

EDTC: 6965 Technology planning for instructional Environments
Final Project

Technology Plan for East High School
2010-2011
2011-2012
2012-2013

Overview

A technology plan has been requested for East High School in the Youngstown City School District. The technology plan is a three year plan scheduled to be implemented in June of 2010 and completed in June 2013. Revisions will be included in the plan to accommodate factors that could alter start and completion dates for implementation of the technology plan.

East High School (EHS) is located on the east side of Youngstown, Ohio. Youngstown has a population of 82,026 and median household income of \$24,201. Youngstown is located South of Pittsburgh, Pennsylvania and west of Cleveland, Ohio. East High School is three years old. The building was constructed in 2007 on the site of a demolished school building, to consolidate and replace two older high school buildings (Rayen & Wilson) each over 70 years old. EHS is a new building that contains updated technology equipment and needs a plan to effectively train, support, educate staff and students.

Student Demographics

East High School has a current student enrollment of 965. The building capacity for students is 1000. EHS houses grades 9 -12. Present enrollments for the grades are:

- 9th graders: 395
- 10th graders: 216
- 11th graders: 206
- 12th graders: 148

Student ethnicity is predominately African American (81%), Hispanic (11%), Caucasian (5%), Multi-Racial (3%), and American Indian (1%). The Administrative staff at EHS has four principals referred to as Academic Deans, three guidance counselors, four clerical workers, seventy teachers, and ten educational assistants. All of the teachers are state certified and licensed, 97% of the teachers are Highly Qualified in their teaching areas.

Community

The community that the school resides in is racially diverse; predominately African American and Hispanic. The average household income is around \$18,000 with mostly single head of households. Breakfast is free to all students at EHS and 98% of the students are eligible for free or reduced school lunches.

Location of Computers and Technology

Computers are located in every classroom. Each classroom has five desktop computers for student use and one for the teacher. Each classroom has a wall mounted remote controlled television monitor. There are three computer labs located on the first floor of the building. Each computer lab has 25 computers. The school library has computers for student use and other technology such as: lab top computers, DVD/VHS players, ELMO Projectors, and video/cassette recorders. Computers are also located in each administrator's and clerical staff office. Common areas such as the cafeteria and auditorium are equipped with wall mounted television monitors that run daily school related news.

Stakeholders

The stakeholders for this Technology Plan will include students, teachers, school administrators, school district board members, parents, technology coordinators, media specialist, local business, government, and community members. The role of the stakeholders is to become active participants committed to forming partnerships for the purpose of supporting use and knowledge of technology in the learning environment. Responsibilities, beneficiaries, and involvement of the stakeholders are described below:

Students

The students at East High School will be the primary beneficiaries of this technology plan. The technology plan will be aligned with the State of Ohio Academic Standards for all subjects, as well as with the learning goals and strategies of the local school district. Students will benefit from this plan by acquiring technology knowledge and skills that will enable the student to transfer and apply new learning across the curriculum and in daily life skills.

Administrators

Administrators will be active participants in the technology planning, designing and implementation process. Administrators are committed to support technology in the classroom and will be consulted throughout each phase of the plan. Administrators will be responsible for creating a school website that will connect faculty, parents, students and the community. Integrating these groups through a website will help to establish communication and build partnerships through use of email and blog pages.

Teachers, Media Specialist, and Technology Coordinators

The stakeholders in this group will use the technology plan to achieve the following:

- Establish a shared vision and mission on the role and importance of technology to help all students achieve academic success.

- Create effective and engaging learning opportunities and activities using technology to reinforce the teaching process.
- Seek support from the community planning and securing technology.
- Identify local, state, and federal resources to support technology integration
- Establishing classroom websites and lessons that incorporate various means of media.

