



MICHIGAN CENTER PUBLIC SCHOOLS DISTRICT TECHNOLOGY PLAN *7/1/2008 - 6/30/2011*



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SECTION I

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Intermediate School District: Jackson County Intermediate School District

URL for Technology Plan:

<http://www.mcps.k12.mi.us/education/components/docmgr/default.php?sectiondetailid=198&fileitem=22&catfilter=11>

Technology Planning Committee

| | |
|--------------------|-------------------------------|
| Doug Davis | Technology Director |
| Brady Cook | Principal |
| Karen Van de Water | Jr./Sr. High Media Specialist |
| Kate Murphy | Jr. High Teacher |
| Molly Scott | High School Teacher |
| Dan Spencer | High School Teacher |
| Damien Hiram | High School Teacher |
| Mike Edwards | Board Member |
| Kelly Lamon | Parent |

SECTION 2

1. District Technology Mission Statement

Various technologies will be acquired and supported by Michigan Center School District to enable students and staff to be self-directed in a changing environment. The technological content, methods and platforms used will be such that allow for adaptation and change which is based upon student outcomes set by the school district.

2. Introduction

Michigan Center School District covers an area of approximately 24 square miles in the southeast corner of Jackson County. Because of the proximity to the many lakes, there are a multitude of recreational activities available during all seasons. In the center of Michigan Center, Michigan Center Lake and Round Lake are parts of the chain of lakes that, beginning with Little Wolf Lake, stretch for ten miles.

Michigan Center is centrally located with easy access to several cities. We border Jackson, which is rapidly growing and has much to offer. Some of these attractions are Jackson Community College, the Space Center, Sharp Park and the world famous Cascades Park and Waterfall. To the east about 35 miles is Ann Arbor and the University of Michigan. About 75 miles to the east is Detroit and all of the activities that a major city has to offer. To the north about 35 miles is the state Capital, Lansing and Michigan State University in nearby East Lansing. The school district has an enrollment of about 1400 students and consists of the Jr/Sr High School (7-12), and two elementary buildings Keicher (3-6) and Arnold (K-2). Also a part of our educational system is the Teen Scene housed in the Clement building, and child care and pre-school located in the former Jr High building. Additionally, many enrichment programs and activities for all ages are provided by the district. There is also a parochial grade school located within the district boundaries. The total number of children in this community enrolled in parochial schools is around 125.

Michigan Center Schools are serviced by the Jackson County Intermediate School District, which serves our special needs students. A large variety of vocational classes are provided for juniors and seniors by the Jackson Area Career Center. Michigan Center is a class "C" school affiliated with the eight school Cascades Conference. We offer a wide variety of sports for our students including basketball, volleyball, football, wrestling, golf, cross country, track, softball, baseball and competitive cheerleading.

The total population of the district is estimated to be about 8,500. Seventy-five percent of the property in the district is residential with eighteen percent being commercial. The remaining property is split between farm and industrial. The major types of dwellings (98%) are single houses with a small portion being mobile homes (1.4%) and apartments (.5%). Just over three fourths of the voters have no children enrolled in schools. Our student enrollment has grown slightly over the past few years following a long period of decline. The high school curriculum varies from general or life prep classes to college prep classes. We require 25 credits for graduation. One half credits are given for each successfully completed class per semester. Within these 25 credits a student is required to have the following credits: English-4; Social Studies-3; Math-4; Science-3; Physical Ed./Health-1; Computers-1, and one semester of Visual, Performing or Fine Arts. Students enrolled at the Career Center receive 1 1/2 credits per semester. Also, a student must be full-time for eight semesters.

SECTION 3

1. Vision

Technology in Michigan Center Schools must be viewed as critical to school reform because of its capacity to support improvement in the educational process. A telecommunications system, with a "gateway" for voice, video, and data, must be accessible by all students and staff. Interaction via electronic mail, fax machine, video conferencing and research on the world wide web leading to problem solving must revolutionize the way students learn. Professional development programs must be provided to upgrade the technological skills of teachers, parents, and community members so that these resources may be used to their fullest potential. Finally, both the system used and related professional development need to be supportive of, and be anchored in the educational goals and objectives established by the district. Additionally, technology must be varied and recognized as ever-changing. It will continuously evolve, dramatically changing our perspectives. Technological advances will command both our continuous attention and recurring resources.

District technology must not become an end in itself. It must remain a means to an end. It must be an evolving process and a communications network that enables students and staff to carry out the process of education both differently and effectively. It must be directed toward increased learning, decreased operational costs, decreased dependence on rote, increased understanding and the maintenance of human dignity.

A technologically enriched curriculum in Michigan Center requires a learning environment that encompasses the following teaching and learning strategies: Active Learning: Students must share the responsibility for how and what they learn both individually and in teams. Technology must be aimed at providing a dimension to learning that parallels real-life situations. Access to Information: An expanded use of multiple technologies and information resources in a world with an expanding knowledge base. Teacher/Student Collaboration: An increased opportunity to break down the barriers of time, distance, age, and ability through the use of two-way interactive communication including voice, video, and data. Global Learning: The entire world must become an extension of the classroom through technological links. Students should be touched, perhaps on a daily basis, by other life-styles, cultures, and customs. Home/School/Community Link for Learning and Communication: The learning day must be extended, the learning audience must be expanded, and home to school communication must become enhanced through the use of technological systems. "School" should not be a specific place anymore - the process of learning must be on-going throughout a lifetime.

