

Section 1: Cover Page

Cheboygan Area Schools DISTRICT EDUCATIONAL TECHNOLOGY PLAN

Start Date: July 1, 2010

End Date: June 30, 2013

File Creation Date: October 6, 2009

School Code: 16015

Intermediate School District: Cheboygan-Otsego-Presque Isle
Educational Service District

Technology Plan URL: <http://www.chebschools.com>

Cheboygan Area Schools
504 Division Street
Cheboygan, Michigan 49721
Phone: 231.627.4436
Fax: 231.627.9105

Mark Dombroski, Superintendent
dombroskim@cheboygan.k12.mi.us

Section 2: Introductory Material

Mission Statement

“Provide and teach all students the curriculum necessary to develop their knowledge base and learning skills to enable them to function as responsible and informed members of a changing society.”

District Introduction Profile

Cheboygan Area Schools is a northern, rural, K-12 school district located at the tip of the mitt with a population of 2,032 students. There is one kindergarten and first grade building; one second, third, and fourth grade building; one middle school for grades 5-8; and one high school for grades 9-12. In addition, an alternative school services 48 students (grades 7-12) who need an alternative approach to the traditional educational setting. We employ 9 administrators, 5 directors, 99 instructional staff, and 135 support staff. We have 1181 students enrolled in the National Free and Reduced Lunch Program as of January 2010.

School Buildings

Cheboygan Area Schools Board of Education Office

504 Division Street
Cheboygan, Michigan 49721
231.627.4436
Mark Dombroski, Superintendent
Carol Clark, Business Director
David McCauslin, Technology Director

Cheboygan Area High School (9-12)

801 West Lincoln Avenue
Cheboygan, Michigan 49721
231.627.7191
Michele Ackerman, Principal
Mark Oberman, Assistant Principal
Jacqueline Herman, CTE Administrator

Cheboygan Middle School (5-8)

905 West Lincoln Avenue
Cheboygan, Michigan 49721
231.627.7103
Linda Chase, Principal

East Elementary (2-4)

440 Garfield
Cheboygan, Michigan 49721
231.627.5211
Sandra Jeannotte, Principal

West Elementary (K-1)

512 Pine Street
Cheboygan, Michigan 49721
231.627.2362
Cathleen Stone, Principal

Cheboygan Alternative High School (7-12)

504 Division Street
Cheboygan, Michigan 49721
231.627.5613
Steven Parker, Administrator

Maintenance and Transportation

801-1/2 West Lincoln Avenue
Cheboygan, Michigan 49721
231.627.4422
Pete Dobrowolski,
Maintenance and Transportation Director

Food Service

801 West Lincoln Avenue
Cheboygan, Michigan 49721
231.627.6591
Sue Engstrom, Food Service Director

Section 3: Vision and Goals

Technology Vision Statement

Our vision is to provide an integrated learning environment wherein students and staff become familiar with and utilize current and future technologies.

Goals and Realistic Strategies of the Technology Plan

Our strategic plan therefore contains strategies for us to achieve the following goals:

Curriculum Goal: To integrate the use of technology in all curricular areas as needed to enhance student learning. Technology is to be used as a tool for teaching and learning.

Professional Development Goal: Encourage the effective integration of technology into the classroom through needs-based professional development and ongoing support.

Technology Infrastructure Goal: To provide as much access to technology tools while maintaining a 95% up time on the equipment.

Budget and Funding Goal: To maximize the use of our funds spent on technology while continually looking at the total cost of ownership and to seek out other alternative sources of funding for technology.

Monitoring and Evaluation Goal: Implementing the use of an evaluation tool to identify instructional needs and monitor progress in order to improve student achievement.

Technology Plan Long-Term Vision

The purpose of this plan is to provide a guideline for the appropriate and effective learning use of technology. This plan is a living document that will be reviewed bi-annually and revised annually to keep abreast of changing technology and district needs.

Integration of the Technology Plan with the District Mission and School Improvement Plan

As curriculum is revised and updated annually, the technology benchmarks/objectives are integrated into the student's use of study. The overall Cheboygan Area Schools Mission Statement aligns seamlessly with our Technology Vision Statement and the academic goals contained in the District School Improvement Plan. The overall theme of all three documents is to increase student achievement in preparation for the next step - whether it be from school to school or from school to work.

Goals Alignment

Technology is an integral part of our district plan and our building school improvement plans. This technology plan has been developed to support and promote district goals in an embedded, integrated capacity.

Section 4: Curriculum Integration

Goals Aligned to State and National Standards

- To integrate the use of technology in all curricular areas as the needs are determined.
- Technology is to be used as a tool for teaching and learning.

These goals will be measured by a representative group of district staff meets periodically to review our K-12 Technology Curriculum and address the ever changing needs of our students based upon current research and best practices in curriculum integration and ensures alignment with state and national standards.

The following chart illustrates the process for curriculum updates and alignment:

CHEBOYGAN AREA SCHOOLS Align and Write the Curriculum Five Year Cycle

YEAR 1 2005-2006 Review & Align	YEAR 2 2006-2007 Review & Update	YEAR 3 2007-2008 Review & Align	YEAR 4 2008-2009 Review & Align	YEAR 5 2009-2010 Review & Align
<ul style="list-style-type: none"> ▪ K-8 Social Studies ▪ K-8 Science ▪ K-8 English-Language Arts ▪ K-8 Math ▪ 9-12 Special Education 	<ul style="list-style-type: none"> ▪ K-12 Math ▪ K-12 Art ▪ K-12 Music ▪ K-12 Physical Education ▪ 4-12 Health Education 	<ul style="list-style-type: none"> ▪ 6-12 Math ▪ K-12 Social Studies ▪ 6-12 English-Language Arts ▪ K-12 Science 	<ul style="list-style-type: none"> ▪ K-5 Reading ▪ 6-12 Math ▪ 6-12 English-Language Arts ▪ 6-12 Science ▪ K-12 Social Studies 	<ul style="list-style-type: none"> ▪ K-5 Reading ▪ 6-12 Math ▪ 6-12 English-Language Arts ▪ 11-12 Science ▪ K-12 Social Studies
Review and Update: <ul style="list-style-type: none"> ▪ K-12 English-Language Arts ▪ K-12 Social Studies 	Write Common Local Assessments: <ul style="list-style-type: none"> ▪ 6-12 Math ▪ 6-12 English-Language Arts ▪ 6-12 Science ▪ 6-12 Social Studies 	Write Common Local Assessments: <ul style="list-style-type: none"> ▪ 2-11 Math ▪ 6-12 English-Language Arts ▪ 5-12 Science ▪ 3-12 Social Studies 	Write Common Local Assessments: <ul style="list-style-type: none"> ▪ 6-12 Math ▪ 6-12 English-Language Arts ▪ 5-12 Science ▪ 3-10 Social Studies 	Write Common Local Assessments: <ul style="list-style-type: none"> ▪ 6-12 Math ▪ 6-12 English-Language Arts ▪ 11-12 Science ▪ 3-10 Social Studies
Address High School Reform		Embed technology objective	Embed technology objective	Embed technology objective
Include Grade Level Content Expectations (K-8)	Write Middle School Technology Curriculum	Address High School Reform: <ul style="list-style-type: none"> ▪ Delivery System ▪ Course/Credit Requirements ▪ Highly Qualified Teachers 	Address High School Reform: <ul style="list-style-type: none"> ▪ Delivery System ▪ Course/Credit Requirements ▪ Highly Qualified Teachers ▪ Personal Curriculum 	Address High School Reform: <ul style="list-style-type: none"> ▪ Delivery System ▪ Course/Credit Requirements ▪ Highly Qualified Teachers
Embed technology objective	Embed technology objective	CTE curriculum alignment to the new high school course credit requirements and state and federal standards	CTE curriculum alignment to the new high school course credit requirements and state and federal standards	CTE curriculum alignment to embed academic credit to meet MME requirements
		Address middle school enrichment courses	Address middle school enrichment courses	

Strategies

Cheboygan Area Schools are committed to identifying and promoting curricula and teaching strategies that integrate technology effectively into the classroom to achieve our educational goals. The district adheres to the following guidelines when integrating technology across the curriculum:

1. The district will use a defined curriculum process to regularly review and update curriculum, instructional strategies, instructional resources, as well as assessment strategies and resources, in all content areas to improve academic achievement.
2. The district will annually review and update a district assessment plan that includes benchmark assessments in core content areas. The purpose of student assessment is to collect information for the purpose of continually improving student learning. This assessment data will be reviewed and analyzed by the District School Improvement Committee.
3. Assessment data, including end of year tests, will be used to identify students not mastering grade level expectations. Building and content area specific strategies will be developed to meet the needs of failing or at risk of failing students.
4. Community resources: community education programs supported by the public library, the Cheboygan Area Chamber of Commerce, and North Central Michigan College will be utilized to support growth toward attainment of district goals.
5. On an annual basis, the Board of Education will approve annual district goals presented by the District School Improvement Team and the Technology Committee.

Technology Integration

Technology integration is part of every curriculum review. With increased access to technology, it becomes easier to integrate the curriculum resources that are more technology based. The completion of the computer education curriculum also helps to promote and meet state technology standard benchmarks including the 8th grade technology completion standards.

Technology Education / Curriculum Revision Overview

For each grade, K-8, grade level expectations have been defined. At each grade level, outcomes are defined in each of the following areas: a) basic operations and concepts; b) keyboarding; c) word processing software; d) file management; e) curriculum linked software (presentation software, Excel/graphing, concept mapping, other); and f) social, ethical, and human issues.

