

**Commonwealth Community  
Development Academy**

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**Educational Technology Plan  
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**Intermediate School District: Wayne County RESA**

# **Commonwealth Community Development Academy Technology Plan 2011 – 2016**

## **Background information on the school**

Commonwealth Community Development Academy was chartered through Eastern Michigan University in 1996 as a grade 6-8 middle school located at 8735 Schoolcraft in Detroit, Michigan. The enrollment at that time was 187 students. In 1998, a second campus was opened to add grades K-5 located at 13477 Eureka in Detroit. The enrollment has been as high as 647 students. Currently, Commonwealth offers grades K-8 on one location, 13477 Eureka and the enrollment is 274 students. The student body consists of 100% African-American students of which 99% are classified as at-risk. The instructional staff is composed of 17 teachers and 3 tutors. Although achieving Adequately Yearly Progress has been difficult and slow, Commonwealth achieved AYP through persistent instruction using research-based models such as Success for All for reading and Everyday Mathematics and Step Up to Writing. Commonwealth is consistently maintaining AYP.

## **Technology Mission Statement**

Commonwealth Community Development Academy will provide a challenging technology curriculum as a powerful tool for its students to achieve life skills, which will enhance the environment of leaders of an ever-changing world.

## **Technology Vision Statement**

Commonwealth Community Development Academy is preparing students for leadership roles in the workplace, the home and the community. While our school excels in the teaching of traditional core curriculum, students today must also be technologically literate.

Our vision for the future development of our study programs includes the use of hands-on technology that will promote both independent and cooperative learning, provide access to new and exciting information sources, inspire a zest for life-long learning and serve as a future resource for the school's community.

Our model will incorporate appropriate technologies in its curriculum and use those technologies as tools to link students to other classrooms, schools and resources, thereby opening a door to an exciting and enriching life of experiences. Our school is committed to providing global, multicultural education, not limited by classroom boundaries, which will prepare students to embrace the challenges that lie ahead.

## **Technology Development Goals**

Commonwealth Community Development Academy is committed to providing its students and staff with the most modern, innovative and functional use of technology to enhance the learning experience. We want to allow our students to explore arenas that were inaccessible to the majority of school environments only a few short years ago. We realize that technology is an essential tool in teaching of the "Internet Generation" of students that we serve today. Our plan is to use technology to:

- Reach our curricular goals
- Increase the technological skills of students, staff and parents
- Encourage and increase the flow of communication amongst the various members of our learning community
- Further develop the skills and knowledge base of our staff
- Facilitate the many administrative functions essential for the success of a school
- Even the playing field for those who are technologically untaught
- Provide information in a manner that will encourage our students to become life-long learners

The world has become increasingly dependent on technology in general, and on computers in particular. Those who own these skills improve their standing in the employment marketplace and improve their ability to gather information and develop critical thought. To be successful, students and others need to know how to gather and manipulate data, synthesize this information to reach conclusions, and express their ideas in increasingly creative ways - often through the use of audio, video and multimedia equipment and programs.

## **Current Technology Resources**

- A File Server System
- A desktop computer for every staff member including instructors
- One desktop computers per classroom
- Eight laptop computers
- A networked computer lab with 25 computers
- Computer Cart with 25 Netbooks
- Tape recorded listening centers with headphone sets in every classroom
- Five televisions with VCR's
- Seven DVD player
- Two classroom sets of calculators (Graphing)
- Overhead projectors in every classroom
- Networked printers and copier systems
- Eight Interactive White Boards
- Eight Document Cameras
- 12 LCD Projectors
- 5 Student Response Remote Control Systems

All computers are internet accessible and every staff member has a personal electronic mail address. Commonwealth's web address is [www.cwdacademy.com](http://www.cwdacademy.com)

## **Current Software Resources**

- Windows XP Professional
- Windows XP
- Microsoft Office 2007 Business Edition
- Microsoft Outlook
- Outlook Express
- Print Shop Edition 15 or 20
- One Call Now Automated Telephone System
- Windows 7

## **Expected Student/Computer ratio**

Our goal is to have one computer available to every four students, to have an average of six computers in every classroom and always have one computer per student in the laboratory. Additionally, there will be a minimum of six computers in the library for student, parent and staff use.

## **Improvement of Educational Opportunities through Software**

Presently, we use a wide variety of software that we have found to be extremely beneficial in teaching our students. We intend to expand the number of software titles available in the next three years. This expansion will be the subject of consultation and planning by teaching and administrative staff in order to ensure that software-based training is not delivered in an ad-hoc manner, but rather is part of a structured curriculum. Software-based training and education will not replace more traditional teaching methods, but rather be an enhancement and expansion of the tools available to teachers in educating their students. Currently, technology components are in place for the Mathematics, Science, Social Studies and English Language Arts curricula.