2. Goals

The following general goals have been developed to serve as the focus and guide for specific yearly plans Goal 1: Appropriate networks will be provided which support voice, data and video technologies within each building and throughout the district. Goal 2: Where appropriate, data, voice and video technologies will use the same medium. Goal 3: Networks continue to be open ended in design in order to support growth and change. Goal 4: Networks will continue to be capable of interfacing with other networks both within the district and outside. Goal 5: Software will be provided which supports the sharing of resources throughout the buildings, the district and the outside world. Goal 6: Technology continues to be provided which encourages

creative ventures in support of student learning. Goal 7: Staff will be provided with adequate support and training for using and applying existing technologies to student learning. Goal 8: Software will be provided which supports the curriculum and allows for growth and expansion. Goal 9: Technology will be provided which provides for the most efficient use of information resources used for support services and instruction. Goal 10: Wherever possible, networks need to use existing resources. Goal 11: Cooperative endeavors must be encouraged within the district and with outside resources in the application of technology to enhance and support student learning.

Guiding Documents for Technology Plan

1. Michigan Educational Technology Standards (METS) <http://techplan.org>
2. National Educational Technology Standards Project <http://cnets.iste.org>

Curriculum

Section 4

Curriculum Integration

The design of the curriculum is driven by the goals and performance indicators for student learning that are defined by the Michigan Core Curriculum, Bloom's taxonomy of thinking skills and differentiated instruction and professional learning communities. Teaching for High Performance serve as guides to this process. The design of the curriculum takes into account the learning needs and interests of the students. The curriculum is being clearly articulated and supports a shared vision for student learning. Curriculum committees consisting of staff from all levels are presently involved in reviewing and refining the K-12 curriculum. The school is committed to this on-going evaluation and renewal of the curriculum including the integration of technology. One advantage of integrating applications of technology in teaching strategies and learning activities is to empower teachers to provide students with learning experiences that would be impossible or difficult to achieve without it. As a result, technology is being promoted and used as a tool to aid in the instructional program. It is connected to the curriculum to help students engage themselves in their learning, not as an "extra". Effective instructional strategies and learning activities are employed to help students understand and apply technology. Information technology resources are employed to expand and strengthen the system of assessing student learning achievement of the essential knowledge and skills they need. All instruction is based on the Michigan Educational Technology Standards and Expectations.

Kindergarten - Third Grade

Students will be introduced to a broad range of technology. Students at this level will know how to use the various productivity tools (e.g. word processors, drawing tools, presentation software) and recognize which tool to use in each situation. Students will be able to identify

safe procedures for using basic telecommunication tools such as e-mail and phone. Instruction is based on the Michigan Educational Technology Standards and Expectations.

Fourth - Sixth Grade

Instructional emphasis will shift from basic care, toward the use of more advanced programs and technology for research and production. Students will begin to expand their knowledge base by creating basic multimedia presentations which include carefully selected materials. These materials include digital images, scanned images, and various electronic resources. Instruction is based on the Michigan Educational Technology Standards and Expectations.

Junior High School

Students will begin to work toward and achieve mastery of the various technological tools available including spelling and grammar checking on word processed documents, an introduction to spreadsheets and databases. They will also prepare multimedia projects with animation, voice and video, and the use of telecommunications. Instruction is based on the Michigan Educational Technology Standards and Expectations.

High School

High School students will utilize their skills in all aspects of technology throughout the 9-12 grade curriculums. Students will be able to identify common graphic, video, audio, and text file formats and demonstrate how to import/export each type. Students will also demonstrate how to proofread and edit a document using the application's spelling and grammar checking functions. By the end of their twelfth year, students will be ready to apply their skills to the objectives of higher learning or entry level work. Instruction is based on the Michigan Educational Technology Standards and Expectations.

Stages of Curriculum Integration

The following are stages of integration of technology into the curricular programs at each level. Although each building is at different stages of technological advancement and has various levels of implementation, all sites need to identify their appropriate level to begin. Ideally, the elementary schools will implement the initial stage and begin the intermediate stage. As a result, the junior high will implement the intermediate stage and go over the requirements for the advanced stage. The high school and adult school sites will concentrate on implementing the advanced stages.

| Equipment | Activities | Outcomes |
|--|---|--|
| Computer Laboratory -OR Classroom Computers -AND Other Resources | Introduction to: Basic Computer skills Appropriate typing skills Word processing Hypermedia Browsing Resources Multimedia CD's | Students will: demonstrate the writing process by using word processing access reference information in a variety of media formats develop critical thinking, problem solving and decision making skills through application |
| Computer Laboratory -OR Classroom Computers -AND Other Resources | Mastery Of: Basic Computer skills Appropriate typing skills Word processing Illustrations & Graphics Desktop Publishing Hypermedia Presentations Browsing Resources Multimedia CD's Library Resources Internet Resources | Students will: apply applications to core curriculum projects access and analyze reference information in a variety of media formats extend critical thinking, problem solving and decision making skills through application |
| Computer Laboratory -OR Classroom Computers -AND Other Resources | Mastery Of: Basic Computer skills Productivity Applications Hypermedia Presentations Browsing Resources Multimedia CD's Library Resources Internet Resources Telecommunications Information Exchange Home Page Creation | Students will: choose the appropriate applications to organize and access information in curricular activities integrate applications and resources to produce presentation materials access, analyze, evaluate and communicate reference information in a variety of media formats |

The District Technology Committee will be working throughout the next three years to continual review and revise the technology curriculum so it reflects and is aligned to the State and Nation technology standards. Technology integration is an ongoing process designed to insure that technology is integrated into all areas of education and aligned with the districts school improvement plan.