In addition to the K-8 courses that all students take, students in grades 6-12 have elective course opportunities in the area of technology. Our curriculum instructional plan provides coverage of all state mandated technology and computer education standards for grades K-8.

The draft chart below is a summary of curriculum teaching strategies for grade level technology integration.

Grade	Key Skills	Instructional Approach
K	<ul style="list-style-type: none"> ▪ Basic skills and simple terms ▪ Introduction to the Read, Write, and Type Program 	<ul style="list-style-type: none"> ▪ Students will be introduced to lab and lab procedures. ▪ Students will begin to use the Read, Write, and Type Program.
1	<ul style="list-style-type: none"> ▪ Basic skills and simple terms ▪ Read, Write, and Type Program: Mastery of "Home Row" 	<ul style="list-style-type: none"> ▪ Students will be reintroduced to lab and lab procedures. ▪ Students will use the Read, Write, and Type Program. An expectation for completion of the program to a defined level will be established.
2	<ul style="list-style-type: none"> ▪ Basic skills and terms ▪ Read, Write, and Type Program: Completion of Level 10 	<ul style="list-style-type: none"> ▪ Students will be reintroduced to lab and lab procedures. ▪ Students will use the Read, Write, and Type Program. Expectation - all students complete through final level.
3	<ul style="list-style-type: none"> ▪ Expanded basic skills ▪ Keyboarding ▪ Introduction to word processing ▪ Exposure to presentation software and concept mapping 	<ul style="list-style-type: none"> ▪ All the Write Type keyboarding software. There will be a defined grade level expectation for competency. ▪ Word processing skills incorporated into lessons in which students have guides for publishing written work.
4	<ul style="list-style-type: none"> ▪ Expanded basic skills, including file management and H:drive ▪ Keyboarding ▪ Word processing - changing layout, formatting, adding Clip Art ▪ File management ▪ Exposure to presentation software and concept mapping 	<ul style="list-style-type: none"> ▪ All the Write Type keyboarding software. Students will start at beginning, review, and be expected to "complete" the program. ▪ Expanded word processing expectations incorporated into lessons in which students have guides for publishing written work.
5	<ul style="list-style-type: none"> ▪ Expanded basic skills ▪ Keyboarding review ▪ Word processing ▪ Introduction to presentation software 	<ul style="list-style-type: none"> ▪ All the Write Type keyboarding software - students will do as a review and should be able to achieve mastery quickly. ▪ Word processing and presentation software presented using model integrated lessons with checklists of skills to be taught and used in project.
6-8	<ul style="list-style-type: none"> ▪ Expanded basic skills ▪ Word processing ▪ Presentation software ▪ Concept mapping ▪ Database ▪ Spreadsheet 	<ul style="list-style-type: none"> ▪ Word processing and presentation software presented using model integrated lessons with checklists of skills to be taught and used in project. ▪ 12 week courses that all students take in grades 6-8.
9-12	<ul style="list-style-type: none"> ▪ Increased use of technology (i.e., web access for textbooks) across subject areas 	<ul style="list-style-type: none"> ▪ See Cheboygan Area High School Curriculum Guide ▪ Required 9th grade technology course (2 trimesters) ▪ Interest based electives available to students in grades 10-12

Section 5: Student Achievement

Ongoing throughout the duration of this plan will be the expectation that the investment that Cheboygan Area Schools has made in technology will result in the outcome of increased student achievement throughout every subject area. Technology is an every day tool available to support instruction and learning. The timeline will be the duration of this plan to fully implement the technology curriculum at each level and technology integration in each subject area.

Technology Education Curriculum (Draft) Kindergarten

Strand		Student Outcome (The student will . . .)	Instructional Notes	Timeline
A. Basic Operations and Concepts	1. Basic Skills	<ul style="list-style-type: none"> ▪ Recognize the following parts of a computer: <ul style="list-style-type: none"> ▪ Monitor/screen ▪ Keyboard ▪ Mouse ▪ Printer ▪ Turn on, as well as properly shut down their computer ▪ Log in using the generic login password and username ▪ Be able to do the following with a mouse: <ul style="list-style-type: none"> ▪ Move and aim ▪ Click/double click ▪ Click and drag 		2010-2011
	2. Vocabulary	Know the meaning of the following terms and be able to respond to directions using them: <ul style="list-style-type: none"> ▪ Monitor/screen ▪ Keyboard ▪ Mouse ▪ Printer ▪ Click/double click ▪ Aim ▪ Drag 		2010-2011
B. Keyboarding		<ul style="list-style-type: none"> ▪ Follow teacher directions to sit properly in a chair in front of a computer ▪ Place their point fingers on the “f” and “j” keys 	<ul style="list-style-type: none"> ▪ Sit up tall ▪ Sit on pockets ▪ Students will be exposed to Level 1 of Read, Write, and Type 	2010-2011

**Technology Education Curriculum (Draft)
Grade 1**

Strand		Student Outcome (The student will . . .)	Instructional Notes	Timeline
A. Basic Operations and Concepts	1. Basic Skills	<ul style="list-style-type: none"> ▪ Be able to do the following with a mouse: <ul style="list-style-type: none"> ▪ Right click ▪ Find and know the function of: <ul style="list-style-type: none"> ▪ Enter key ▪ Space bar ▪ Backspace ▪ Shift ▪ Close box ▪ Log on to the network using the generic login as well as his or her personal username and password ▪ Recognize the following parts of the computer: <ul style="list-style-type: none"> ▪ CD Rom drive / floppy drive ▪ Cursor (insertion point) 	<ul style="list-style-type: none"> ▪ Also see Kindergarten for additional basic skills 	2010-2011
	2. Vocabulary	Know the meaning of the following terms and be able to respond to directions using them: <ul style="list-style-type: none"> ▪ Right click ▪ Enter key ▪ Space bar ▪ Backspace ▪ Shift ▪ CD Rom drive ▪ Floppy drive ▪ Cursor ▪ Close box ▪ Network ▪ Log in ▪ Password 	<ul style="list-style-type: none"> ▪ Also see Kindergarten for additional vocabulary 	2010-2011
B. Keyboarding		<ul style="list-style-type: none"> ▪ Sit properly in a chair at a computer workstation ▪ Identify and place fingers on the "home keys" ▪ Use their left hand to type certain keys ▪ Use their right hand to type certain keys ▪ Use their thumbs for the space bar ▪ Type the following letters with the appropriate finger and key: f, a, t, c, j, h, i, s, k, d, n, r, e 	<ul style="list-style-type: none"> ▪ Sit up tall ▪ Sit on pockets ▪ Eyes forward ▪ This equates to completing through Level 5 of Read, Write, and Type 	2010-2011
C. Word Processing Software		<ul style="list-style-type: none"> ▪ Find and access a word processing document (i.e., Max Write) 		
D. File Management				
E. Curriculum Linked Software				

F. Social, Ethical, and Human Issues	<ul style="list-style-type: none"> ▪ Be told that Internet use is appropriate with adult supervision only ▪ Discuss scenarios describing appropriate and inappropriate uses of technology (e.g. phones, computers, 911, email, Internet) ▪ Identify places in the community where they can access technology (e.g. library) 		2010-2011
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**Technology Education Curriculum (Draft)
Grade 2**

Strand		Student Outcome (The student will . . .)	Instructional Notes	Timeline
A. Basic Operations and Concepts	1. Basic Skills	<ul style="list-style-type: none"> ▪ Be able to access programs ▪ Be able to change text size and font by selecting words or sentences ▪ Be able to find and use the minimize and maximize buttons ▪ Be able to retrieve and save documents in a word processing document 	<ul style="list-style-type: none"> ▪ Also see Kindergarten and Grade 1 for additional basic skills 	2011-2012
	2. Vocabulary	<p>Know the meaning of the following terms and be able to respond to directions using them:</p> <ul style="list-style-type: none"> ▪ Save ▪ Open ▪ Start menu ▪ Text ▪ Minimize ▪ Maximize ▪ Font ▪ Ergonomics (i.e., “sit up tall”, “sit on pockets”) 	<ul style="list-style-type: none"> ▪ Also see Kindergarten and Grade 1 for additional basic skills 	2011-2012
	3. Troubleshooting	<p>Recognize computer failures, including:</p> <ul style="list-style-type: none"> ▪ No response to print commands ▪ Improper username/password ▪ Frozen computer <p>Once the student recognizes the failure, the teacher can troubleshoot</p>		2011-2012
B. Keyboarding		<ul style="list-style-type: none"> ▪ Sit properly in a chair at a computer workstation ▪ Identify and place fingers on the “home keys” ▪ Use their left hand to type certain keys ▪ Use their right hand to type certain keys ▪ Use their thumbs for the space bar ▪ Type the following letters with the appropriate finger and key: f, a, t, c, j, h, i, s, k, d, n, r, e, o, l, p, u, g, m, b, y, z, w, v, q, x 	<ul style="list-style-type: none"> ▪ Sit tall ▪ Sit on your pockets ▪ Look forward ▪ This equates to completing the Read, Write, and Type program 	2011-2012
C. Word Processing Software		<ul style="list-style-type: none"> ▪ Find and access a word processing document (i.e., Max Write) ▪ Identify the proper program for word processing 		2011-2012
D. File Management				2011-2012
E. Curriculum Linked Software				2011-2012

