

Technology Plan

New Philadelphia City Schools

2010 - 2015

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Introduction

The technology plan for the New Philadelphia City School district has been and continues to be developed by the district technology team consisting of teachers, administrators, and other district representatives. The primary purpose of this technology plan is to provide a direction for implementation and future use of diverse technologies over the course of 5 years.

Technology has transformed student's ability to learn and interact in a rapidly changing world. Technology enables teachers and students to take more innovative and flexible approaches to gathering and communicating information. As technological innovations are implemented into the district, it will create rich and compelling learning opportunities that meet all learners' needs. To ensure that technology is effectively integrated into the schools, educators and community members must collaborate to create a formal technology plan. After reviewing the district's technological needs, it was evident the district should implement a technology plan.

Our belief is that technology should not be a separate entity, but blended into our current and future core curriculums. Our plan for technology is a working document that allows for changes to take place as needs and opportunities arise for us to continue to provide the most up to-date advances in technology to our school population. The future will require that students be knowledgeable and proficient in the use of technology available in today's world. Through education of these technologies we will provide students with the ability to adapt to change, solve problems, make decisions, and think creatively. Education in the area of technology will provide students with knowledge to understand what technology can and cannot do in our complex society and serves as the interdisciplinary link with other curricular areas.

In order to create a classroom tailored to the 21st century learner, the following emerging digital technologies will be used for the enhancement of student learning.

- interactive boards
- projectors
- computers
- digital cameras
- response devices
- software
- document cameras
- professional development

It is imperative that the New Philadelphia City School District have a technology plan that ensures the most effective use of the district's resources. In conclusion, the technology team has developed this dynamic document for systematic change.

Vision

The New Philadelphia School District is committed to the ongoing development and engagement of collaborative and inquiry-based problem solving provided by teachers who integrate technology into the core curriculum to provide enhanced interactive learning for all students.

Technology Goals:

National Educational Technology Standards for students PK-12

1. Creativity and Innovation
2. Communications and Collaboration
3. Research and Information Fluency
4. Critical Thinking, Problem Solving, and Decision Making
5. Digital Citizenship
6. Technology Operations and Concepts

Teachers should incorporate these standards into the daily core curriculum to make students literate in the Technology Content Standards.

Technology Standards for Teachers

1. Facilitate and Inspire Student Learning and Creativity
2. Design and Develop Digital-Age Learning Experiences and Assessments
3. Model Digital-Age Work and Learning
4. Promote and Model Digital Citizenship and Responsibility
5. Engage in Professional Growth and Leadership

Professional Development Goals for New Philadelphia School District

1. Promote strategic, ongoing professional development
2. Utilize technology to enhance curriculum and student learning.

Professional Development Aspect

New Philadelphia City Schools' vision is to create High Quality Professional Development that is Relevant, Collaborative, and On-Going. Providing relevant professional development to teachers will enable the district to successfully integrate technology over the next 5-years.

Professional Development Goals for Technology

	Goal 1 Promote strategic, on-going professional development	Goal 2 Utilize technology to enhance curriculum and student learning
Objectives	<ul style="list-style-type: none">• Increase teacher competence with emerging technologies	<ul style="list-style-type: none">• Integrate technology to facilitate learning
Action Steps	<ul style="list-style-type: none">• Provide in-services that fit schedules of all staff members• Increase technical expertise through in-services and collaboration• Acquiring technology into the district buildings	<ul style="list-style-type: none">• Teachers will utilize a variety of technology related resources to enrich curriculum<ul style="list-style-type: none">○ Examples include PowerPoint presentations, Internet resources, and response devices• Students will acquire skills necessary for problem-solving

The effectiveness of this plan will be evaluated using a variety of methods, which may include:

- Teacher feedback
- Student achievement
- Classroom observations
- Authentic assessments

Consistency with the district's 5-year technology plan.

Computer Labs

- High School / Middle School Teachers will schedule their lab times according to teacher schedules and on an as needed basis. This will be scheduled through the building administrator(s).

Elementary School:

- K-2 will have access to the computer lab 1 thirty minute period per week.
- 3-5 will have access to the computer lab 2-3 forty minute periods per week.

Computer Lessons

It is our belief that no individual or group should be excluded from the opportunity to learn in the most innovative, inquiry based format facilitated by technology.

In an effort to incorporate technology into the core curriculum at all levels as adopted by the state of Ohio providing the students with opportunities for creativity and innovation; communication and collaboration; research and information fluency; critical thinking, problem solving, and decision making; digital citizenship; and finally technology operations and concepts.