Students are taught basic computer and keyboarding skills as part of the standard curriculum, and this will continue in the coming years, taking into account new skills and abilities required by changes in technology.

## **Internet Use for Improved Educational Opportunities**

The Internet will play a vital role in making sure that our students receive the best possible education. The Internet offers to students and teachers alike unprecedented opportunities for accessing information on a global scale.

Additionally, students and teachers will be able to take advantage of communication opportunities made possible through the use of e-mail, newsgroup and chat facilities, contact their teacher from home, participate and learn from discussions with their peers, communicate

with other students from around the world in real-time using webcams on the netbooks.

It is expected that students will be informed of the potential dangers associated with the Internet, and how to distinguish between trustworthy and untrustworthy sources of information. Students will receive adequate supervision during Internet sessions and software usage to ensure appropriate use. Both students and staff will receive copies of the Board policy regarding internet use. The policy will be enforced and disciplinary actions imposed for breaches of the policy by either staff members or students.

## **Acceptable and Unacceptable Internet Uses**

### **ACCEPTABLE:**

Employees accessing the internet or representing Commonwealth must do so for professional reasons. All employees are responsible for ensuring that the internet is used in an effective, ethical, and lawful manner. Internet relay chat channels may be used to conduct official Commonwealth business or to gain technical or analytical advice. Data bases may be accessed when information is needed. Electronic mail (e-mail) may be used for business contacts.

### **UNACCEPTABLE:**

The internet should not be used for personal gain or advancement. Solicitation of non-Commonwealth business, or any use of the internet for personal gain, is strictly prohibited. Use of the internet must not disrupt the operation of Commonwealth's network or the networks above the users. It must not interfere with your productivity.

The unacceptable and acceptable use policies are included in the staff and parent-student handbooks. Signatures are kept on file for each year.

## **Goals for Staff Development**

It is imperative, in the ever-growing technology industry, for all staff members to be informed on the latest technology expectations. The Michigan Department of Education has drastically increased use of electronic communication and the LEA must strive to maintain effective use of such systems. Administrators, clerical staff, food service workers, etc. will efficiently train and continuously update knowledge on state and vendor electronic applications. Professional development sessions are offered by MDE and Wayne County RESA as necessary.

All staff members will be required to complete a minimum of ten hours per school year in technology training to enhance the use of technology during daily instruction and include technology projects in lessons that will provide hands-on experiences for student learners. It is also expected that instructional members complete a minimum of two technology oriented presentation to peers, parents or students per school year.

Proper use of various search engines to research information will be introduced to staff and students to facilitate learning through technological modes. The same information will be communicated to others, including parents, students, and peers via electronic transmission.

Commonwealth continues to research the advantages of an electronic system to maintain student attendance and grades. Some staff have implemented excel spreadsheets to track and calculate grades, however, there have been some challenges with remaining compliant with such critical information that is directly connected to state aid.

The administrative staff at Commonwealth Community Development Academy has completed a minimum of 10 hours per individual in computer operations to enhance their usage skills with Microsoft Office Business tools and Windows XP. Additionally, the use of electronic mail communications has increased to comply with regional and state compliance and reporting requirements. Professional development is ongoing.

## **School Intranet and Homepage**

Commonwealth Community Development Academy has been successful with developing a home web page to better communicate with parents, students, staff and the general public. The IT Coordinator will fulfill the responsibility of maintenance and updates to all on hardware and software. The technology plan is accessible at [www.cwdacademy.com](http://www.cwdacademy.com) and paper editions are available in the school office.

## **Outline of Physical Infrastructure Needs**

### **Telecommunications**

Telecommunication systems are provided for administrative and transportation staff. The systems are in need of update to prevent improper or insufficient communication during normal critical operations.

Ten classrooms stationed in modular units are in need of direct communication systems with the school's main office. The school building does not currently have a public address system. A system will be installed to effectively communicate with the entire student body and faculty.

Video messaging will be implemented through the wiring and installation of network television/monitoring systems in each classroom and the main office. This wiring system will also permit thorough security monitoring of the campus and parking area.

### **Computers**

Commonwealth Community is facing the need to update equipment that has fast become outdated and costly to maintain. 16 Classrooms are in need of updated computers to provide instruction to students. Each classroom will be updated to include four computer stations instead of two. Additional equipment will be included to conduct listening and video/DVD sessions for alternative group instruction. 3 newly added classrooms will also require student technology centers.