<p>F. Social, Ethical, and Human Issues</p>	<ul style="list-style-type: none"> ▪ Be told that Internet use is appropriate with adult supervision only ▪ Discuss scenarios describing appropriate and inappropriate uses of technology (e.g. phones, computers, 911, email, Internet) ▪ Identify places in the community where they can access technology (e.g. library) 		<p>2011-2012</p>
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**Technology Education Curriculum (Draft)
Grade 3**

Strand		Student Outcome (The student will . . .)	Instructional Notes	Timeline
A. Basic Operations and Concepts	1. Basic Skills	<ul style="list-style-type: none"> ▪ Log on to the network using user name and password ▪ Open files from portable storage devices (e.g. CDs, thumb drives) ▪ Use pull down menu to save files ▪ Use pull down menu to open files ▪ Use pull down menu to print ▪ Properly shut down the computer using the start menu ▪ Properly log off the computer using the start menu ▪ Recognize that different types of software are used for different purposes ▪ Use the mouse to: <ul style="list-style-type: none"> ▪ Select words ▪ Aim correctly ▪ Double click ▪ Right click ▪ Left click ▪ Close programs using: <ul style="list-style-type: none"> ▪ File exit ▪ File close ▪ The "X" in the upper right hand corner ▪ Open programs using Novel window icons ▪ Identify individual H: drive ▪ Identify and use earphones ▪ Use volume controls (right click) to adjust sound and to mute sound ▪ Print to a desired printer 		2011-2012
	2. Concepts	<ul style="list-style-type: none"> ▪ Use technology tools to learn, increase productivity and enhance creativity 		2011-2012
	3. Communication	<ul style="list-style-type: none"> ▪ Use a variety of media formats ▪ Use available proofreading and editing tools 		2011-2012
	4. Research Tools	<ul style="list-style-type: none"> ▪ Identify and use age appropriate strategies for locating needed information on the Internet (this may involve going to pages pre-identified by teacher or following links from teacher web pages) 		2011-2012
	5. Problem Solving and Decision Making			2011-2012

	6. Vocabulary	<p>Use accurate technology terminology, including the following:</p> <ul style="list-style-type: none"> ▪ Identify input devices - keyboard and mouse ▪ CPU/processor, disk drive, cursor, I-bar ▪ Identify output devices - monitor and printer ▪ KB, MB, and GB ▪ Download, desktop, laptop, server, Novell window, floppy disk, disk drive, CD Rom, portable storage device, CD Rom/DVD drive, soft boot, hard boot, minimize, maximize, restore, right click, left click 		2011-2012
	7. Troubleshooting	<ul style="list-style-type: none"> ▪ Recognize a non-responsive computer (to keyboard or mouse commands) ▪ Recognize failure to respond to print command ▪ Locate open files which are minimized 		2011
B. Keyboarding		<ul style="list-style-type: none"> ▪ Identify and use the home row keys A, S, D, F, J, K, L, ; ▪ Consistently keep fingers on home row and reach for all other keys ▪ Access keys R, I, G, H, O, V, T, Y, B, C, M, N, P, Q, W, X, ', , , ? from the home row ▪ Identify and use: <ul style="list-style-type: none"> ▪ Space bar ▪ Return/enter ▪ Delete ▪ Backspace ▪ The shift keys ▪ Period key ▪ Use ergonomic posture (hand, arm, and leg position) 	<ul style="list-style-type: none"> ▪ This equates to demonstration of mastery through Level 13 of <i>All the Write Type</i> or equivalent to new software purchases 	2011-2012

<p>C. Word Processing Software</p>	<ul style="list-style-type: none"> ▪ Manipulate the layout of a document using: <ul style="list-style-type: none"> ▪ Line spacing ▪ Align left ▪ Align right ▪ Add Clip Art / import ▪ Spell check using the menu and/or the F7 key ▪ Recognize that shortcuts for commonly used editing tools exist ▪ Recognize: <ul style="list-style-type: none"> ▪ CTRL C (copy) ▪ CTRL V (paste) ▪ Use the mouse to: <ul style="list-style-type: none"> ▪ Minimize ▪ Maximize ▪ Select (highlight) words ▪ Copy ▪ Cut ▪ Paste ▪ Copy, cut, paste using the edit menu ▪ Select (highlight) words and/or sentences to change text size and font using the format menu ▪ Change text size and font using the toolbar icons ▪ Change text using file → menu, shortcuts, or icons: <ul style="list-style-type: none"> ▪ Center ▪ Bold ▪ Underline ▪ Italic ▪ Use the arrow keys to move the cursor (insertion point) to a line of text 	<p>Curriculum linked projects for teaching these skills include the following:</p> <ul style="list-style-type: none"> ▪ Published pieces from writing workshop ▪ Reports (science and social studies) and other informational presentations <p>Teacher created rubrics for presentations may include expectations for word processing (e.g. imported Clip Art, alignment of text, formatting of text)</p>	<p>2011-2012</p>
<p>D. File Management</p>	<ul style="list-style-type: none"> ▪ Save work in personal drives ▪ With teacher guidance, put in organized "Save" folder ▪ Save to a desired location ▪ Retrieve and save documents using the file menu ▪ Save information using file → save, file → save as ▪ Name files to be saved using meaningful file names 		<p>2011-2012</p>

E. Curriculum Linked Software	1. Presentation	<ul style="list-style-type: none"> ▪ Be exposed to presentation software and its practical uses 	Modeling by teacher	2011-2012
	2. Excel / Graphing	<ul style="list-style-type: none"> ▪ 	Introduced at teacher's discretion (graphing tools)	2011-2012
	3. Concept Mapping	<ul style="list-style-type: none"> ▪ 	Exposure to concept mapping software introduced at teacher's discretion	2011-2012
	4. Other (specify)		Exposure to digital cameras at teacher's discretion	2011-2012
F. Social, Ethical, and Human Issues		<ul style="list-style-type: none"> ▪ Only access website if given permission by an adult ▪ Only access acceptable websites ▪ Understand and comply with the Acceptable Use Policy ▪ Demonstrate proper care in the use of technology equipment and devices ▪ Use age appropriate citing of sources ▪ Discuss appropriate and inappropriate uses of technology ▪ Identify appropriate kinds of information that should be shared electronically ▪ Identify safety precautions that should be taken online ▪ Develop positive attitudes towards technology ▪ Understand that technology development is the result of human creativity 	www.netsmartz.org as resource for Internet safety - this is a web-based resource maintained by the National Center for Missing and Exploited Children and the Boys and Girls Clubs of America	2011-2012

Technology Education Curriculum (Draft)
Grade 4

Strand		Student Outcome (The student will . . .)	Instructional Notes	Timeline
A. Basic Operations and Concepts	1. Basic Skills	<ul style="list-style-type: none"> ▪ Log on to the network using user name and password ▪ Open files from portable storage devices (e.g. CDs, thumb drives) ▪ Use pull down menu to save files ▪ Use pull down menu to open files ▪ Use pull down menu to print ▪ Properly shut down the computer using the start menu ▪ Properly log off the computer using the start menu ▪ Recognize that different types of software are used for different purposes ▪ Use the mouse to: <ul style="list-style-type: none"> ▪ Select words ▪ Aim correctly ▪ Double click ▪ Right click ▪ Left click ▪ Close programs using: <ul style="list-style-type: none"> ▪ File exit ▪ File close ▪ The "X" in the upper right hand corner ▪ Open programs using Novel window icons ▪ Identify individual H: drive ▪ Identify and use earphones ▪ Use volume controls (right click) to adjust sound and to mute sound ▪ Print to a desired printer 		2012-2013
	2. Concepts	<ul style="list-style-type: none"> ▪ Use technology tools to learn, increase productivity and enhance creativity 		2012-2013
	3. Communication	<ul style="list-style-type: none"> ▪ Use a variety of media formats ▪ Use available proofreading and editing tools 		2012-2013
	4. Research Tools	<ul style="list-style-type: none"> ▪ Identify and use age appropriate strategies for locating needed information on the Internet (e.g. following identified links from teacher web pages) 		2012-2013
	5. Problem Solving and Decision Making			2012-2013

	6. Vocabulary	<p>Use accurate technology terminology, including the following:</p> <ul style="list-style-type: none"> ▪ Identify input devices - keyboard and mouse ▪ CPU/processor, disk drive, cursor, I-bar ▪ Identify output devices - monitor and printer ▪ KB, MB, and GB ▪ Download, desktop, laptop, server, Novell window, floppy disk, disk drive, CD Rom, portable storage device, CD Rom/DVD drive, soft boot, hard boot, minimize, maximize, restore, right click, left click 		2012-2013
	7. Troubleshooting	<ul style="list-style-type: none"> ▪ Recognize a non-responsive computer (to keyboard or mouse commands) ▪ Recognize failure to respond to print command ▪ Locate open files which are minimized 		2012-2013
B. Keyboarding		<ul style="list-style-type: none"> ▪ Identify and use the home row keys A, S, D, F, J, K, L, ; ▪ Consistently keep fingers on home row and reach for all other keys ▪ Access keys R, I, G, H, O, V, T, Y, B, C, M, N, P, Q, W, X, ', , , ? from the home row ▪ Access numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 0 from the home row ▪ Identify and use: <ul style="list-style-type: none"> ▪ Space bar ▪ Return/enter ▪ Delete ▪ Backspace ▪ The shift keys ▪ Period key ▪ Use ergonomic posture (hand, arm, and leg position) 	<ul style="list-style-type: none"> ▪ This equates to demonstration of mastery of content of <i>All the Write Type</i> 	2012-2013