School Board Member

The Youngtown City School Board will have the primary responsibility for funding the EHS Technology Plan. A budget will be created in the school district budget. The school board will designate a member to represent the school board to examine all issues and questions related to the benefits of integrating technology in the educational process. These areas will include but not limited to costs, potential savings, plan evaluation, staff professional development and student achievement. The school board will share the responsibility of communicating with the public to build support for the technology plan.

Parents and Community Members

Parents and community members will benefit from the technology plan by being able to view school and classroom web sites to be informed of events and student learning activities. Parents and community members will be encouraged to provide technical support and volunteer to help with technology initiatives. Their role and importance will be included in the plan's overall success. The school will explore the idea of community members using the computer labs for the purpose of educational literacy and skill enhancement.

Local government officials and business community

Local government officials and the business community will benefit from this plan as an interest and investment in education, youth, and community. The local business partners and government

officials will be able to use this plan as a reference for future initiatives involving education and technology. Their role and participation is a great way of developing partnerships and relations with local taxpayers and community members.

Technology Planning Committee

The Technology Planning Committee for the East High School Technology Plan will consist of the following persons and or groups: School Administrator must be trained and prepared to assist and support staff in the implementation of the plan, to insure it is aligned with the educational goals, vision and mission of the school. Educational staff will include: Library/Media Specialist, instructional or curriculum specialist, adaptive assistance specialist, and technology technicians. The educator group will be responsible for training, troubleshooting and guidance. Academic chairpersons for each academic subject areas will make sure that academic standards are aligned to the curriculum and technology is used appropriately. Parents will be included and informed of available technology and use to assist students; a local school board member will be the representative and liaison to report and respond for the full governing school board; Community representatives from local businesses, corporations, and governments. This group of professionals is needed for funding, technical support and investment in education and youth.

Overview of Technology Plan Development

An idea to develop a technology plan was initiated by the administrative principle of East High School and the Youngstown Board of Education. It was decided a planning committee was needed to formulate ideas, set objectives, and study the feasibility of such a plan. Individuals were identified from the school staff, community and board of education to be participants on the planning committee. The planning committee met on a monthly basis to discuss components of the plan, inventory existing technology in the school and district, brainstorm and identify

resources and communicate with neighboring school districts that have a technology plan in place. The technology plan is designed for a three year period. Implementation of the plan would occur in phases. This allows the planning committee to effectively monitor and evaluate areas of the plan.

Pre-Planning Phase

During this phase the committee will use the eTech Ohio online Technology Planning Tool as a framework for designing the plan. This is a program that strategically addresses technology planning in an educational organization and provides guidance in implementing technology to increase student achievement. The technology framework will use Edie Holcomb's "asking the Right Questions": Techniques for Collaboration and School Change. Each year of the plan various aspects and benchmarks will be evaluated.

First Year

- East High School Administration will create a school website with links to programs, services, staff web pages, school calendar, and school events.
- Professional Development workshops and training sessions will be scheduled 2 -3 times per year. The academic chairpersons will oversee the alignment of technology standards to the content areas.

Second Year

- All teachers will be expected to have classroom websites created and functional with lessons, student assignments, and links for resources.
- Planning committee will conduct evaluations and measure success using the Ohio Department of Education (ODE) Academic Content Standards for Technology for grades 9-12. The plan will also integrate technology goals from the National Educational Technology Standards for Students from the International Society for Technology in Education (ISTE).

The benchmarks for technology are:

Standard 1: Nature of Technology:

Students develop an understanding of technology, its characteristics, scope, core concepts and relationships between technologies and other fields.

Standard 2: Technology and Society Interaction:

Students recognize interactions among society, the environment and technology, and understand technology's relationship with history. Consideration of these concepts forms a foundation for engaging in responsible and ethical use of technology.

Standard 3: Technology for Productivity Applications:

Students learn the operations of technology through the usage of technology and productivity tools.

Standard 4: Technology and Communication Applications:

Students use an array of technologies and apply design concepts to communicate with multiple audiences, acquire and disseminate information and enhance learning.