Rooms and existing network equipment will be retrofitted as required. Older or potentially obsolete equipment will be evaluated by technical support staff for possible use in less

demanding roles or properly disposed of.

## **Network**

One room in our building and one office lack network access. The wiring and port services will be installed to update services in these rooms. Connections that are in need of repair will also be included.

## **Miscellaneous**

Other equipment will be purchased as required as miscellaneous technology needs come to light in updating the current system. Sufficient budget will include monies to purchase this equipment as and if needed.

## **Outline of the Software Infrastructure**

### **Software standards and requirements (server/network)**

The network is run on a server-client model. Microsoft Windows 2003 Server is the obvious choice of operating system for this task. Security of the internal school network through a configured firewall is in tact and virus protected.

### **Software standards and requirements (desktop)**

All office desktops and laptops are run by Windows XP or Windows 7 and all classrooms have Windows XP or higher. All computers will be updated to run on a unified software system to prevent the handicaps with exchange of documents through electronic communication.

As a minimum, all machines have a version of Microsoft Office Business edition as ability to use standard word-processing, spreadsheet and presentation packages are skills required of our students by potential employers.

Enough licenses will be purchased for all software to cover the number of installations required. A standard applications package will be developed and maintained by technical support staff in conjunction with teaching staff to cover the required curriculum.

## **Computer skills training for students**

There are minimal basic skills taught as part of the standard curriculum of the Commonwealth Community Development Academy program. We will need to bring our current course material up to date with changes in technology and the Michigan Grade Level Content Expectations.

Basic computer skills training will consist of classes in keyboarding, familiarity with maintaining files and filing systems, operating system and application program skills, and Internet skills (browsing, e-mail, html).

## **Technology Delivery**

A system has not been developed to address distant learning at this time. Due to the extremely high level of at-risk students being serviced, Commonwealth does not expect computers, internet access and e-mail accounts to be a high priority in family homes at this time. Technology delivery in the classroom will continue at an increasing rate.

## **Curriculum Development**

Commonwealth Community Development Academy is committed to implementing technology instruction utilizing the Michigan Department of Education Benchmarks as the guidelines for grade level outcomes. The Michigan Educational Technology Standards (METS) and the grade level standards and expectations are included in this document for reference by the instructional staff. The METS will be used as an evaluation tool to assess implementation of technology into the core curriculum and student progress. Evaluations will be completed a minimum of once per year.

Commonwealth's technology curriculum lesson plans are currently under review to include technology oriented instructional methods in the four core content areas. Each instructor will develop instructional goals to complete a minimum of one unit that will require instructional and student use of software such as Microsoft Power Point for delivery. Technology centers will be required for student use to achieve tasks related to the technology based unit.

Professional Development will continue to be ongoing to support the technological instruction from teachers. The technical support required to sustain such quality will be contracted and will include regular maintenance.

Community involvement will be required to offer life skills to students for their development of electronic socialization and communication expectations. The relationship with community corporations will consist of electronic publishing on the corporate web page regarding information about their company, the products manufactured and the types of employment offered. When possible, direct communications will be established such as teleconferencing and video conferencing for student learning.

Use of the Internet will be integrated into the curriculum in order to provide students, with basic Internet skills, and to provide more opportunity for meaningful research and communication with peers and others. Students will each be allocated their own e-mail address and encouraged to communicate globally with others. Project-based learning will be incorporated into the

curriculum to support cooperative learning strategies and offer realistic employment assimilations.

Internet research skills, and the ability to identify the difference between accurate and inaccurate information, will also be taught to our students through Internet usage. This skill will assist students in either pursuing employment or further educational opportunities. The Internet will become one of the major resources available to our student body.

## **Curriculum Integration Timeline**

August 2011 – **Professional Development** Session on electronic attendance, electronic grades and demonstration of photography, SMART Boards, Electronic Remote Control Assessment Systems, Everyday Mathematics eSuite and Success for All Member Center

September 2011 – All teachers required to implement a minimum of 2 technology integrated lessons per semester.