Section 5

Student Achievement

Michigan Center Schools students will benefit from educational technology as evidenced by the capacity to effectively demonstrate the following proficiencies:

K-2 Achievement

Basic operations and concepts

By the end of Grade 2 each student will:

1. understand that people use many types of technologies in their daily lives (e.g., computers, cameras, audio/video players, phones, televisions)
2. identify common uses of technology found in daily life
3. recognize, name, and will be able to label the major hardware components in a computer system (e.g., computer, monitor, keyboard, mouse, and printer)
4. identify the functions of the major hardware components in a computer system
5. discuss the basic care of computer hardware and various media types (e.g., diskettes, CDs, DVDs, videotapes)
6. use various age-appropriate technologies for gathering information (e.g., dictionaries, encyclopedias, audio/video players, phones, web resources)
7. use a variety of age-appropriate technologies for sharing information (e.g., drawing a picture, writing a story)
8. recognize the functions of basic file menu commands (e.g., new, open, close, save, print)
9. proofread and edit their writing using appropriate resources including dictionaries and a class developed checklist both individually and as a group

Social, Ethical, and Human Issues

By the end of Grade 2 each student will:

1. identify common uses of information and communication technologies
2. discuss advantages and disadvantages of using technology
3. recognize that using a password helps protect the privacy of information
4. discuss scenarios describing acceptable and unacceptable uses of age-appropriate technology (e.g., computers, phones, 911, internet, email) at home or at school
5. discuss the consequences of irresponsible uses of technology resources at home or at school
6. understand that technology is a tool to help complete a task
7. understand that technology is a source of information, learning, and entertainment
8. identify places in the community where one can access technology

Technology Productivity Tools

By the end of Grade 2 each student will:

1. know how to use a variety of productivity software (e.g., word processors, drawing tools, presentation software) to convey ideas and illustrate concepts
2. be able to recognize the best type of productivity software to use for certain age-appropriate tasks (e.g., word processing, drawing, web browsing)
3. be 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

Technology Communications Tools

By the end of Grade 2 each student will:

1. identify procedures for safely using basic telecommunication tools (e.g., e-mail, phones) with assistance from teachers, parents, or student partners
2. know how to use age-appropriate media (e.g., presentation software, newsletters, word processors) to communicate ideas to classmates, families, and others
3. 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

Technology Research Tools

By the end of Grade 2 each student will:

1. know how to recognize the Web browser and associate it with accessing resources on the internet
2. use a variety of technology resources (e.g., CD-ROMs, DVDs, search engines, websites) to locate or collect information relating to a specific curricular topic with assistance from teachers, parents, or student partners
3. interpret simple information from existing age-appropriate electronic databases (e.g., dictionaries, encyclopedias, spreadsheets) with assistance from teachers, parents, or student partners
4. provide a rationale for choosing one type of technology over another for completing a specific task

Technology Problem-Solving and Decision-Making Tools

By the end of Grade 2 each student will:

1. discuss how to use technology resources (e.g., dictionaries, encyclopedias, search engines, websites) to solve age-appropriate problems
2. identify ways that technology has been used to address real-world problems (personal or community)

Grades 3-5 Achievement

Basic Operations and Concepts

By the end of Grade 5 each student will:

1. discuss ways technology has changed life at school and at home
2. discuss ways technology has changed business and government over the years

3. 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
4. know how to use basic input/output devices and other peripherals (e.g., scanners, digital cameras, video projectors)
5. know proper keyboarding positions and touch-typing techniques
6. manage and maintain files on a hard drive or the network
7. demonstrate proper care in the use of hardware, software, peripherals, and storage media
8. know how to exchange files with other students using technology (e.g., e-mail attachments, network file sharing, diskettes, flash drives)
9. 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
10. identify search strategies for locating needed information on the internet
11. 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

Social, Ethical, and Human Issues

By the end of Grade 5 each student will:

1. identify cultural and societal issues relating to technology
2. discuss how information and communication technology supports collaboration, productivity, and lifelong learning
3. discuss how various assistive technologies can benefit individuals with disabilities
4. discuss the accuracy, relevance, appropriateness, and bias of electronic information sources
5. 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
6. discuss basic issues regarding appropriate and inappropriate uses of technology (e.g., copyright, privacy, file sharing, spam, viruses, plagiarism) and related laws
7. use age-appropriate citing of sources for electronic reports
8. identify appropriate kinds of information that should be shared in public chat rooms
9. identify safety precautions that should be taken while on-line
10. explore various technology resources that could assist in pursuing personal goals
11. identify technology resources and describe how those resources improve the ability to communicate, increase productivity, or help achieve personal goals

Technology Productivity Tools

By the end of Grade 5 each student will:

1. 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. know how to insert various objects (e.g., photos, graphics, sound, video) into word processing documents, presentations, or web documents
3. use a variety of technology tools and applications to promote creativity

4. understand that existing (and future) technologies are the result of human creativity
5. collaborate with classmates using a variety of technology tools to plan, organize, and create a group project

Technology Communications Tools

By the end of Grade 5 each student will:

1. use basic telecommunication tools (e.g., e-mail, WebQuests, IM, blogs, chat rooms, web conferencing) for collaborative projects with other students
2. 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
3. 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)

Technology Research Tools

By the end of Grade 5 each student will:

1. use Web search engines and built-in search functions of other various resources to locate information
2. describe basic guidelines for determining the validity of information accessed from various sources (e.g., web site, dictionary, on-line newspaper, CD-ROM)
3. know how to independently use existing databases (e.g., library catalogs, electronic dictionaries, encyclopedias) to locate, sort, and interpret information on an assigned topic
4. perform simple queries on existing databases and report results on an assigned topic
5. identify appropriate technology tools and resources by evaluating the accuracy, appropriateness, and bias of the resource
6. compare and contrast the functions and capabilities of the word processor, database, and spreadsheet for gathering data, processing data, performing calculations, and reporting results

Technology Problem-Solving and Decision-Making Tools

By the end of Grade 5 each student will:

1. use technology resources to access information that can assist in making informed decisions about everyday matters (e.g., which movie to see, which product to purchase)
2. 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)

Grades 6-8 Achievement

Basic Operations and Concepts

By the end of Grade 8 each student will:

1. use proper keyboarding posture, finger positions, and touch-typing techniques to improve accuracy, speed, and general efficiency in operating a computer
2. use appropriate technology terminology
3. use a variety of technology tools (e.g., dictionary, thesaurus, grammar-checker, calculator) to maximize the accuracy of technology-produced products

4. understand that new technology tools can be developed to do what could not be done without the use of technology
5. describe strategies for identifying and preventing routine hardware and software problems that may occur during everyday technology use
6. 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)
7. discuss common hardware and software difficulties and identify strategies for troubleshooting and problem solving
8. identify characteristics that suggest that the computer system hardware or software might need to be upgraded
9. identify a variety of information storage devices (e.g., floppies, CDs, DVDs, flash drives, tapes) and provide a rationale for using a certain device for a specific purpose
10. identify technology resources that assist with various consumer-related activities (e.g., budgets, purchases, banking transactions, product descriptions)
11. identify appropriate file formats for a variety of applications
12. use basic utility programs or built-in application functions to convert file formats
13. 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

Social, Ethical, and Human Issues

By the end of Grade 8 each student will:

1. understand the potential risks and dangers associated with on-line communications
2. identify security issues related to e-commerce
3. discuss issues related to acceptable and responsible use of technology (e.g., privacy, security, copyright, plagiarism, spam, viruses, file-sharing)
4. describe possible consequences and costs related to unethical use of information and communication technologies
5. discuss the societal impact of technology in the future
6. provide accurate citations when referencing information from outside sources in electronic reports
7. use technology to identify and explore various occupations or careers
8. discuss possible uses of technology (present and future) to support personal pursuits and lifelong learning
9. identify uses of technology to support communication with peers, family, or school personnel

Technology Productivity Tools

By the end of Grade 8 each student will:

1. apply common software features (e.g., thesaurus, formulas, charts, graphics, sounds) to enhance communication and to support creativity
2. use a variety of technology resources, including the internet, to increase learning and productivity
3. explore basic applications that promote creativity (e.g., graphics, presentation, photo-editing, programming, video-editing)

4. use available utilities for editing pictures, images, or charts
5. use collaborative tools to design, develop, and enhance materials, publications, or presentations

Technology Communications Tools

By the end of Grade 8 each student will:

1. 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
2. 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

Technology Research Tools

By the end of Grade 8 each student will:

1. use a variety of Web search engines to locate information
2. evaluate information from various online resources for accuracy, bias, appropriateness, and comprehensiveness
3. identify types of internet sites based on their domain names (e.g., edu, com, org, gov, au)
4. know how to create and populate a database
5. perform queries on existing databases
6. know how to create and modify a simple database report
7. evaluate new technology tools and resources and determine the most appropriate tool to use for accomplishing a specific task

Technology Problem-Solving and Decision-Making Tools

By the end of Grade 8 each student will:

1. use database or spreadsheet information to make predictions, develop strategies, and evaluate decisions to assist with solving a basic problem
2. describe the information and communication technology tools to use for collecting information from different sources, analyze findings, and draw conclusions for addressing real-world problems

Grades 9-12 Achievement

Basic Operations and Concepts

By the end of Grade 12 each student will:

1. discuss emerging technology resources (e.g., pod casting, web casting, compressed video delivery, online file sharing, graphing calculators, global positioning software)
2. identify the capabilities and limitations of emerging communication resources
3. understand the importance of both the predictable and unpredictable impacts of technology
4. identify changes in hardware and software systems over time and discuss how these changes might affect the individual personally in his/her role as a lifelong learner
5. understand the purpose, scope, and use of assistive technology
6. understand that access to online learning increases educational and workplace opportunities

7. be provided with the opportunity to learn in a virtual environment as a strategy to build 21st century learning skills
8. understand the relationship between electronic resources, infrastructure, and connectivity
9. routinely apply touch-typing techniques with advanced accuracy, speed, and efficiency
10. assess and solve hardware and software problems by using online help or other user documentation and support
11. identify common graphic, audio, and video file formats (e.g., jpeg, gif, bmp, mpeg, wav)
12. demonstrate how to import/export text, graphics, or audio files
13. proofread and edit a document using an application's spelling and grammar checking functions

Social, Ethical, and Human Issues

By the end of Grade 12 each student will:

1. identify legal and ethical issues related to use of information and communication technology
2. analyze current trends in information and communication technology and assess the potential of emerging technologies for ethical and unethical uses
3. discuss possible long-range effects of unethical uses of technology (e.g., virus spreading, file pirating, hacking) on cultures and society
4. discuss the possible consequences and costs of unethical uses of information and computer technology
5. identify ways that individuals can protect their technology systems from unethical or unscrupulous users
6. demonstrate the ethical use of technology as a digital citizen and lifelong learner
7. explain the differences between freeware, shareware, and commercial software
8. adhere to fair use and copyright guidelines
9. create appropriate citations for resources when presenting research findings
10. adhere to the district acceptable use policy as well as state and federal laws
11. explore career opportunities and identify their related technology skill requirements
12. design and implement a personal learning plan that includes technology to support his/her lifelong learning goals

Technology Productivity Tools

By the end of Grade 12 each student will:

1. complete at least one online credit, or non-credit, course or online learning experience
2. use technology tools for managing and communicating personal information (e.g., finances, contact information, schedules, purchases, correspondence)
3. have access to and utilize assistive technology tools
4. apply advanced software features such as an application's built-in thesaurus, templates, and styles to improve the appearance of word processing documents, spreadsheets, and presentations
5. identify technology tools (e.g., authoring tools or other hardware and software resources) that could be used to create a group project
6. use an online tutorial and discuss the benefits and disadvantages of this method of learning
7. develop a document or file for inclusion into a web site or web page
8. use a variety of applications to plan, create, and edit a multimedia product (e.g., model, web cast, presentation, publication, or other creative work)

9. have the opportunity to participate in real-life experiences associated with technology-related careers

Technology Communications Tools

By the end of Grade 12 each student will:

1. identify and describe various telecommunications or online technologies (e.g., desktop conferencing, listservs, blogs, virtual reality)
2. use available technologies (e.g., desktop conferencing, e-mail, groupware, instant messaging) to communicate with others on a class assignment or project
3. use a variety of media and formats to design, develop, publish, and present products (e.g., presentations, newsletters, web sites) to communicate original ideas to multiple audiences
4. collaborate in content-related projects that integrate a variety of media (e.g., print, audio, video, graphic, simulations, and models) with presentation, word processing, publishing, database, graphics design, or spreadsheet applications
5. plan and implement a collaborative project using telecommunications tools (e.g., groupware, interactive web sites, videoconferencing)

Technology Research Tools

By the end of Grade 12 each student will:

1. compare, evaluate, and select appropriate internet search engines to locate information
2. formulate and use evaluation criteria (authority, accuracy, relevancy, timeliness) for information located on the internet to present research findings
3. determine if online sources are authoritative, valid, reliable, relevant, and comprehensive
4. distinguish between fact, opinion, point of view, and inference
5. evaluate resources for stereotyping, prejudice, and misrepresentation
6. develop a plan to gather information using various research strategies (e.g., interviews, questionnaires, experiments, online surveys)

Technology Problem-Solving and Decision-Making Tools

By the end of Grade 12 each student will:

1. use a variety of technology resources (e.g., educational software, simulations, models) for problem solving and independent learning
2. describe the possible integration of two or more information and communication technology tools or resources to collaborate with peers, community members, and field experts
3. formulate a research question or hypothesis, then use appropriate information and communication technology resources to collect relevant information, analyze the findings, and report the results to multiple audiences

Section 6

Technology Delivery

There is direct access to the internet from every classroom and instructional area in the district. Wireless technology may be phased in to enable the utilization of electronic resources in any learning environment. Video sources are available through the new Jackson County Intermediate School District (JCISD) county wide digital network.

Virtual fieldtrips, academic classes and other distance learning events via JCISD will be explore with the possibility of installing a distance learning classroom in the district. On line classes are offered through the Michigan Virtual University allowing students advanced placement classes that are not offered in the district.

Section 7

Parental/Community Relations

The Michigan Center School District website (<http://www.mcps.k12.mi.us>) features district information, newsletters, current events, activities, and announcements. School open houses and technology nights give parents and the community an opportunity to see the integration of technology in the classroom. Parents and students can also check on homework assignments and grades by navigating to <http://mcps.schooloffice.com/MCPS/parentconnect/>. Parents are encouraged to communicate electronically with teachers. The staff contact directory can be found on the Contact Directory Link on the left hand side of the homepage. Parents are also welcome to participate in the development of the district technology plan. This plan is put together by the technology committee which consists of staff, community members, and board members.

The Michigan Center School District currently does not have any adult education or English as a second language programs. At this time this section's requirements are not addressed in this plan. These issues will be added if the district adds these programs in the future.

Section 8

Collaboration

Where available, monetary support from outside sources will be utilized to support and enhance the district technology plan. The district has worked with a local organization, The Jackson Community Foundation, to fulfill the goal of bringing multimedia to the schools. Our District will work closely with JCISD, keeping informed of current funding and collaborative technology opportunities.

Our District Technology Committee will review funding sources, apply for grants (i.e. USF e-rate) and make recommendations to the Superintendent.

Our District will continue to make use of our capital outlay funds and monitor / adjust to respond to current State and local financial situations.

Professional Development

Section 9

Strategies

To provide continuous training for staff in all areas of technology. This is an ongoing process that will take place each year. Content in these areas will be based on need and feedback from staff.