C. Word Processing Software	<ul style="list-style-type: none"> ▪ Manipulate the layout of a document using: <ul style="list-style-type: none"> ▪ Line spacing ▪ Align left ▪ Align right ▪ Add Clip Art - import, position, manipulate graphics ▪ Use Word Art ▪ Spell check using the menu and the F7 key ▪ Recognize that shortcuts for commonly used editing tools exist ▪ Recognize: <ul style="list-style-type: none"> ▪ CTRL C (copy) ▪ CTRL V (paste) ▪ Use the mouse to: <ul style="list-style-type: none"> ▪ Minimize ▪ Maximize ▪ Select (highlight) words ▪ Copy ▪ Cut ▪ Paste ▪ Copy, cut, paste using the edit menu ▪ Select (highlight) words and/or sentences to change text size and font using the format menu ▪ Change text size and font using the toolbar icons ▪ Change text using file → menu, shortcuts, or icons: <ul style="list-style-type: none"> ▪ Center ▪ Bold ▪ Underline ▪ Italic ▪ Use the arrow keys to move the cursor (insertion point) to a line of text 	<p>Curriculum linked projects for teaching these skills include the following:</p> <ul style="list-style-type: none"> ▪ Published pieces from writing workshop ▪ Reports (science and social studies) and other informational presentations <p>Rubrics for published project may include expectations for word processing; skill demonstration in areas of inclusion of graphics, use of Word Art, text alignment, and text formatting</p>	2012-2013
D. File Management	<ul style="list-style-type: none"> ▪ Save work in personal drives ▪ With teacher guidance, put in organized "Save" folder ▪ Save to a desired location ▪ Retrieve and save documents using the file menu ▪ Save information using file → save, file → save as ▪ Name files to be saved using meaningful file names 		2012-2013

E. Curriculum Linked Software	1. Presentation	<ul style="list-style-type: none"> ▪ Be exposed to presentation software and its practical uses 	Teacher modeling	2012-2013
	2. Excel / Graphing		Introduced at teacher's discretion	2012-2013
	3. Concept Mapping		Exposure to concept mapping software introduced at teacher's discretion	2012-2013
	4. Other (specify)		Exposure to digital cameras at teacher's discretion	2012-2013
F. Social, Ethical, and Human Issues		<ul style="list-style-type: none"> ▪ Only access website if given permission by an adult ▪ Only access acceptable websites ▪ Understand and comply with the Acceptable Use Policy ▪ Demonstrate proper care in the use of technology equipment and devices ▪ Use age appropriate citing of sources ▪ Discuss appropriate and inappropriate uses of technology ▪ Identify appropriate kinds of information that should be shared electronically ▪ Identify safety precautions that should be taken online ▪ Develop positive attitudes towards technology ▪ Understand that technology development is the result of human creativity 	www.netsmartz.org as resource for Internet safety - this is a web-based resource maintained by the National Center for Missing and Exploited Children and the Boys and Girls Clubs of America	2012-2013

**Technology Education Curriculum (Draft)
Grade 5**

Strand		Student Outcome (The student will . . .)	Instructional Notes	Timeline
A. Basic Operations and Concepts	1. Basic Skills	<ul style="list-style-type: none"> ▪ Log on to the network using user name and password ▪ Recognize “read only” files ▪ Open files ▪ Use pull down menus (e.g. to save files, to open files, to print) ▪ Properly shut down the computer using the start menu ▪ Properly log off the computer using the start menu ▪ Use the mouse or touchpad to: <ul style="list-style-type: none"> ▪ Select words ▪ Aim correctly ▪ Double click ▪ Right click ▪ Left click ▪ Close programs using: <ul style="list-style-type: none"> ▪ File exit ▪ File close ▪ The “X” in the upper right hand corner ▪ Open programs using Novel window icons ▪ Identify the specific type of hardware needed for each task ▪ Identify individual H: drive ▪ Identify and use earphones ▪ Use volume controls (right click) to adjust sound and to mute sound ▪ Select printer ▪ Change printer ▪ Print to a desired printer ▪ Print selection ▪ Print specific pages 		2012-2013
	2. Concepts	<ul style="list-style-type: none"> ▪ Use technology tools to learn, increase productivity and enhance creativity ▪ Use technology in group settings to produce creative work 		2012-2013
	3. Communication	<ul style="list-style-type: none"> ▪ Use a variety of media formats ▪ Use available proofreading and editing tools ▪ Use technology to collaborate, interact, and publish ▪ Know how to exchange files with others using technology (e.g. shared drives, email, external storage devices) 	Used shared drives and dedicated servers for posting book reviews and book recommendations	2012-2013

	4. Research Tools	<ul style="list-style-type: none"> ▪ Identify and use age appropriate strategies for locating needed information on the Internet ▪ Independently use existing databases (e.g. Grolier Online, Encarta) ▪ Use technology to locate, evaluate, and collect information 	Coordinate with media specialist to teach use of research tools for social studies and science projects	2012-2013
	5. Problem Solving and Decision Making	<ul style="list-style-type: none"> ▪ Use technology resources to make informed decisions ▪ Use online references to make informed decisions ▪ Access online newspapers, movie guides, compare prices or political candidates ▪ Use technology tools as needed (calculators, DVDs, educational software for problem solving and decision making) 		2012-2013
	6. Vocabulary	<p>Use accurate technology terminology, including:</p> <ul style="list-style-type: none"> ▪ Identify input devices - keyboard and mouse ▪ CPU/processor, disk drive, cursor, I-bar ▪ Identify output devices - monitor and printer ▪ KB, MB, and GB ▪ Download, desktop, laptop, server, Novell window, floppy disk, disk drive, CD Rom, portable storage device, CD Rom/DVD drive, soft boot, hard boot, minimize, maximize, restore, right click, left click 		2012-2013
	7. Troubleshooting	<ul style="list-style-type: none"> ▪ Recognize a non-responsive computer (to keyboard or mouse commands) ▪ Recognize failure to respond to print command ▪ Locate open files which are minimized 		2012-2013

<p>B. Keyboarding</p>	<ul style="list-style-type: none"> ▪ Identify and use the home row keys A, S, D, F, J, K, L, ; ▪ Consistently keep fingers on home row and reach for all other keys ▪ Access keys R, I, G, H, O, V, T, Y, B, C, M, N, P, Q, W, Z, X, ' , , , ? from the home row ▪ Access numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 0 from the home row ▪ Identify and use: <ul style="list-style-type: none"> ▪ Space bar ▪ Return/enter ▪ Delete ▪ Backspace ▪ The shift keys ▪ Period key ▪ Use ergonomic posture (hand, arm, and leg position) 	<ul style="list-style-type: none"> ▪ This equates to demonstration of mastery of content of <i>All the Write Type</i> ▪ Students will review keyboarding skills by working through the program as a review at the beginning of Grade 5 	<p>2012-2013</p>
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<p>C. Word Processing Software</p>	<ul style="list-style-type: none"> ▪ Use the undo and redo tool ▪ Manipulate the layout of a document using: <ul style="list-style-type: none"> ▪ Margins ▪ Tabs ▪ Line spacing ▪ Align left ▪ Align right ▪ Align center ▪ Align justify ▪ Add graphics - import, position, manipulate ▪ Use Word Art ▪ Spell check using the menu and the F7 key ▪ Recognize that shortcuts for commonly used editing tools exist ▪ Recognize: <ul style="list-style-type: none"> ▪ CTRL C (copy) ▪ CTRL V (paste) ▪ CTRL Z (undo) ▪ Use the mouse to: <ul style="list-style-type: none"> ▪ Minimize ▪ Maximize ▪ Select (highlight) words ▪ Copy ▪ Cut ▪ Paste ▪ Copy, cut, paste using the edit menu ▪ Select (highlight) words and/or sentences to change text size and font using the format menu ▪ Change text size and font using the toolbar icons ▪ Change text using file → menu, shortcuts, or icons: <ul style="list-style-type: none"> ▪ Center ▪ Bold ▪ Underline ▪ Italic ▪ Use the arrow keys to move the cursor (insertion point) to a line of text ▪ Add bullets ▪ Add headers ▪ Add footers 	<p>Curriculum linked projects for teaching these skills include the following:</p> <ul style="list-style-type: none"> ▪ Endangered species reports ▪ Science Fair project presentation ▪ Space/explorer informational captions for mobiles ▪ Reading response and journals ▪ Published pieces from writing workshop component of ELA curriculum <p>Rubrics for published writing and research should include expectations that include defined word processing skills</p>	<p>2012-2013</p>
<p>D. File Management</p>	<ul style="list-style-type: none"> ▪ Save and organize saved work in folders and on personal drives ▪ Save work to desired location in personal drives ▪ Save to different formats (e.g. Word to Rich Text Format or to other compatible formats) ▪ Rename folders and documents ▪ Save documents using the file menu ▪ Save information using file → save, file → save as ▪ Name files to be saved with meaningful names 		<p>2012-2013</p>