September 2011 through June 2012 – IT Support for classroom teachers with SMART boards and Laptop Cart

October 2011 – Installation of 2 SMART boards (leaving 9 classrooms to furnish)

March 2012 – **Technology Professional Development Conference**

April 2012 – Installation of Campus-wide communication system (Public Address/Intercom, Bell Signal)

May 2012- Assessment of modifications to curriculum and goal setting for next school year

*\*Activities repeat annually and adjustments made accordingly*

## Michigan Educational Technology Standards (METS) - K-8 Checklist by Grade Levels

**O** = Teacher Observation

**P** = Portfolio Evidence

**A** = Formal Assessment

**C** = Technology Literacy Class

Grades K through 2 – Technology Standards and Expectations – (by the end of Grade 2)									
<b>1. Basic Operations and Concepts.</b>									
<b>a. Students demonstrate a sound understanding of the nature and operation of technology systems.</b>									
1. Students understand that people use many types of technologies in their daily lives (e.g., computers, cameras, audio/video players, phones, televisions).	K	1	2						
2. Students identify common uses of technology found in daily life.									
3. Students recognize, name, and label the major hardware components in a computer system (e.g., computer, monitor, keyboard, mouse, and printer).									
4. Students identify the functions of the major hardware components in a computer system.									
5. Students discuss the basic care of computer hardware and various media types (e.g., diskettes, CDs, DVDs, videotapes).									
6. Students proofread and edit their writing using appropriate resources including dictionaries and a class developed checklist both individually and as a group.									
<b>b. Students are proficient in the use of technology.</b>									
1. Students use various age-appropriate technologies for gathering information (e.g., dictionaries, encyclopedias, audio/video players, phones, web resources).									
2. Students use a variety of age-appropriate technologies for sharing information (e.g., drawing a picture, writing a story).									
3. Students recognize the functions of basic file menu commands (e.g., new, open, close, save, print).									
<b>2. Social, ethical, and human issues.</b>									
<b>a. Students understand the ethical, cultural, and societal issues related to technology.</b>									
1. Students identify common uses of information and communication technologies.									
2. Students discuss advantages and disadvantages of using technology.									
<b>b. Students practice responsible use of technology systems, information, and software.</b>									
1. Students recognize that using a password helps protect the privacy of information.									
2. Students discuss scenarios describing acceptable and unacceptable uses of age-appropriate technology (e.g., computers, phones, 911, internet, email) at home or at school.									
3. Students discuss the consequences of irresponsible uses of technology resources at home or at school.									
<b>c. Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.</b>									
1. Students understand that technology is a tool to help them complete a task.									
2. Students understand that technology is a source of information, learning and entertainment.									
3. Students can identify places in the community where one can access technology.									

## Michigan Educational Technology Standards (METS) – K – 2<sup>nd</sup> Checklist

<b>O = Teacher Observation</b>	<b>P = Portfolio Evidence</b>	<b>A = Formal Assessment</b>	<b>C = Technology Literacy Class</b>								
<b>3. Technology productivity tools.</b>			<b>K</b>	<b>1</b>	<b>2</b>						
<b>a. Students use technology tools to enhance learning, increase productivity, and promote creativity.</b>											
1. Students know how to use a variety of productivity software (e.g., word processors, drawing tools, presentation software) to convey ideas and illustrate concepts.											
2. Students will be able to recognize the best type of productivity software to use for a certain age-appropriate tasks (e.g., word-processing, drawing, web browsing).											
<b>b. Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.</b>			<b>K</b>	<b>1</b>	<b>2</b>						
1. Students are aware of how to work with others when using technology tools (e.g., word processors, drawing tools, presentation software) to convey ideas or illustrate simple concepts relating to a specified project.											
<b>4. Technology communications tools</b>			<b>K</b>	<b>1</b>	<b>2</b>						
<b>a. Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.</b>											
1. Students will identify procedures for safely using basic telecommunication tools (e.g., e-mail, phones) with assistance from teachers, parents, or student partners.											
<b>b. Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.</b>			<b>K</b>	<b>1</b>	<b>2</b>						
1. Students know how to use age-appropriate media (e.g., presentation software, newsletters, word processors) to communicate ideas to classmates, families, and others.											
2. Students will know how to select media formats (e.g., text, graphics, photos, video), with assistance from teachers, parents, or student partners, to communicate and share ideas with classmates, families, and others.											
<b>5. Technology research tools</b>			<b>K</b>	<b>1</b>	<b>2</b>						
<b>a. Students use technology to locate, evaluate, and collect information from a variety of sources.</b>											
1. Students know how to recognize the Web browser and associate it with accessing resources on the internet.											
2. Students will use a variety of technology resources (e.g., CD-ROMs, DVDs, search engines, websites) to locate or collect.											
<b>b. Students use technology tools to process data and report results.</b>			<b>K</b>	<b>1</b>	<b>2</b>						
1. Students will interpret simple information from existing age-appropriate electronic databases (e.g., dictionaries, encyclopedias, spreadsheets) with assistance from teachers, parents, or student partners.											
<b>c. Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.</b>			<b>K</b>	<b>1</b>	<b>2</b>						
1. Students can provide a rationale for choosing one type of technology over another for completing a specific task.											
<b>6. Technology problem-solving and decision-making tools</b>			<b>K</b>	<b>1</b>	<b>2</b>						
<b>a. Students use technology resources for solving problems and making informed decisions.</b>											
1. Students discuss how to use technology resources (e.g., dictionaries, encyclopedias, search engines, websites) to solve age-appropriate problems.											
<b>b. Students employ technology in the development of strategies for solving problems in the real world.</b>			<b>K</b>	<b>1</b>	<b>2</b>						