To provide staff with training on how to integrate technology into their classroom /content area. Professional development time is set aside at the beginning of each school year for this area. Staff will be trained on how to use projectors to incorporate technology in the classroom.

Utilize contractual in-service and common planning days to offer technology training. Various days are set aside for technology training throughout the school year. These days are determined year by year based on the school calendar negotiated by teachers and administration.

Professional development may be obtained through computer literacy / integration courses offered by the Michigan Center School District, JCISD, area colleges or universities, or through conferences offered by outside sources. Instructors for the computer literacy courses will be obtained from the present staff, staff from area schools, JCISD or an outside consultant may be hired.

Section 10

Supporting Resources

Professional development will occur through various computer literacy / integration courses offered through the Michigan Center School District, through JCISD, through area colleges and universities, through Michigan Virtual University or through conferences offered by other sources outside the district.

Infrastructure, Hardware, Technical Support and Software

Section 11

Infrastructure Needs /Technical Specifications and Design

This plan is an organized method of planning for the addition and replacement of existing district technology. It will develop priorities for the expenditure of district funds for this purpose. We realized many of our goals in the previous technology plan and feel we are doing a good job providing technology for our students and staff. We will use the state wide REMC bid for procuring many of our voice, data and video needs. In addition, since we are part of a county wide network (WAN), we will continue to collaborate with JCISD to assure upgrade and compatibility issues as well as getting the best value for our dollar.

Voice Technology

Telephones are located in the offices and teacher workrooms. Each building has at least one FAX machine. Plans are in place to include a phone in every classroom, giving teachers greater access to real-time parent/teacher communication.

Data Technology

The district's network technology is comprised of a Local Area Network. The Jr./Sr. High School server runs Novell Netware 6.0 which provides internet access to the district. It also supports curriculum-based applications such as Accelerated Reader and library checkout

software. Arnold and Keicher share a Netware 6.5 server which sits in the Jr./Sr. High. It also supports applications such as Accelerated Reader and library checkout software. The superintendent's office has a Netware 6.0 server which supports the central office administrative applications and finance software for the district. The building network topology consists of Ethernet networks utilizing Category 5 rated 100MB copper twisted pair backbones. Currently, we are in the process of upgrading this to Cat 6. Each computer is connected to the Ethernet network via 10/100MB network interface card. All schools are connected via fiber connection. The high school server is connected to a fiber link with the Jackson County ISD.

Within each district building, teachers and administrators have access to a desktop computer in their work area. Arnold Elementary school has one main computer lab. Keicher has two computer labs. One lab is for instruction only and one is for open use. There is one main computer lab at the Jr./Sr. High library. There is also one computer lab for computer class only. The library lab is available to students, faculty, staff, and community (after school) use. Instruction and Internet research is the main use for those labs. Administrators and teachers have e-mail accounts through our server. The district supports Novell GroupWise as the e-mail package. Each Windows compatible computer uses Microsoft Office as the standard instructional office suite software for the district.

Video Technology

All district classes have access to a mobile TV/VCR on a cart. Currently, we are adding projector to most classrooms. Each building has several LCD projectors available for check out that can be connected to their teacher workstation. This connection allows the teacher to display on a projection screen whatever is displayed on the teacher's monitor. This enables the entire class to view any Internet or software generated image that the teacher chooses to display. This "extra" use of the teacher's computer is a powerful interactive tool that will make classroom instruction come "alive". The buildings also have image scanners and digital cameras. These image generators play an increasing important role in teachers' lesson plans as teachers incorporate student work or as students use the computers to generate projects. The student's ability to manipulate the written word and the visible images is critical to the student's overall understanding of the technology revolution we are now witnessing.

Technical Support

Each district building has a technology contact person that is the first point of contact. The Technology contact determines how the request is to be addressed. Both in-house and contracted services are resources used to address the district's technology needs.

Michigan Center School District has a long relationship with Data Management Consultants Inc (DMCI). Generally, if a question about hardware or networking comes up that can't be handled on-site, DMCI technicians can answer the questions over the phone or come out to perform the required solution. Michigan Center School District's Technology Director and computer teachers shadow the technician when they are on-site to learn more about the network so that future support cost can be reduced.

The Jackson Intermediate School District provides monthly technology meetings for area technology directors to attend and collaborate with each other on technological issues.

Jackson Intermediate School District also provides technology training for interested Michigan Center School District staff members on a variety of topics.

Following is our three year upgrade and replacement schedule:

2008-2009

Replace Keicher Lab (CEC)
 Purchase interactive white boards for district
 Purchase data projectors for district
 Internet Costs
 Network Licenses
 Antivirus Software Licenses
 Software
 Computer Supplies
 Lab control software
 Purchase CPS Click and Examview Software
 Rewire entire district with new cable and network electronics.
 Upgrade phone system

2009-2010

Replace Arnold/Keicher teacher machines
 Hardware upgrades
 Replace High School Server
 In-service for staff
 Internet Costs
 Network Licenses
 Antivirus Software Licenses
 Software
 Computer Supplies

2010-2011

Replace Jr/Sr High Library Lab
 Hardware upgrades
 In-service for staff
 Internet Costs
 Replace Jr. High Lab
 Network Licenses
 Antivirus Software Licenses
 Software
 Computer Supplies

Section 12

Increase access

Our district will continue to monitor our internet access speed and modify if needed.
 Our district will continue to monitor our streaming (digital) video accessibility and adjust if

needed.