E. Curriculum Linked Software	5. Presentation	<ul style="list-style-type: none"> ▪ Create presentations with slides that can also be viewed in the outline format ▪ Create a presentation using combined slides ▪ Add text boxes and text to a slide ▪ Choose an appropriate slide template from the slide menu (if blank slide used, information will not appear in the outline format) ▪ Add background color or pictures to slides ▪ Use and insert any graphics to slides ▪ Use and insert Clip Art to slides ▪ Add additional text boxes and graphics to slides ▪ Use paint tools to illustrate a slide ▪ Reorganize slides using the “slide sorter” view ▪ Insert transitions between slides ▪ Use (not overuse) transitions effectively ▪ Reorganize slides using the sorter menu ▪ Select words and/or sentences to change text size and font using the format menu ▪ Change text size and font using the toolbar icons 	<p>Curriculum linked projects for teaching these skills include the following:</p> <ul style="list-style-type: none"> ▪ Endangered species presentation ▪ Revolutionary War biographical presentation ▪ Science Fair presentation <p>Rubrics for presentations should include expectations for demonstration of knowledge of these identified skills</p>	2012-2013
	2. Excel / Graphing		Exposure to Excel and graphing functions introduced at teacher's discretion	2012-2013
	3. Concept Mapping		Exposure to concept mapping software introduced at teacher's discretion	2012-2013
	4. Other (specify)		Exposure to digital cameras, video, and movie production programs at teacher's discretion	2012-2013

<p>F. Social, Ethical, and Human Issues</p>	<ul style="list-style-type: none"> ▪ Only access website when given permission by an adult ▪ Only access acceptable websites ▪ Recognize that the authors or publishers of the items copied from electronic sources should be credited ▪ Demonstrate knowledge of the required source information for giving credit to authors of graphics used ▪ Understand and comply with the Acceptable Use Policy ▪ Demonstrate proper care in the use of technology equipment and devices ▪ Use age appropriate citing of sources ▪ Discuss appropriate and inappropriate uses of technology ▪ Identify appropriate kinds of information that should be shared electronically ▪ Identify safety precautions that should be taken online ▪ Develop positive attitudes towards technology ▪ Understand that technology development is the result of human creativity ▪ Practice responsible use of technology systems, information, and software 	<p>www.netSMARTZ.org as resource for Internet safety - this is a web-based resource maintained by the National Center for Missing and Exploited Children and the Boys and Girls Clubs of America</p>	<p>2012-2013</p>
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Technology Education Curriculum (Draft)
Grade 6 / 12 weeks

Strand		Student Outcome (The student will . . .)	Instructional Notes	Timeline
A. Basic Operations and Concepts	1. Basic Skills	<ul style="list-style-type: none"> ▪ Log on to the network using user name and password ▪ Recognize “read only” files ▪ Open files ▪ Use pull down menus (e.g. to save files, to open files, to print) ▪ Properly shut down the computer using the start menu ▪ Properly log off the computer using the start menu ▪ Use the mouse or touchpad to: <ul style="list-style-type: none"> ▪ Select words ▪ Aim correctly ▪ Double click ▪ Right click ▪ Left click ▪ Close programs using: <ul style="list-style-type: none"> ▪ File exit ▪ File close ▪ The “X” in the upper right hand corner ▪ Open programs using Novel window icons ▪ Identify the specific type of hardware needed for each task ▪ Open programs using Start → Program ▪ Identify individual H: drive ▪ Identify and use earphones ▪ Use volume controls (right click) to adjust sound and to mute sound ▪ Select printer ▪ Change printer ▪ Print to a desired printer ▪ Print selection ▪ Print specific pages 		2010-2011
	2. Concepts	<ul style="list-style-type: none"> ▪ Use technology tools to learn, increase productivity and enhance creativity ▪ Use technology in group settings to produce creative work 		2010-2011
	3. Communication	<ul style="list-style-type: none"> ▪ Use a variety of media formats ▪ Use available proofreading and editing tools ▪ Use technology to collaborate, interact, and publish ▪ Know how to exchange files with others using technology (e.g. shared drives, email, external storage devices) 	Use of class bulletin board and class server sites for book reviews and recommendations	2010-2011

	4. Research Tools	<ul style="list-style-type: none"> ▪ Identify and use age appropriate strategies for locating needed information on the Internet ▪ Independently use existing databases (e.g. Grolier Online, Encarta) ▪ Use technology to locate, evaluate, and collect information ▪ Use technology to collaborate, plan, organize, and create a project ▪ Create a project using a variety of media and formats to present content information to an audience 	Curriculum linked projects for teaching these skills include the following: <ul style="list-style-type: none"> ▪ Business relocation research (country reports) ▪ Ancient civilizations, self-selected research question ▪ Historical figure comparison project ▪ Author research 	2010-2011
	5. Problem Solving and Decision Making	<ul style="list-style-type: none"> ▪ Use technology resources to make informed decisions ▪ Use online references to make informed decisions ▪ Access online newspapers, movie guides, compare prices or political candidates ▪ Use technology tools as needed (calculators, DVDs, educational software for problem solving and decision making) 		2010-2011
	6. Vocabulary	Use accurate technology terminology, including: <ul style="list-style-type: none"> ▪ Identify input devices - keyboard and mouse ▪ CPU/processor, disk drive, cursor, I-bar ▪ Identify output devices - monitor and printer ▪ KB, MB, and GB ▪ Download, desktop, laptop, server, Novell window, floppy disk, disk drive, CD Rom, portable storage device, CD Rom/DVD drive, soft boot, hard boot, minimize, maximize, restore, right click, left click 		2010-2011
	7. Troubleshooting	<ul style="list-style-type: none"> ▪ Respond to teacher directed troubleshooting ▪ Use techniques to save files when server connection is lost ▪ Recognize a non-responsive computer (to keyboard or mouse commands) ▪ Recognize failure to respond to print command ▪ Locate open files which are minimized 		2010-2011

B. Keyboarding	<ul style="list-style-type: none"> ▪ Use correct fingering for all keyboard functions ▪ Use ergonomic posture (hand, arm, and leg position) 	Monitor and reinforce keyboarding taught in grades 1-4 and re-taught in grade 5	2010-2011
C. Word Processing Software	<ul style="list-style-type: none"> ▪ Use the undo and redo tool ▪ Manipulate the layout of a document using: <ul style="list-style-type: none"> ▪ Margins ▪ Tabs ▪ Hanging indents ▪ Justification ▪ Line spacing ▪ Align left ▪ Align right ▪ Align center ▪ Align justify ▪ Access template when necessary ▪ Move or copy text between two Word documents ▪ Format text in documents by <ul style="list-style-type: none"> ▪ Indentation ▪ Page breaks ▪ Spacing ▪ Add graphics - import, position, and manipulate ▪ Copy and paste source information, use appropriate citations for sources, give credit to authors of media used ▪ Use the thesaurus as a writing tool in documents (Shift F7) ▪ Use Word Art ▪ Insert symbol ▪ Recognize overwrite command (OVR) and know how to turn it off ▪ Spell check using the menu and the F7 key ▪ Recognize that shortcuts for commonly used editing tools exist ▪ Identify and use: <ul style="list-style-type: none"> ▪ Shift ▪ Caps Lock ▪ Tab ▪ Arrow keys ▪ . ▪ ! ▪ ? ▪ ‘ ▪ “ ” ▪ , ▪ CTRL C (copy) ▪ CTRL V (paste) ▪ CTRL Z (undo) 	<p>Curriculum linked projects for teaching these skills include the following:</p> <ul style="list-style-type: none"> ▪ Business relocation project (country report) ▪ Test review sheets ▪ Reading responses ▪ Journaling ▪ Published pieces from writing workshop component of ELA curriculum <p>Document format, source citation, and other word processing product expectations may be established in overall rubric for any given project</p>	2010-2011

	<ul style="list-style-type: none"> ▪ Use the mouse to: <ul style="list-style-type: none"> ▪ Minimize ▪ Maximize ▪ Select (highlight) words ▪ Copy ▪ Cut ▪ Paste ▪ Move text by selecting and dragging ▪ Select words with shift and arrow keys ▪ Copy, cut, paste using the edit menu ▪ Select (highlight) words and/or sentences to change text size and font using the format menu ▪ Change text size and font using the toolbar icons ▪ Change text using file → menu, shortcuts, or icons: <ul style="list-style-type: none"> ▪ Center ▪ Bold ▪ Underline ▪ Italic ▪ Use the arrow keys to move the cursor (insertion point) to a line of text ▪ Add bullets ▪ Add headers ▪ Add footers 		
D. File Management	<ul style="list-style-type: none"> ▪ When word processing file problems caused by a loss in network connection occur, use teacher directed techniques to: <ul style="list-style-type: none"> ▪ Save ▪ Recover ▪ Save and organize saved work in folders and on personal drives ▪ Delete files ▪ Use the “save as” feature for shared files and templates ▪ Save work to desired location in personal drives ▪ Save to different formats (e.g. Word to Rich Text Format or to other compatible formats) ▪ Rename folders and documents ▪ Save documents using the file menu ▪ Save information using file → save, file → save as ▪ Name files to be saved with meaningful names ▪ Use the “search” or “find” file feature to locate saved files 		2010-2011