1. Students identify ways that technology has been used to address real-world problems (personal or community).										
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## Michigan Educational Technology Standards (METS) - 3<sup>rd</sup> to 5<sup>th</sup> Checklist

<b>O</b> = Teacher Observation	<b>P</b> = Portfolio Evidence	<b>A</b> = Formal Assessment	<b>C</b> = Technology Literacy Class
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### Grades Three through Five – Technology Standards and Expectations – (by the end of Grade 5)

<b>1. Basic Operations and Concepts.</b>			<b>3</b>	<b>4</b>	<b>5</b>		
<b>a. Students demonstrate a sound understanding of the nature and operation of technology systems.</b>							
1. Students discuss ways technology has changed life at school and at home.							
2. Students discuss ways technology has changed business and government over the years.							
3. Students recognize and discuss the need for security applications (e.g., virus detection, spam defense, popup blockers, firewalls) to help protect information and to keep the system functioning properly.							
<b>b. Students are proficient in the use of technology.</b>			<b>3</b>	<b>4</b>	<b>5</b>		
1. Students know how to use basic input/output devices and other peripherals (e.g., scanners, digital cameras, video projectors).							
2. Students know proper keyboarding positions and touch-typing techniques.							
3. Students manage and maintain files on a hard drive or the network.							
4. Students demonstrate proper care in the use of hardware, software, peripherals, and storage media.							
5. Students know how to exchange files with other students using technology (e.g., e-mail attachments, network file sharing, diskettes, flash drives).							
6. Students identify which types of software can be used most effectively for different types of data, for different information needs, or for conveying results to different audiences.							
7. Students identify search strategies for locating needed information on the internet.							
8. Students proofread and edit writing using appropriate resources (e.g., dictionary, spell check, grammar check, grammar references, writing references) and grade level appropriate checklists both individually and in groups.							
<b>2. Social, ethical, and human issues.</b>			<b>3</b>	<b>4</b>	<b>5</b>		
<b>a. Students understand the ethical, cultural, and societal issues related to technology.</b>							
1. Students identify cultural and societal issues relating to technology.							
2. Students discuss how information and communication technology supports collaboration, productivity, and lifelong learning.							
3. Students discuss how various assistive technologies can benefit individuals with disabilities.							
4. Students discuss the accuracy, relevance, appropriateness, and bias of electronic information sources.							
<b>b. Students practice responsible use of technology systems, information, and software.</b>			<b>3</b>	<b>4</b>	<b>5</b>		
1. Students discuss scenarios describing acceptable and unacceptable uses of technology (e.g., computers, digital cameras, cell-phones, PDAs, wireless connectivity) and describe consequences of inappropriate use.							
2. Students discuss basic issues regarding appropriate and inappropriate uses of technology (e.g., copyright, privacy, file sharing, spam, viruses, plagiarism) and related laws.							

3. Students use age-appropriate citing of sources for electronic reports.																				
4. Students identify appropriate kinds of information that should be shared in public chat rooms.																				
5. Students identify safety precautions that should be taken while on-line.																				