Our district will continue to monitor the speed and reliability of desktop computers throughout the district and replace when necessary.

Our district will monitor our voice system to assure reliable communication.

Our district will monitor our local area network and adjust as needed.

Our district will monitor students in need of assistive technology and implement when needed.

Section 13

Budget and Timetable - Proposed Technology Budget

Timeline and budget covering the acquisition, implementation, interoperability, maintenance and professional development related to the use of technology to improve student academic achievement. Our future budgets are projections based on existing knowledge and with projected budgets for K-12 education uncertain, our budgets are uncertain as well.

| Account | Description | 2008-09 | 2009-10 | 2010-11 |
|-----------|----------------------|-----------|-----------|-----------|
| 111153100 | INSTRUCT TECH - ARN | \$1,000 | \$1,030 | \$ 1,061 |
| 111153300 | INSTRUCT TECH - KCH | \$1,000 | \$1,030 | \$ 1,061 |
| 111153400 | INSTRUCT TECH - JH | \$1,000 | \$1,030 | \$ 1,061 |
| 111153440 | INSTRUCT TECH - HS | \$1,000 | \$1,030 | \$ 1,061 |
| 111364000 | TECH PREP EQUIPMENT | \$3,000 | \$3,090 | \$3,183 |
| 122141000 | TECH INSERVICE - ARN | \$1,500 | \$1,545 | \$1,591 |
| 122143000 | TECH INSERVICE - KCH | \$1,500 | \$1,545 | \$1,591 |
| 122144000 | TECH INSERVICE - HS | \$3,000 | \$3,090 | \$3,183 |
| 122482250 | INTERNET - JCISD | \$2,500 | \$2,575 | \$2,652 |
| 126134000 | COMMUNICATIONS | \$2,266 | \$2,334 | \$2,404 |
| 126134100 | TELEPHONE | \$15,965 | \$16,444 | \$16,937 |
| 128151000 | DATA WAREHOUSE | \$0 | \$2,700 | \$4,725 |
| 122515000 | TECH DIRECTOR | \$48,223 | \$49,670 | \$51,160 |
| 122516000 | TECH SECRETARY | \$6,626 | \$6,825 | \$7,030 |
| 128421300 | TECH H&A | \$5,620 | \$5,789 | \$5,962 |
| 128428200 | TECH RET | \$9,306 | \$9,585 | \$9,873 |
| 128428300 | TECH M FICA | \$4,474 | \$4,608 | \$4,746 |
| 128428400 | WORKERS COMP - TECH | \$222 | \$229 | \$236 |
| 128431900 | WEB HOSTING | \$5,475 | \$5,639 | \$5,808 |
| 128432100 | TRAVEL TECH | \$400 | \$400 | \$400 |
| 128434100 | TECH COMM/TELE | \$1,030 | \$1,061 | \$1,093 |
| 128442700 | DP MAINT CONT | \$40,000 | \$41,200 | \$42,436 |
| 128459000 | DP SUPPLIES - ELEM | \$2,000 | \$2,060 | \$2,122 |
| 128459000 | DP SUPPLIES - JH/HS | \$5,000 | \$5,150 | \$5,305 |
| 122559110 | COMP SUPP AR | \$600 | \$618 | \$637 |
| 122559130 | COMP SUPP KCH | \$800 | \$824 | \$849 |
| 122559140 | COMP SUPP JH | \$600 | \$618 | \$637 |
| 122559140 | COMP SUPP HS | \$1,500 | \$1,545 | \$1,591 |
| 128464000 | TECHNOLOGY EQUIPMENT | \$60,000 | \$61,800 | \$63,564 |
| | TOTALS | \$225,607 | \$232,363 | \$239,334 |

Section 14

Coordination of Resources

Our District will work closely with JCISD and MDE, keeping informed of current funding and collaborative technology opportunities.

Our District Technology Committee will review funding sources, apply for grants (i.e. USF e-rate) and make recommendations to the Superintendent.

Our District will continue to make use of our capital outlay funds and monitor/ adjust to respond to current State and local financial situations.

Monitoring and Evaluation

Section 15

Evaluation

The following represents the major plan components and the evaluation model for Michigan Center Schools technology implementation over the next three years. Currently, Michigan Center School District has formed two committees. The first committee is the Strategic Planning Committee consisting of staff and community members. The goal of this committee is to determine long range goals for the district and see to it that they are followed through. The committee meets twice a year to evaluate, re-focus, and/or establish new goals. From this committee, the Technology Committee has been formed. The specific purpose of this committee is to establish and evaluate specific technology needs, goals, and ideas. This committee will follow through on the evaluation process by using surveys, student testing, and evaluation indicators. The Technology committee, teachers, and administrators will evaluate the success of these goals. Any goal not met will be re-evaluated to determine what didn't work and how it can be accomplished in the future. Below are those goals and success indicators for each goal:

1. Incorporate multimedia into the curriculum. Seventy-five percent of the student body at the ninth grade level will demonstrate competency in using multimedia resources for presentation.
2. Incorporate technology in the K-12 curriculum using MI Educational Technology Standards and Expectations.
 - a.) Fifty percent of the grade 3-12 curriculum will incorporate technology as a support.
 - b.) Eighty-five percent of graduating students will be competent in word-processing and using technology in research.
3. Provide staff Training. Eighty-five percent of administrators and staff will have been trained and demonstrate competency in the application of technology in the performance of their job.
4. Provide Internet access screening. One hundred percent of all incoming information from outside resources will be evaluated and screened using local legal, ethical and community standards.