E. Curriculum Linked Software	1. Presentation	<ul style="list-style-type: none"> ▪ Create presentations with slides that can also be viewed in the outline format ▪ Create a presentation using combined slides ▪ Add text boxes and text to a slide ▪ Choose an appropriate slide template from the slide menu (if blank slide used, information will not appear in the outline format) ▪ Add background color or pictures to slides ▪ Use and insert any graphics to slides ▪ Use and insert Clip Art to slides ▪ Add additional text boxes and graphics to slides ▪ Use paint tools to illustrate a slide ▪ Reorganize slides using the “slide sorter” view ▪ Modify the pace or timing of presentations ▪ Insert transitions between slides ▪ Use (not overuse) transitions effectively ▪ Access templates when necessary ▪ Reorganize slides using the sorter menu ▪ Select words and/or sentences to change text size and font using the format menu ▪ Change text size and font using the toolbar icons 	<p>Curriculum linked projects for teaching these skills include the following:</p> <ul style="list-style-type: none"> ▪ Business relocation project (country reports) ▪ Student selected project in Ancient Civilizations or Middle Ages to Reformation units ▪ End of unit projects <p>Essential technical components for presentation may be established in overall rubric for any given project</p>	2010-2011
	2. Excel / Graphing		Introduced at teacher’s discretion - this is a grade 7 emphasis	2010-2011
	3. Concept Mapping	<ul style="list-style-type: none"> ▪ Use concept mapping software (e.g., Inspiration) to organize information 		2010-2011
	3. Other (specify)	<ul style="list-style-type: none"> ▪ Use digital and/or video cameras to capture images and then use programs to edit these images for inclusion in presentations (word processed or presentation documents) 	<p>Curriculum linked projects for teaching these skills include the following:</p> <ul style="list-style-type: none"> ▪ Business relocation project (country reports) ▪ Student selected project in Ancient Civilizations or Middle Ages to Reformation units ▪ End of unit projects 	2010-2011

<p>F. Social, Ethical, and Human Issues</p>	<ul style="list-style-type: none"> ▪ Only access website when given permission by an adult ▪ Only access acceptable websites ▪ Recognize that the authors or publishers of the items copied from electronic sources should be credited ▪ Demonstrate knowledge of the required source information for giving credit to authors of graphics used ▪ Understand and comply with the Acceptable Use Policy ▪ Learn and use “safe web surfing” behavior ▪ Demonstrate proper care in the use of technology equipment and devices ▪ Provide accurate citations when using information from outside sources ▪ Discuss appropriate and inappropriate uses of technology ▪ Identify appropriate kinds of information that should be shared electronically ▪ Identify safety precautions that should be taken online ▪ Develop positive attitudes towards technology ▪ Understand that technology development is the result of human creativity ▪ Practice responsible use of technology systems, information, and software ▪ Discuss the accuracy, relevance, appropriateness, and bias of electronic information systems ▪ Discuss the various assistive technologies and their usefulness to those with disabilities ▪ Recognize that technology supports collaboration, productivity, and learning 	<p>Document format, source citation, and other word processing product expectations may be established in overall rubric for any given project</p>	<p>2010-2011</p>
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Technology Education Curriculum (Draft)
Grade 7-8 / 12 weeks each year

Strand		Student Outcome (The student will . . .)	Instructional Notes	Timeline
A. Basic Operations and Concepts	1. Basic Skills	<ul style="list-style-type: none"> ▪ Recognize software and hardware components (both internal and external) ▪ Identify the role of each main component of a computer system and describe its function 	Use web resources and manipulation of real and model computer components	2011-2012
	2. Concepts			
	3. Communication			
	4. Research Tools			
	5. Problem Solving and Decision Making	<ul style="list-style-type: none"> ▪ Identify characteristics that suggest the computer system or software may need to be upgraded ▪ Demonstrate use of "Help" in software packages 	<ul style="list-style-type: none"> ▪ Classroom discussion ▪ Teacher demonstration followed by student practice 	2011-2012
	6. Vocabulary	<ul style="list-style-type: none"> ▪ Define input, output, storage, and processing and describe how these functions work together in a computer ▪ Compare and contrast system and application software ▪ Define machine language ▪ Explore binary, octal, and hexadecimal number systems 	<ul style="list-style-type: none"> ▪ Web resources and classroom discussion ▪ Connect binary system information to math content 	2011-2012
	8. Troubleshooting	<ul style="list-style-type: none"> ▪ Analyze and correct routine problems encountered in hardware and software use ▪ Generate a list of troubleshooting strategies used to solve computer problems - the list will be modeled after lists used in other curricular areas ▪ Describe strategies for preventing problems 	Use classroom experience and guided discussion	2011-2012
B. Keyboarding		<i>The student will have achieved mastery of the computer keyboard and healthy computer ergonomic habits prior to entry into grade 7.</i>		2011-2012

C. Word Processing Software	<p><i>The student will have achieved mastery of effective use of a word processor as a tool prior to entry into grade 7. Use of the tool includes effective use of language tools such as spell check, grammar check, and the thesaurus; effective use of formatting tools such as automated outlining, tables, columns, indentation, tabs, headers and footers, bullets, and line spacing; effective use of text entry and editing skills. Effective use also includes importing files into a document using methods other than copy and paste</i></p>		2011-2012	
D. File Management	<ul style="list-style-type: none"> ▪ Define file extensions and describe the role of the file extension in determining what type of program is necessary to open it ▪ Discuss the different types of graphics files and determine which type is most appropriate for use in various applications (e.g., .jpg or .gif better for web than .bmp due to size) ▪ Use basic utility programs or built in application functions to convert file formats <p><i>The student will have established effective file management techniques prior to entry into grade 7. These techniques will include an understanding of when to create a new file while saving and when to just save changes to an existing file (Save As vs. Save). This also includes effective use of folders for saving related material and appropriate file naming conventions.</i></p>		2011-2012	
E. Curriculum Linked Software	1. Presentation	<p><i>The student will have achieved mastery of effective use of presentation software as a tool prior to entry into grade 7. Use of the tool includes use of graphics, animation, sound, and text to present information to an audience as required by core content area curricula. The student will be able to import other files into the presentation. The student will be able to create presentation notes, both by creating an automatically generated outline and by creating effective handouts using the software. The student will be able to create a slideshow presentation that enhances his or her oral presentation to audiences as required by the Language Arts Curriculum.</i></p>		2011-2012

	2. Excel / Spreadsheet	<ul style="list-style-type: none"> ▪ Design and enter numeric data, labels, and formulas into a spreadsheet program ▪ Format the display and edit the contents of the spreadsheet ▪ Use the advanced features of a spreadsheet program such as AutoFill, conditional formatting, and absolute cell reference to complete tasks listed in these outcomes ▪ Store and retrieve the contents of spreadsheets ▪ Analyze the results of formulas used in the spreadsheet ▪ Change numeric data in specific cells to answer “what if” questions, test hypotheses, and analyze outcomes ▪ Produce a hard copy of selected portions of the electronic spreadsheet ▪ Create a graph or chart using a spreadsheet ▪ Identify the most suitable type of graph to display different kinds of data ▪ Calculate a sum and average using AutoSum button and using the fx button ▪ Use the Now and If functions ▪ Apply formulas, functions, and “what if” statements in spreadsheets and graphs or charts to analyze and interpret data for content assignments ▪ Recognize how spreadsheets may be used to assist with consumer related activities (e.g., budgets, banking transactions) 	Use teacher demonstration of skills followed by creation of spreadsheets which are either tied to student interests or content in core curriculum	2011-2012
	3. Concept Mapping	<ul style="list-style-type: none"> ▪ Identify software used to create flowcharts <p><i>The student will have achieved mastery of concept mapping software (e.g., Inspiration) as required by core content area curriculum prior to entry into grade 7.</i></p>		2011-2012
	4. Word Processor	<p><i>Before grade 7, the student will achieve mastery of a word processor as a tool to create business letters, bibliographies, outlines, memos, addressed envelopes, and footnotes. These skills will be reinforced in English-Language Arts, Media, and Social Studies classrooms.</i></p>		2011-2012

	5. Database	<ul style="list-style-type: none"> ▪ Create, using design and datasheet views, and edit simple databases and sort records ▪ Design a database using more than one table to store related data ▪ Define fields, records, tables, primary keys, and queries ▪ Use the mailing label option within the database format ▪ Create a form letter merging a word processing file and a database file ▪ Search database for individual records ▪ Create and save reports, forms, and queries using a database he or she created ▪ Use advanced query criteria such as text data, wild cards, numeric data, compound criteria, and joined tables to display selected fields 	Use teacher demonstrations of skills followed by creation of database of information related to student interests or core curriculum content	
	6. Internet	<ul style="list-style-type: none"> ▪ Demonstrate how to conduct an advanced search using Boolean logic and other sophisticated search functions ▪ Evaluate information from a variety of sources for accuracy, bias, appropriateness, and comprehensiveness 	Use web based information - literacy and search materials - to complete teacher created activities	2011-2012

<p>F. Social, Ethical, and Human Issues</p>	<ul style="list-style-type: none"> ▪ Understand and comply with the Acceptable Use Policy ▪ Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources ▪ Identify legal and ethical issues related to use of information and communication technology, recognize consequences of its misuse, and predict possible long-range effects of ethical and unethical use of technology on culture and society ▪ Identify a broad range of issues related to use and misuse of information and communication technology resources (e.g., privacy, security, copyright, file sharing, and plagiarism) and discuss laws relating to each ▪ Identify and develop scenarios or examples that illustrate ethical behaviors for use of personal copyrighted media (e.g., images, music, video, content, language, correctly formatted citations for the copyrighted materials), and will analyze the consequences and costs of unethical use of information and computer technology (e.g., hacking, spamming, consumer fraud, virus setting, and intrusion) ▪ Learn and use “safe web surfing” behavior ▪ Provide accurate citations when using information from outside sources ▪ Identify safety precautions that should be taken online 	<p>Use web based safety and ethics materials to complete teacher created activities to explore these topics</p>	<p>2011-2012</p>
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Technology, Employability, and Careers (TEC) Curriculum Grade 9

COMPUTER BASICS

UNIT OBJECTIVES:

The student will . . .