Kindergarten

- Name the basic parts of the computer (e.g. monitor, keyboard, mouse, printer)
- Listen to directions and use proper care when handling computer and multimedia technology.
- Follow the correct order for turning computers and multimedia technology resources on and off with teacher assistance
- Use software programs with teacher assistance (e.g NP Schools Curriculum Best Sites K-6 Resources)
- Recognize productivity tools (e.g. kid pix)
- Engage in teacher directed online learning activities (e.g. 100th day of kindergarten activities, online field trips)
- Use Web page functions:
 - a. Scroll up and down
 - b. Click on links (usually blue)
 - c. Use the back button

First Grade

- Name the basic parts of the computer (e.g. monitor, keyboard, mouse, printer, power button, disk drive, CD/DVD drive)
- Listen to directions and use proper care when handling computer and multimedia technology
- Turn computer and multimedia technology resources on and off.
- Start, use and exit software programs with teacher assistance.
- Begin to locate letters and special keys on the keyboard with teacher assistance (e.g. enter, key, escape key, space bar, delete, backspace)
- Recognize productivity tools (e.g. kid pix)
- Use technology resources with teacher assistance (e.g. pre selected Web sites, launching applications, educational software)
- Create documents with teacher assistance (e.g. students observe the teacher making a document, they add ideas, and select images for the teacher to import)
- Find information in a technology based resource (e.g. Web site, database, DVD, software program, video)
- Use technology to tell what was learned from information gathered (e.g. use simple presentation tools to create a poster, book, slide show)

Second Grade

- Name the basic parts of the computer (e.g. monitor, keyboard, mouse, printer, power button, disk drive, CD/DVD drive, digital camera)
- Listen to directions and use proper care when handling computer and multimedia technology
- Turn computer and multimedia technology resources on and off.
- Develop a slide show presentation with teacher assistance (e.g. small groups, work together to create slides or hypermedia products)
- Use proper keyboarding techniques (e.g. placing fingers on a home row keys)
- Use productivity tools for communication with teacher assistance (e.g. word processing, presentations, drawing programs, creative stories)
- Present information in an electronic format, including text, graphics, or multimedia (e.g. write and illustrate a story based on a writing prompt, slide show or photo album)
- Compose class email or email pen pals
- Find information in a technology based resource (e.g. Web site, database, DVD, software program, video)
- Use technology to tell what was learned from information gathered (e.g. use simple presentation tools to create a poster, book, slide show)
- Use online library catalog to locate information sources by title, author, or subject

Third Grade

- Identify and use input and output devices to operate and interact with computers and multimedia technology resources (e.g. scanners, digital cameras)
- Identify and use a variety of software programs
- Touch type letters on a keyboard with both hands (e.g. begin to learn how to type/keyboard, use continuous strokes)
- Use productivity tools for communication with teacher assistance (e.g. word processing, presentations, drawing programs, creative stories)
- Tell a story using presentation software
- Incorporate the use of a digital image into a document (e.g. clipart, picture from a digital camera or scanned images)
- Use software to publish information in printed form (e.g. card, calendar, banner)
- Compose, send, and receive email messages with teacher direction
- Engage in online learning (e.g. Web activities, virtual field trips, videoconferencing)
- Search for information in an online library catalog, electronic encyclopedia, or teacher selected Web sites.
- Select, record and use needed information to answer a question or complete a project.
- Review the home page of a teacher or librarian selected Web site

Fourth Grade

- Discuss policies presented in the district Acceptable Usage Policy (AUP) and understand that the AUP describes the rules for using school-based technology.
- Describe the role of Ohio's inventors in the social and economic development of society (e.g. Thomas Edison, the Wright Brothers, Charles F. Bush, Granville T. Woods, Elisha Gray, James W. Packard, Alexander Winton, Frank A. Sieberling, Garrett Morgan, Charles Kettering).
- Learn and use new technology terminology based on the computer and multimedia technology resources being used.
- Demonstrate ability to login and use basic network services.
- Demonstrate appropriate keyboarding skills.
- Save, transport, and access stored information from portable devices (e.g. portable hard drives, universal serial bus—USB devices, memory sticks (zip drives, flash drives))
- Use media and technology resources for presenting information (e.g. projectors, video cameras).
- Use peripherals to increase skills and facilitate learning throughout the curriculum.

- Select needed information from a defined group of resources: library catalog, online encyclopedia and subject list of age-appropriate Web sites.
- Choose a search engine or directory specifically designed for students to locate information on the Internet.

Fifth Grade

- Identify and show cooperative and collaborative strategies to work with others when using technology systems.
- Discuss basic issues related to responsible use of technology and describe personal consequences of inappropriate use (e.g. plagiarism, intellectual property, and the conditions of the district AUP).
- Use technology to collaborate with others and credit all participants for their contribution to the work.
- Select the appropriate device to store needed information and independently save and access stored information from portable devices (e.g. how large is the saved information? Do others need to use the information? What device will best store this information?)
- Collect information for projects using still and video digital camera, scanners and electronic resources.
- Investigate technology tools used for researching problems and acquiring information and data.
- Select and use appropriate software applications to complete content-specific tasks (e.g. use desktop publishing software to create a newsletter, use drawing programs to create artwork.)
- Apply primary and secondary sources to investigate a person, place, thing or event, and identify each source as primary or secondary.
- Select needed information from a defined group of resources: library catalog, online encyclopedia and subject list of age-appropriate Web sites.
- Choose a search engine or directory specifically designed for students to locate information on the Internet.

Where to Start with Hardware ?