<b>Michigan Educational Technology Standards (METS) – 3<sup>rd</sup> to 5<sup>th</sup> Checklist</b>																														
<b>O = Teacher Observation</b>					<b>P = Portfolio Evidence</b>					<b>A = Formal Assessment</b>					<b>C = Technology Literacy Class</b>															
<b>Grades Three through Five – Technology Standards and Expectations – (by the end of Grade 5)</b>																														
<b>2c. Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.</b>														3	4	5														
1. Students explore various technology resources that could assist them in pursuing personal goals.																														
2. Students identify technology resources and describe how those resources improve the ability to communicate, increase productivity, or help them achieve personal goals.																														
<b>3. Technology productivity tools.</b>														3	4	5														
<b>a. Students use technology tools to enhance learning, increase productivity, and promote creativity.</b>																														
1. Students know how to use menu options in applications to print, format, add multimedia features; open, save, manage files; and use various grammar tools (e.g., dictionary, thesaurus, spell-checker).																														
2. Students know how to insert various objects (e.g., photos, graphics, sound, video) into word processing <b>XX</b> documents, presentations, or web documents.																														
3. Students use a variety of technology tools and applications to promote [their] creativity.																														
4. Students understand that existing (and future) technologies are the result of human creativity.																														
<b>b. Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.</b>														3	4	5														
1. Students collaborate with classmates using a variety of technology tools to plan, organize, and create a group project.																														
<b>4. Technology communications tools</b>														3	4	5														
<b>a. Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.</b>																														
1. Students use basic telecommunication tools (e.g., e-mail, WebQuests, IM, blogs, chat rooms, web conferencing) for collaborative projects with other students.																														
<b>b. Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.</b>														3	4	5														
1. Students use a variety of media and formats to create and edit products (e.g., presentations, newsletters, brochures, web pages) to communicate information and ideas to various audiences.																														
2. Students identify how different forms of media and formats may be used to share similar information, depending on the intended audience (e.g., presentations for classmates, newsletters for parents).																														
<b>5. Technology research tools</b>														3	4	5														
<b>a. Students use technology to locate, evaluate, and collect information from a variety of sources.</b>																														
1. Students use Web search engines and built-in search functions of other various resources to locate information.																														
2. Students describe basic guidelines for determining the validity of information accessed from various sources (e.g., web site, dictionary, on-line newspaper, CD-ROM).																														

<b>b. Students use technology tools to process data and report results.</b>						3	4	5			
1. Students know how to independently use existing databases (e.g., library catalogs, electronic dictionaries, encyclopedias) to locate, sort, and interpret information on an assigned topic.											
2. Students perform simple queries on existing databases and report results on an assigned topic.											

## Michigan Educational Technology Standards (METS) – 3<sup>rd</sup> to 5<sup>th</sup> Checklist

<b>O</b> = Teacher Observation	<b>P</b> = Portfolio Evidence	<b>A</b> = Formal Assessment	<b>C</b> = Technology Literacy Class								
<b>Grades Three through Five – Technology Standards and Expectations – (by the end of Grade 5)</b>											
<b>5c. Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.</b>						3	4	5			
1. Students identify appropriate technology tools and resources by evaluating the accuracy, appropriateness, and bias of the resource.											
2. Students compare and contrast the functions and capabilities of the word processor, database, and spreadsheet for gathering data, processing data, performing calculations, and reporting results.											
<b>6. Technology problem-solving and decision-making tools</b>						3	4	5			
<b>a. Students use technology resources for solving problems and making informed decisions.</b>											
1. Students use technology resources to access information that can assist [them] in making informed decisions about everyday matters (e.g., which movie to see, which product to purchase).											
<b>b. Students employ technology in the development of strategies for solving problems in the real world.</b>						3	4	5			
1. Students use information and communication technology tools (e.g., calculators, probes, videos, DVDs, educational software) to collect, organize, and evaluate information to assist with solving real-life problems (personal or community).											

## Michigan Educational Technology Standards (METS) - 6<sup>th</sup> to 8<sup>th</sup> Checklist

<b>O</b> = Teacher Observation	<b>P</b> = Portfolio Evidence	<b>A</b> = Formal Assessment	<b>C</b> = Technology Literacy Class								
<b>Grades Six through Eight – Technology Standards and Expectations – (by the end of Grade 8)</b>											
<b>1. Basic Operations and Concepts.</b>											
<b>a. Students demonstrate a sound understanding of the nature and operation of technology systems.</b>									6	7	8
1. Students understand that new technology tools can be developed to do what could not be done without the use of technology.											
2. Students describe strategies for identifying, and preventing routine hardware and software problems that may occur during everyday technology use.											
3. Students identify changes in hardware and software systems over time and discuss how these changes affected various groups (e.g., individual users, education, government, and businesses).											
4. Students discuss common hardware and software difficulties and identify strategies for trouble-shooting and problem solving.											
5. Students identify characteristics that suggest that the computer system hardware or software might need to											