Standard 5: Technology and Information Literacy:

Students engage in information literacy strategies, use the Internet, technology tools and resources, and apply information-management skills to answer questions and expand knowledge.

Standard 6: Design:

Students apply a number of problem-solving strategies demonstrating the nature of design, the role of engineering and the role of assessment.

Standard 7: Designed World:

Students understand how the physical, informational and bio-related technological systems of the designed world are brought about by design process. Critical to this will be students' understanding of their role in the designed world: its processes, products, standards, services, history, future, impact, issues and career connections.

Third Year

- Teachers and staff will complete a survey to evaluate technology and instruction.
- Technology Plan revisions will be completed
- Technology Budget will be revised in areas that were under or over funded.
- Students will complete survey to measure the impact of technology on learning.

Technology at the Site

East High School is a fairly new school building constructed in 2007. New Dell Computers were installed in each classroom. There are five for students and one for the teacher. The operating system is Windows XP and has Microsoft Office 2003 and Internet access. Other software programs are: MS Word, MS Excel, MS Power Point, Roseta Stone a (ESL program for English as a Second Language), and New Century (keyboarding tutorial). The school has three labs with 25 computers in each one. There are a total of 425 computers throughout the school building. The school library has the following equipment for classroom instructional use:

- 70- DVD and VHS Players
- 10- Laptop Computers
- 8 - Digital Photo/video Cameras
- 10- 2D ELMO Projectors
- 5 - LCD Projectors
- 5 - Video Recorders
- 1 – Poster Laminating Machine
- 5 – Cassette and Audio Recorders
- Distance Learning Monitors and equipment
- 8 – Smart Boards
- 80 TV Carts and Monitors

Technology use for instruction at East High School has been integrated based on the classroom teacher's technology skills. Results of a survey conducted during the pre-planning stage of this technology plan indicate that there is a small percentage of teachers who use technology for lessons on a regular basis and a large percentage of teachers do not use any technology as part of the instructional process because of inadequate skills or not comfortable in being able to support students use of technology. (Appendix A) This instructional imbalance in use of technology in the classroom does not provide equal learning and computer experience for the student.

Budget

East High School currently does not have a budget that is devoted to technology. The administrative staff must complete and submit a requisition form for repairs, purchases, upgrades, and other requests to the business office at the board of education. East does have a teacher, called a SYSOP who manages and handles small computer and programming tasks such as setting up email and assigning log on IDs to students and staff. All other technical concerns are contracted to an outside source.

The school board and community recognize the need for steady and continuous sources of funding to support technology infrastructure and to provide the necessary resources for teachers and students. The school will allocate funds for technology in its school operational budget. Some of the funds will be allocated for professional staff development supporting technology. The school Technology Coordinator in coordination with administration; will be responsible for creating a technology budget for the school.

The Youngstown Board of Education will provide online and additional resources to ensure that funding will be available to support technology and professional development. The board will investigate opportunities and develop appropriate procedures for group leasing, purchasing, and licensing of hardware, software, and peripheral technology products. The school will also participate in federal and state funded programs for which it is eligible such as No Child Left Behind.

East High School Technology Plan Three Year Budget

Network/ Telecommunication Services	\$45,000
Hardware	\$20,000
Student Data Administrative System	\$10,000
Software	\$20,000
Security	\$5,000
Technology Staffing/support	\$40,000
Professional Development	\$8,000
Materials and Supplies	\$20,000

Total cost of Technology Plan Budget: \$170,000

Line Item Costs Subject to Funding

Requirement	Estimate	Justification
Professional Development	\$1,000 each session	Teacher/ staff training on Technology Plan
Interactive Smart Boards	\$3,150.00	To display websites in classrooms
Blank CD's 300 Units per year	\$100.00	To save lessons and backup software programs
Adobe Photoshop CS4	\$699.00	Software to create graphs and pictures on website
Dream Weaver/Adobe	\$2000.00	Main software for the school website
Misc. equipment or services	\$5000.00	Adapters, electrical components, etc.