SEGMENT 1, 5, 6

- Define computer-related terms.
- Recognize the implications of emerging technologies.
- Identify types of computer hardware and software.
- Analyze computer literature and develop consumer awareness through a purchasing activity.
- Explain ethical and legal behavior regarding software.
- Explain the purpose and use of filtering (i.e., Spam).
- Identify and apply procedures for maintenance of technology equipment.
- Develop an awareness of computers through history.
- Deliver and receive information via the Internet.
- Use data projectors or other presentation tools.
- Identify and locate information sources using technology.
- Use local and wide area networks.
- Manage and maintain technology tools.
- Diagnose and solve common technology problems.
- Apply learning styles and multiple intelligences to their own learning.

SEGMENT 1






- Understand tools, strategies, and systems needed to access, process, maintain, evaluate, and disseminate information to assist business decision-making.
- Utilize computer's operating system to manage and perform work responsibilities.
- Move files in the computer operating system.
- Create directories.
- Apply technological tools in business management and administration to expedite workflow.
- Utilize information-technology tools to manage and perform work responsibilities.
- Identify ways that technology impacts business.
- Discuss principles of computer systems.
- Explain the scope of data communications tools.
- Demonstrate basic email functions.

SEGMENT 5

- Understand tools, strategies, and systems needed to access, process, maintain, evaluation, and disseminate information to assist business decision-making.
- Facilitate computer system operations to enhance usability.
- Explain issues involved in designing systems for different environments.

CULMINATING ASSESSMENTS:

REQUIRED:

-  Computer Basics Test
-  Computer purchasing and analysis project
-  Technique Evaluation (common evaluation)
-  Timed Writing - 90% accuracy (3 minute timed writings)
-  Learning Styles Compare/Contrast Paper

VOCABULARY:

e-mail
facsimile
virus
hardware
software
modem
LAN
WAN
network
input
output
peripherals
cache
home row
ergonomics
prioritizing
learning styles
multiple intelligences
initiative
responsibility

TEAMWORK SKILLS

UNIT OBJECTIVES:

The student will . . .

SEGMENT 1, 6



- Develop an understanding of group dynamics.
- Work cooperatively with people of diverse backgrounds and abilities and contribute to a group process with ideas, suggestions, and efforts.
- Demonstrate effective teamwork skills in decision making.
- Define integrity in the workplace.
- Make the right decisions in ethical challenges.
- Treat people with respect.
- Display commitment and positive attitude.
- Assist co-workers in completing the job.
- Adapt to changes in work activities.
- Explain methods for implementing departmental goals and objectives.
- Compare departmental goals and objectives with company goals and objectives.
- Motivate co-workers to achieve goals.
- Distribute work fairly and responsibly.
- Take ownership for work.
- Apply technological tools in business management and administration to expedite workflow.
- Utilize information technology tools to manage and perform work responsibilities.

SEGMENT 1

- Take personal responsibility for influencing and accomplishing group goals.
- Demonstrate understanding of how effective teams operate within an organization and in diverse settings.
- Solve a career/work related problem as a member of a team.

CULMINATING ASSESSMENTS:

REQUIRED:

-  Observable Performance
-  Trusty Travel

VOCABULARY:

cooperation
collaboration
diversity
teamwork
motivation
responsibility
respect
communication
group dynamics
synergy
co-workers

DOCUMENT AND WORD PROCESSING

UNIT OBJECTIVES:

The student will . . .

SEGMENT 1, 5

- Analyze information presented in a variety of formats such as tables, lists, and figures.
- Use correct spelling, punctuation, and capitalization.
- Use correct grammar and sentence structure.
- Format, edit, and proof text documents.
- Insert graphics into text documents.
- Identify the purpose of business correspondence and documents.
- Create and format business documents and reports.
- Execute appropriate and successful Internet research.
- Determine accuracy and appropriateness of business correspondence and documents.
- Demonstrate correct touch keyboarding.
- Define ergonomics in order to maintain a healthy and safe environment.

SEGMENT 1




- Write internal and external business correspondence to convey and obtain information effectively.
- Write business letters.
- Handle difficult customers.
- Implement safety, health, and environmental controls to enhance productivity in business management and administration.
- Adhere to health and safety regulations to support a safe work environment.
- Implement safety procedures to minimize loss.
- Follow instructions for use of equipment, tools, and machinery.
- Follow safety precautions.
- Maintain a safe work environment.
- Explain procedures for handling accidents.
- Handle and report emergency situations.
- Determine needed safety policies/procedures to protect employees.
- Identify potential safety issues.
- Implement security policies/procedures to minimize chance for loss.
- Develop policies/procedures to protect workplace security.
- Apply technological tools in business management and administration to expedite workflow.
- Utilize information technology tools to manage and perform work responsibilities.
- Demonstrate basic word processing skills.
- Create custom styles for text, tables, and lists.
- Control pagination.
- Format, position, and resize graphics using advanced layout features.
- Insert and modify objects.
- Modify table formats.
- Use automated tools for document navigation.
- Create and modify document background.
- Customize menus and toolbars.
- Modify Word default settings.

SEGMENT 2

- Utilize in text citations and prepare a bibliography.
- Follow rules and regulations relating to plagiarism and copyright.

CULMINATING ASSESSMENTS:

REQUIRED:

-  Letter Quiz
-  State Project
-  Common Exam

MICROSOFT WORD VOCABULARY:

- | | | |
|------------------------|------------------------------|-----------------------|
| landscape orientation | automatic grammar checking | bullet |
| normal view | automatic spell checking | indent |
| portrait orientation | AutoText | leaders |
| print preview | spelling and grammar checker | line spacing |
| task pane | thesaurus | margins |
| word processing | font size | outline numbered list |
| word wrap | font style | sorting |
| clipboard | fonts | tabs |
| copy | formatting | vertical alignment |
| cut | highlight | borders |
| drag and drop | points | chart |
| overtyping mode | toggling | clip art |
| paste | alignment | desktop publishing |
| selecting | shading | diagram |
| AutoComplete | sizing handles | graphics |
| AutoCorrect | endnote | scale |
| AutoFormat As You Type | footer | selection rectangle |
| section | footnote | mail merge |
| style | header | main document |
| table | page break | paste special |
| data source | pane | template |
| hyperlink | track changes | web page |
| wizard | web site | |

EMPLOYABILITY

UNIT OBJECTIVES:



The student will . . .

SEGMENT 2

- Use a portfolio, résumé, record of attendance, certificates, and/or transcripts as self-marketing tools to demonstrate interest and competence.
- Assess personal strengths and weaknesses and develop an EDP.
- Demonstrate ethical behavior in school, work, and community situations.
- Describe employer-employee rights and responsibilities.
- Follow company and appearance standards.
- Demonstrate leadership and teamwork.
- Exercise honesty in the workplace setting.
- Follow established rules, regulations, and policies.
- Integrate employability skills into behaviors which prepare one for obtaining, maintaining, advancing, and changing employment.
- Identify trends in the changing workplace.
- Define legal rights and responsibilities of an employee, such as sexual harassment.
- Display personal qualities such as responsibility, dependability, self-management, ethical behavior, and respect for self and others.
- Apply communication skills such as reading, writing, speaking, and listening.

CULMINATING ASSESSMENTS:

REQUIRED:

-  Résumé
-  Mock Interview

VOCABULARY:

ethics
punctuality
EDP
integrity
honesty
criticism
constructive criticism
etiquette
cooperation
teamwork
emotions
personal strengths

CAREER UNIT

UNIT OBJECTIVES:





The student will . . .

SEGMENT 2

- Develop a personal resume for a specific job opening.
- Write a letter of application for a specific job opening.
- Complete job application forms provided by employer.
- Exhibit acceptable dress for an interview.
- Demonstrate professional conduct before, during, and after an interview.
- Communicate his/her qualifications and interests clearly and concisely.
- Use technical terms and concepts.
- Incorporate and use references effectively and accurately.
- Identify and demonstrate work habits.
- Locate information from the Internet.
- Identify personal interests and aptitudes.
- Identify job requirements and characteristics for each career of interest.
- Compare personal interests and aptitudes with job requirements and characteristics.
- Locate and interpret career information for career opportunities.
- Identify job requirements for at least three career opportunities.
- Identify educational and credentialing requirements for at least three career opportunities.
- Compare career information with personal interests.
- Identify goals and objectives for reaching and advancing in a career.
- Develop a list of suggested strategies for reaching career objectives.
- Compile and arrange information to communicate main facts.
- Understand concepts, tools, and strategies used to explore, obtain, and develop a business career.
- Assess personal strengths and weaknesses.
- Participate in career-planning to enhance job success potential.
- Identify sources of career information.
- Identify tentative occupational interest.
- Implement job-seeking skills to obtain employment.
- Utilize job-search strategies.
- Complete a job application.
- Interview for a job.
- Write a letter of application.
- Prepare a résumé.
- Continue the EDP process which includes an annual review with student and counselor and notification of parents.
- Participate in work-based opportunities such as job shadowing, mentorships, work experiences, etc.
- Show ability to market oneself by preparing for and completing an interview process.
- Accurately complete records/documents to support job applications (inquiry letters, résumé, references, evaluations, and follow-up letters).
- Use a portfolio, résumé, record of attendance, certificates, and/or transcript as self-marketing tools to demonstrate interest and competence.
- Apply career and labor market information to seek and obtain employment and/or pursue educational goals.
- Research availability of educational programs, financial requirements, and resource and complete an application process as appropriate for career goals.
- Understand the need for lifelong learning in a rapidly changing job market.