5. Expand adult technology literacy. One hundred percent of adults will be provided with the opportunity to reach a basic level of computer literacy.
6. Expand Tech prep. Seventy-five percent of graduates shall have taken at least two courses in Tech. Prep between the 7th and 12th grades.
7. Develop technology support services for staff. Ninety-five percent of the staff will indicate adequate technological support is available for them to perform their job effectively and efficiently.
8. Continue to develop networked resources. Ninety-five percent of the staff will indicate adequate networked resources available to perform their job effectively and efficiently.
9. Expand technology available in the district to incorporate video. One hundred percent video access, which supports the curriculum, will be provided at every level.

Section 16

Acceptable Use Policy

Michigan Center School District encourages and strongly promotes the use of electronic information technologies in educational endeavors. The district provides access to information resources available in a variety of electronic formats and for the development of information management skills. Together these allow learners to access current and relevant resources, provide the opportunity to communicate in a technologically rich environment and assist them to become responsible, self-directed, life-long learners.

Approved: 4/17/96, reviewed 5/2008

REGULATIONS

Michigan Center School District is responsible for the management of the structure, hardware and software that the district uses to allow access to information technologies for educational purposes. These include:

- a. Assigning and removing of member accounts on the network(s);
- b. Maintenance and repair of equipment that comprise the network(s);
- c. Selection of software that the network will support as well as the use of filtering software on all student machines connected to the Internet;
- d. Electronic Information Access and Use Policy;
- e. Defining the rights/responsibilities of members;
- f. Providing training opportunities on the use and application of information technology, including training and information on new technologies, software and media as they are acquired and put into use in the district.
- g. Providing Technology Protection Measures, per the Child Internet Protection Act [CIPA], used to block or filter Internet access to pictures and content that:
 1. Are obscene
 2. Contain child pornography
 3. Are harmful to minors
 4. The district determines is "inappropriate to minors"

The district does not take responsibility for resources located or actions taken by the members that do not support the purposes of the school district.

Network Members

All network members on the Michigan Center School District network will be granted access to all services the network offers. The following people may use district technology and may hold accounts on the Michigan Center School District Network:

1. Students -- Students who are currently enrolled in the district may be granted a network account upon agreement to the terms stated in this policy.
2. Faculty and Staff -- Staff members currently employed by the district may be granted a network account upon agreement to the terms stated in this policy.
3. Others -- Anyone may request a special account on the Michigan Center School District network. These requests will be granted on a case-by-case basis, depending on need and resource availability.

Rights and Responsibilities of Members

Members have the right:

To use all authorized hardware and software for which they have received training to facilitate learning and enhance educational information exchange.

To access district networks and the outside resources to retrieve information to facilitate learning and enhance education information exchange.

Members have the conditional and limited rights to sign up for listservs, bulletin boards, chat rooms, e-mail exchange and newsgroups on the Internet which facilitate learning and enhance educational information exchange. Recreational use is prohibited.

Members are responsible for:

Utilizing technology in the school only for facilitating learning and enhancing educational information exchange consistent with the purposes of the school.

Attending appropriate training sessions in the use and care of hardware, software and networks and refraining from using any technology for which they have not received training.

Adhering to the rules established for the use of hardware, software, labs and networks in the school or through remote access outside of the school.

Maintaining the privacy of passwords and are prohibited from publishing or discussing passwords.

Having all disks or videos scanned for virus, dirt or other contamination which might endanger the integrity of district hardware, software or networks before they are used in district systems.

All material received via the Internet under their account. They accept responsibility for keeping all pornographic material, inappropriate files, or files dangerous to the integrity of the school's network, equipment, or software from entering the school via the Internet or from being reproduced in visual, digital or written format.

Making all subscriptions to listservs or newsgroups known to the system administrator and seeking prior approval before requesting such subscriptions on the Internet.

Maintaining the integrity of the electronic mail (e-mail) system, reporting any violations of privacy and making only those e-mail contacts which facilitate learning and enhance educational information exchange.

Adhering to copyright guidelines in the use of hardware and software and in the transmission or copying of text or files on the Internet or from other resources.

Members are prohibited from:

Using the technology for personal or private business, for product advertisement or political lobbying, or for making any financial commitments on the Internet.

The malicious use of technology to disrupt the use of technology by others, to harass or discriminate against others, and to infiltrate unauthorized computer systems.

Consequences of Inappropriate Network Behavior

Any member who does not comply with the Information Access and Use Policy will lose network privileges. Repeated or severe infractions of the policy will result in permanent termination of privileges.

The system administrator will determine what is inappropriate use based on Electronic Information Access and Use Policy and the administrator's decision is final.

Members violating any of these rights and responsibilities may face additional disciplinary action deemed appropriate in keeping with the disciplinary policies and guidelines of the district.

Challenges

Challenges to district information resources or policies shall be made in writing and shall state the reasons for the challenge. A district appointed panel shall review the challenge and determine its appropriateness.

Definitions

DISTRICT EQUIPMENT - includes, but is not limited to, computers, disk drives, printers, scanners, networks, video and audio recorders, cameras, photocopiers, phones and other related electronic resources.

SOFTWARE - includes, but is not limited to, computer software, print and non-print resources.

NETWORK - includes, but is not limited to, all voice, video and data systems.