communication and to support creativity.												
2. Students use a variety of resources, including the internet, to increase learning and productivity.												
3. Students explore basic applications that promote creativity (e.g., graphics, presentation, photo-editing, programming, video-editing).												
4. Students use available utilities for editing pictures, images, or charts.												
<b>b. Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.</b>										6	7	8
1. Students use collaborative tools to design, develop, and enhance materials, publications, or presentations.												
<b>4. Technology communications tools</b>										6	7	8
<b>a. Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.</b>												
1. Students use a variety of telecommunication tools (e.g., e-mail, discussion groups, IM, chat rooms, blogs, video-conferences, web conferences) or other online resources to collaborate interactively with peers, experts, and other audiences.												
<b>b. Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.</b>										6	7	8
1. Students create a project (e.g., presentation, web page, newsletter, information brochure) using a variety of media and formats (e.g., graphs, charts, audio, graphics, video) to present content information to an audience.												
<b>5. Technology research tools</b>										6	7	8
<b>a. Students use technology to locate, evaluate, and collect information from a variety of sources.</b>												
1. Students use a variety of Web search engines to locate information.												
2. Students evaluate information from various online resources for accuracy, bias, appropriateness, and comprehensiveness.												
3. Students can identify types of internet sites based on their domain names (e.g., edu, com, org, gov, au).												
<b>b. Students use technology tools to process data and report results.</b>										6	7	8
1. Students know how to create and populate a database.												
2. Students can perform queries on existing databases.												
3. Students know how to create and modify a simple database report.												
<b>c. Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.</b>										6	7	8
1. Students evaluate new technology tools and resources and determine the most appropriate tool to use for accomplishing a specific task.												

<b>Michigan Educational Technology Standards (METS) – 6<sup>th</sup> to 8<sup>th</sup> Checklist</b>													
<b>O</b> = Teacher Observation	<b>P</b> = Portfolio Evidence	<b>A</b> = Formal Assessment	<b>C</b> = Technology Literacy Class										
<b>6. Technology problem-solving and decision-making tools</b>											6	7	8
<b>a. Students use technology resources for solving problems and making informed decisions.</b>													
1. Students use database or spreadsheet information to make predictions, develop strategies, and evaluate decisions to assist them with solving a basic problem.													
<b>b. Students employ technology in the development of strategies for solving problems in the real world.</b>											6	7	8

1. Students describe the information and communication technology tools to use for collecting information from different sources, analyze their findings, and draw conclusions for addressing real-world problems.



## **Outline of Staff Development Required**

The instructional staff continuously requires professional development. Basic skills required to efficiently produce professional documents have been achieved with % of the instructional staff and 100% of the administrative or support staff. Professional development will continue until 95% mastery by the *total staff* has been achieved with the other 5% consisting of newly hired employees and low technology usage positions. Surveys of technology needs and interest will be conducted after each session to plan future sessions.

Staff members who show more interest and aptitude for technology skills will be designated as "technology specialists" and form an important backup to our contracted technical support person. Commonwealth Community Development Academy will ensure that staff members have access to sufficient training enabling them to become proficient in basic support and maintenance skills. Technical support service is a prime issue in ensuring that technology is a reliable resource for the school. Technical support staff will also play a crucial role in the school's electronic resources security.

## **Use of Intranet resources**

### **Internet Use Policy and CIPA**

Children's Internet Protection Act – Commonwealth Community Development Academy, its Board of Directors and the School leader has taken every precaution to implement policies and guidelines to certify compliance with CIPA (Children's Internet Protection Act of 2000) by guaranteeing that filters and/or blocking technology is in place and maintained on a daily basis.

Students of Commonwealth are prohibited from visiting sites which display materials inappropriate for school age children such as, but not limited to: pornography, vulgar profane language, sex acts of any kind, etc. The current filter protection has been successful in preventing access, through computers with Internet access, to visual depictions that are obscene, child pornography, or (in the case of use by minors) harmful to minors. The school and its library also is enforcing the operation of such filtering or blocking technology during any use of such computers by minors.

Commonwealth's Internet use Policy currently addresses the following in section 7000 of the Board Policy Manual:

1. access by minors to inappropriate matter on the Internet and World Wide Web;
2. the safety and security of minors when using electronic mail, chat rooms, and other forms of direct electronic communications;

3. unauthorized access, including so-called "hacking," and other unlawful activities by minors online;
4. unauthorized disclosure, use, and dissemination of personal information regarding minors; and
5. Measures designed to restrict minors' access to materials harmful to minors.

It is our intention to set up a school Intranet for communication between members of the school community and for teaching purposes with a public web page to provide information and contact information for interested parties as well as stakeholders. This free access will enable the school to improve communication amongst teaching faculty, administration, students and parents.

Development of training activities and intranet resource improvements will require involvement of all users.

Administrative staff will continue to develop technology skills and awareness the support improvements to the operations of Commonwealth Academy and its structure. Tools such as Personal Data Assistants will be used to assess functionality of staff and conduct organized planning sessions. Equipment research will be conducted in an effort to reduce expenses such as labor, utilities and consumable supplies.