Hardware and Software

The computer equipment at East High School is three years old. Currently there are 425 computers located in the classrooms and computer labs. To maintain such a large number of computers along with the computer servers, it is recommended that a network administrator is hired or assigned to East to maintain and monitor the network system. The computers have already been in use three years prior to implementation of this plan, the upkeep and maintenance of equipment will be important to keep costs down. The following recommendations included in the technology plan are:

1. Hire an experienced network administrator
2. Hire or train a staff person as a computer technician, this saves from outsourcing.
3. Re-evaluate user policies for Internet and Email use. All staff and students will sign revised policy.
4. Upgrade Microsoft Office 2003 to Microsoft Office 2007
5. Train teachers on POW PAK, it a free software program that designs classroom web pages.
6. Purchase or adapt computers and software for special needs and ESL students.
7. Train current building SYSOP to dispose of discarded hardware and software.

Technology Implementation and Maintenance

It is recommended that a network administrator be hired and housed at East to oversee the computer technicians, technology coordinator and sysops. The network administrator will also be responsible for coordinating any computer installations, upgrades, and repairs.

One teacher will be assigned to be responsible for scheduling classrooms for computer lab use.

The administration and school board liaison will establish policies for student and staff use of computer and Internet. Blocks will be installed on the network system to prevent access to inappropriate websites.

Students will be orientated on computer use to include plagiarism, confidentiality, and courtesy.

Each student and staff person will be assigned a username and a password. Students and staff who violate rules of computer conduct and use, will lose Internet and or computer privileges.

Procedures and protocols for reporting problems with software, hardware, or network will be written and posted for staff knowledge. Building sysop will be the first notified, technology coordinator, and then network administrator. All stakeholders will have read, sign, and follow the Acceptable Use and Safety for Technology (AUP) user agreement.

<http://www.youngstown.k12.oh.us/departments/technology/technology.html>

The AUP policies for students and staff make clear the rules on the legalities in the use of technology. It is the intent of the Youngstown City School Board for students and staff to consider computer and Internet use a privilege and would like the experience to be safe and educational.

Professional Development

The Youngstown Board of Education and the East High School Professional Development Team recognizes that the technology plan will only be academically successful and beneficial if staff and teachers have adequate knowledge and training to support the plan. The following recommendations are proposed in the technology plan:

- Administrative Staff will be involved in the professional development programs and training so that they are familiar with the programs and are able to provide teacher support.
- Pre-Assessment surveys will be conducted with staff and teachers to determine areas of need. Results and data from the technology survey will be analyzed by the professional development team and board of education.
- As new technology and software becomes available it will be offered to teachers and staff throughout the year in the form of workshops. Staff will be able to select the training workshops that will develop their individual knowledge and skills.
- Professional Development workshops for aligning technology standards for each academic content area will be offered.
- Teachers that service special needs students will have assistive technology available to them in the form of Wynn Readers or Kurweil Readers. These programs allow text to be scanned and through audio can be read back to the student. Training in these areas will be ongoing.

The technology planning committee and professional development team will issue a technology assessment survey to staff during the initial phases of the plan.

Communication

The technology plan will provide provisions to communicate with administrators, staff, students, parents, business and general community partners in the following matter:

Establish a district wide web site that will post information and links to each school building, school policies, programs and services, school and district calendar.

Email addresses of East High Administration and staff will be posted on school website for parents, students, and community members.

Teacher's classroom websites will post student lessons and links to resources for skill enhancement.

Teachers will use a various means of media to communicate with students such as podcasts, vodcasts, email, blog pages, and PowerPoint presentations.

Use of interoffice mail and local US Mail for school staff will still be a form of communication.

East High School will also make available a list of outside resources for student, parent, and community use on its website by posting links to such sources as:

The Vindicator @ www.vindy.com

The Ohio Department of Education @ www.ode.com

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