021	\$2,500
Goal 5: Support technology leaders to enable our staff to continue to integrate technology for 21st learners and discover ways to increase equitable access for students outside of the classroom.					
Various technology workshops and conferences	Professional Development	Director of Technology	June	2021	\$6,000
Director of Technology will remain an active member of the Erie 2 BOCES Technology Consortium					\$2,400
Community & District stakeholders to work together to determine needs of the district to support off site access to Internet	Community Partnerships				\$0