Determine current inventory of mounted and not mounted projectors.*

Costs

Determine cost for projector, video splitter, and cables.*

Determine cost to mount projector...contracted vs. maintenance department.*

Total cost per room will determine number of projectors that can be installed.*

Technology Leadership Program (TLP), AKA PIC (Projectors in Classrooms)

Process for selecting which classrooms will receive mounted projectors:

Application – use last years and/or alter/adapt it. Application was evaluated by building principals.

Recipients must either be able to demonstrate that they are proficient in PowerPoint or be willing to take a PowerPoint class before the start of school. The Tech Team will work with the LPDC to ensure that a course is offered that will meet the criteria required by the LPDC.

They should also submit a description of how they have used the projector. The description should be submitted to the Technology Coordinator by December 1 who will then summarize the descriptions for the Tech Team.

Repeat process in subsequent years until classrooms have mounted projectors.

*To be continued...

Technology Projected Budget

ITEM	2010-2011		2011-2012		2012-2013		2013-2014		2014-2015	
	Essential	Cutting Edge	Essential	Cutting Edge	Essential	Cutting Edge	Essential	Cutting Edge	Essential	Cutting Edge
LCD mounted projector	\$15,000	\$35,000	\$12,000	\$35,000	\$12,000	\$35,000	\$12,000	\$35,000	\$12,000	\$35,000
New computers	\$35,000	\$140,000	\$30,000	\$140,000	\$30,000	\$140,000	\$30,000	\$140,000	\$30,000	\$140,000
Professional Development	\$3,000	\$6,000	\$3,000	\$6,000	\$3,000	\$6,000	\$3,000	\$6,000	\$3,000	\$6,000
Wireless Network			\$3,000		\$3,000		\$3,000		\$3,000	
Interactive Technology		\$5,000	\$4,000	\$5,000	\$4,000	\$5,000	\$4,000	\$5,000	\$4,000	\$5,000
Total	\$53,000	\$186,000	\$35,000	\$186,000	\$49,000	\$186,000	\$52,000	\$186,000	\$52,000	\$186,000

How will we keep up with technology?

Prevention

- Due to the fact that electronic equipment must be kept at a reasonable temperature as required by electronic components, air conditioners must be installed in computer labs.
- Develop an inventory of critical system parts, to reduce downtime in the event of hardware failure.
- Create replacement schedule for all switches, upgrade backbone to fiber/copper gigabit.
- Install fire extinguishers in all computer lab.
- Each summer all electronic components needs to be cleaned.

Maintenance

Support helpdesk is an extremely common practice in nearly every environment. Effective management and support response can only be achieved if communication channels are governed and focused helpdesk staff is in place.

Recommendation to structure individuals from the technology support team to be responsible for reviewing each request and providing tier 1 support. If necessary assigning to appropriate team member as tier 2 escalation.

Change to a web-based tool accessible from the Internet as part of the NPCS head-end web site and streamline request channels. Leave only web-based helpdesk tool and phone/email as backup or escalation method. Eliminate manual paper process.

Use the data being captured through the ticketing process to run analysis reports and determine where the highest volume of tickets are being generated, and structure support group around meeting that need.

Replacement

New Philadelphia City SD has a plan to replace 200 computers in the classrooms each school year. The past district practice was to replace the oldest computers first, this should continue with movement of computers to the department that has the most recent adopted textbooks.

We plan to upgrade all teacher and staff workstations during our five year technology plan.

In order to implement our TLP we will be adding projectors, new computers, interactive technologies, and wireless technology.

Community Outreach

The Technology Team recognizes that public support is essential to ensure the success and longevity of planning implementation of technology. Through the involvement of the community support we can use technology to teach children how to become life long learners in a changing world.

Our technology steps to obtain our community goals are as follows:

- Let the community know how we are using technology in the classroom through demonstrations shown at open houses, on our school web site to be able to view student projects, downloading and sending home finished projects for parents to view, informing the community through a technology article(s) detailing new equipment, our vision, and what is being done in the classroom
- Provide computer training and access to parents and the community
- Involvement through local businesses to relate technology to the outside world
- Gain funding through PTO, grants and local businesses to meet goals as set by our technology team

Evaluation & Ongoing Assessment

The evaluation and assessment of technology is essential to the ongoing growth and development of a productive technology plan. An evaluation of the current technology practices in NPCS as well as the TLP (Technology Leadership Program) will be implemented to provide essential information that will ensure quality progress toward a 21st century vision. The evaluation will consider the development of new technologies as well as the utilization of current technology resources. The equitable access of technology throughout the district will be considered

Progress will be monitored annually by the Superintendent, Assistant Superintendent, Curriculum Director, building administration and the district technology committee. Necessary recommendations and revisions will be made and changes will be made according to the needs of the district. A survey will be conducted to evaluate the following areas affecting technology.

Areas of evaluation	Review schedule
Curriculum	May 2012, 2013,2014
Professional Development/staff support	May 2012, 2013,2014
Budget	May 2012, 2013,2014
Scheduling/	May 2012, 2013,2014
Community Outreach	May 2012, 2013,2014
Maintenance	May 2012, 2013, 2014