Cost analysis will be conducted to select technology equipment and programs that will yield the greatest impact on student academic performance and offer the highest level of instruction. The Board of Directors and the School Leader is committed to gaining and providing the resources to achieve the technology goals outlined in this plan.

## **Funding**

Funding will be sought from various venues such as:

- Grant Writing
- In-kind Donations
- Benefit Fund Raising
- E-Rate Funding

Donations and sponsorship by charitable organizations and local businesses will be sought wherever possible to cover increased costs. Fund-raising programs may be undertaken for specific technology expenses, such as new printers or computers.

## **5 YEAR BUDGET FOR TECHNOLOGY PLAN**

The budget represents a 3 year timeline to update existing technology components and add features that are non-existent. Implementation will be based upon the severity of need. A technology needs analysis was conducted with staff, parents and students and the outcomes are reflected herein.

	2011-12	2012-13	2013-14	2014-15	2015-16
3 Classroom Computer Cart sets (25 each)		\$ 30000			
4 Computers in Library		\$ 4,800			
Upgrade Microsoft Office	\$ 1000			\$ 1000	\$ 1000
Mathematics Software	\$ 3800	\$ 3800	\$ 3800	\$ 4000	\$ 4000
Social Studies Software	\$ 500	\$ 500	\$ 500	\$ 575	\$ 575
Reading Software	\$ 100	\$ 100	\$ 100	\$ 500	\$ 500
Writing Software	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500
Foreign Language Tutorial Software	\$ 125	\$ 125	\$ 125	\$1000	\$1000
Academic Games Subscriptions	\$ 4000	\$ 4000	\$ 4000	\$ 5000	\$ 5000
Typing/Keyboarding Tutorials	\$ 450	\$ 450	\$ 450	\$ 1000	\$ 1000
Site Licensing	\$ 1000	\$ 1000	\$ 1000	\$ 2000	\$ 2000
Universal Clock System	\$ 5,000				
Web Cameras	\$ 4,000				
Installation and Implementation	\$ 15,000	\$ 5,000	\$ 5,000		
Security Desk Locks	\$ 10,000				
Computer Technician	\$ 65,000 Annually	\$ 65,000 Annually	\$ 70,000 Annually	\$ 70,000	\$ 70,000
Certified Technology Teacher	\$ 45,000 Annually	\$ 50,000 Annually	\$ 55,000 Annually	\$57,000	\$57,000
Communication System (equipment & installation)	\$ 15000	\$ 5000	\$ 5000		
<b>Annual Totals</b>	<b>\$170,425</b>	<b>\$ 172,275</b>	<b>\$ 145,475</b>	<b>\$ 142,575</b>	<b>\$ 142,575</b>

Total Three Year Budget	\$ 773,325				
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## **Continuous Review Planning**

This plan is intended to constantly develop as new needs arise, rather than be a static document. For this reason, the plan is scheduled for regular monthly review during technology planning meetings in the initial stages of implementation and on a bi-annual basis thereafter. As new technologies develop and new ways to implement such technology within our school become apparent, the plan will reflect these changes. This plan will form a guide and an important feedback tool of our progress towards our technology goals.

## **Monitoring and Evaluation Process**

Staff has been involved in the creation of this plan and will continue to be involved in its monitoring and progress. Specific measurement tool will be drafted for assessment and feedback. The reports will be used to evaluate the effectiveness of programs and services and to chart the next steps during regular technology planning meetings.

### Implementation, Analysis and Review Timeline\*

August (Annually) - Major curriculum goals identified and implemented

Ongoing – Monthly Technology meetings will commence

Ongoing – Quarterly assessment of equipment needs

August 2011 – Report of next steps (Completed Annually)

\* The timeline above is to be re-enacted on an annual basis

## **Technology Coordination**

Overall coordination of the plan will be the responsibility of the school principal and administrators. All plans are subject to review and approval by the Board of Directors. Parental Involvement in planning and development of technology upgrades and systems is expected. Invitations are disseminated through the monthly parent meetings to participate in all school improvement efforts, including technology. Additionally, parents are recruited to experience technology by way of classroom visitations and to provide support to their children in the home.

## **Independent Review and Approval**

This plan will be submitted to the Wayne County Intermediate School District for review. Subject to review and upon approval, this plan will be forwarded to the Michigan Department of Education for documentation of satisfied requirements and certification to be placed on file.

3 Year Budget

On-Line

[www.techplan.org](http://www.techplan.org)