CULMINATING ASSESSMENTS:

REQUIRED:

-  Mock Interview
-  Résumé
-  Letter of Application
-  Job Application

VOCABULARY:

professional dress
résumé
application for employment
job
career
cover letter
interview
career pathway
aptitude
interest
credentialing
portfolio
transcript

SPREADSHEETS

UNIT OBJECTIVES:

The student will . . .

SEGMENT 3, 6



- Identify and define spreadsheet terminology.
- Plan, design, and create spreadsheets.
- Create and enter formulas to compute and analyze numerical data.
- Integrate word processing and spreadsheet documents.
- Perform “what if” analysis.
- Organize data using tables, charts, graphs, spreadsheets, and databases.
- Identify and utilize order of precedence and logical and conditional operators in formula writing.
- Use common standards of measurement, including the metric system, in solving work-related or business problems.
- Apply technological tools in business management and administration to expedite workflow.
- Utilize information technology tools to manage and perform work responsibilities.
- Demonstrate basic spreadsheet applications.

SEGMENT 3

- Organize and analyze data in Excel.
- Use subtotals.
- Group and outline data.
- Create and modify list ranges.
- Define, modify, and use named ranges.
- Format data and content.
- Format and resize graphics.
- Format charts and diagrams.
- Employ numbers and operations to understand and solve mathematical problems in business management and administration.
- Employ mathematical operations.
- Perform computations successfully.
- Apply algebraic skills to make business decisions.
- Represent changes in quantities mathematically.
- Interpret graphical and numerical data.

CULMINATING ASSESSMENTS:

REQUIRED:

-  Dream Car Project (spreadsheet)
-  Spreadsheet Test

MICROSOFT EXCEL VOCABULARY:

active cell
cell
column
formula bar
highlight
name box
range
row
spreadsheet
workbook
worksheet
AutoFormat
indented text
rotated text
style
wrapped text
filling
freezing
absolute cell reference
formulas
mixed cell reference
operand
operator
point-and-click method
relative cell reference
argument
financial information
function formula
logical function
mathematical function
statistical function
trigonometric function
AutoFilter
AutoFilter Arrows
clips online
comment
discussion server
drawing tool
hiding
hyperlink
media clips
sorting
template
web discussion
active sheet
link
sheet tabs
three-dimensional cell reference
workbook
axis
chart
chart sheet
chart wizard
column chart
data labels
data series
embedded chart
image handles
line chart
pie chart
scatter chart

MULTIMEDIA

UNIT OBJECTIVES:

The student will . . .

SEGMENT 1, 5, 6

- Incorporate the use of current technologies in the development of presentations.
- Prepare visual aids and support materials for easy viewing and without error.
- Use appropriate software to develop text, charts, graphs, or figures.
- Use correct spelling, punctuation, capitalization, and grammar.
- Explain information presented in tables, charts, and figures.
- Document sources of data.
- Determine the most appropriate way to display data.
- Speak clearly with appropriate volume, rate, and gestures and without grammatical error.
- Respond to questions and comments on a presentation.
- Observe eye contact, facial expressions, posture, gestures, and other body language.
- Apply technological tools in business management and administration to expedite workflow.
- Utilize information technology tools to manage and perform work responsibilities.
- Demonstrate basic presentation applications.

SEGMENT 1

- Apply listening and presentation skills.

SEGMENT 5

- Create content in Power Point.
- Create new presentations from templates.
- Insert and edit text-based content.
- Insert tables, charts, and diagrams.
- Insert pictures, shapes, and graphics.
- Insert objects.
- Format text-based content.
- Format pictures, shapes, and graphics.
- Format slides.
- Apply animation schemes.
- Apply slide transitions.
- Customize slide templates.
- Organize a presentation.
- Set up slide shows for delivery.
- Rehearse timing.
- Deliver presentations.
- Print slides, outlines, handouts, and speaker notes.

CULMINATING ASSESSMENTS:

REQUIRED:

 Multimedia Presentations

POWER POINT VOCABULARY:

notes pane
outline tab
slide sorter
slides tab
task pane
animate
AutoContent Wizard
design template
effects options
hyperlink
motion path
placeholder
show advanced timeline
slide master
slide transitions
charts and graphs
data sheet
grouping
handles
organization charts
shift-clicking
embed
format painter
grid settings
guide settings
pack and go
snap to
route

DATABASE

UNIT OBJECTIVES:

The student will . . .

SEGMENT 5, 6

- Identify and define database terminology.
- Plan, design, and create databases.
- Integrate word processing and database documents.
- Modify forms.
- Query a database.
- Create and modify a database report.
- Apply technological tools in business management and administration to expedite workflow.
- Utilize information technology tools to manage and perform work responsibilities.
- Demonstrate basic database applications.

SEGMENT 5

- Create Microsoft Access databases.
- Create and modify tables.
- Define and modify field types.
- Modify field properties.
- Create and modify one-to-many relationships.
- Enforce referential integrity.
- Create and modify queries.
- Create forms.
- Add and modify form control properties.
- Create reports.
- Add and modify report control properties.
- Create a data access page.
- Find and move among records.
- Import data to Access.
- Modify report layout and page setup.
- Format datasheets.
- Sort records.
- Filter records.
- Identify object dependencies.
- Print database objects and data.
- Export data from Access.

CULMINATING ASSESSMENTS:

REQUIRED:

-  Access Final Project

MICROSOFT ACCESS VOCABULARY:

database management system
datasheet view
design view
entry
field
field name
primary key
record
field properties
field selectors
record pointer
record selectors
bound control
calculated control
detail
form header
form footer
unbound control
and operator
ascending sort
descending sort
filter
indexing
multitable query
one-to-many relationship
or operator
primary key
query
referential integrity
relationship
search criteria
subdatasheet
database report
grouping
macro
data access page
data source
form letter
main document
merge field

ONLINE LEARNING

UNIT OBJECTIVES:


The student will . . .


SEGMENT 6

- Perform successful Internet searches and Web Quests.
- Utilize My Dream Explorer to create and maintain an electronic EDP.
- Utilize Career Forward to research careers.
- Utilize online tutorials for a variety of learning experiences.
- Utilize Web 2.0 technologies to participate in a blog or podcast.
- Apply technological tools in business management and administration to expedite workflow.
- Utilize information technology tools to manage and perform work responsibilities.
- Demonstrate basic web search skills.
- Demonstrate basic email functions.

CULMINATING ASSESSMENTS:

REQUIRED:

 Electronic EDP

 Atomic Learning Assessments

VOCABULARY:

wiki

blog

Cheboygan Area High School Course Descriptions

CAREER AND TECHNOLOGY EDUCATION

PLEASE NOTE: To be enrolled in two 2-hour CTE programs, students must obtain permission prior to their senior year. Students can enroll in four combined hours of CTE courses and they must be occupationally related. The CTE courses selected must be reflected in their Career Pathway choice and on the students E.D.P. Please note: CTE courses do not fulfill state curriculum requirements for independent study coursework.

	COURSE	CREDIT	GRADE	TRI
Health Sciences				
	Allied Health Technology	2	11-12	4
Business Marketing, Management, and Technology				
	Technology, Education, and Careers (T.E.C)	1	9	2
	Information Processing I	1	10-12	2
	Information Processing II	1.5	11-12	3
	Web Design	1	10-12	2
	Desktop Publishing	1	10-12	2
	Computerized Programming	1	11-12	2
	Advanced Computerized Programming	1	12	2
	Business Math and Personal Finance	.5	11-12	1
	Introduction to Law	.5	11-12	1
	Digital Imaging	.5	10-12	1
	Hospitality and Culinary Service I	2	11-12	4
	Hospitality and Culinary Service II	2	12	4
Finance				
	Computerized Accounting I	1	10-12	2
	Computerized Accounting II	1	11-12	2
Marketing Education				
	Introduction to Business	1.5	10-12	3
	Retail Marketing	1.5	11-12	3
	Marketing Management	1.5	11-12	3
Human Service				
	Early Childhood Education I	2	11-12	4
	Early Childhood Education II	2	12	4
	Introduction to Teaching	1.5	11-12	3
Engineering, Manufacturing, and Industrial Technology				
	Automotive Essentials	.5	10-12	1
	Automotive Technology I & II	2	11-12	4
	Home Maintenance	.5	10-12	1
	Construction Technology Core	1	10-12	2
	Construction Trades I	2	11-12	4
	Construction Trades II	2	12	4
	Introduction to Metal Fabrication I	1	9-12	2
	Metal Fabrication II	1.5	10-12	3
	Introduction to Drafting/Architecture	1	9-12	2
	Architectural Design	1.5	10-12	3
	Engineering and Industrial Design	1.5	10-12	3
	AutoCAD	1.5	11-12	3
	Welding Technology I	2	11-12	4
	Welding Technology II	2	12	4

ALLIED HEALTH TECHNOLOGY I & II**2 credits****Grades 11-12**

Prerequisite or currently enrolled in: Anatomy & Physiology

Students in the Allied Health Technologies Program will be able to complete training in a variety of health-related fields with the potential of being job ready in several areas. The overall title is Multi-Skilled Technician. All students must complete a core of national skills mandated by the State of Michigan. These include the following: Medical Ethics, Communication, Supplies/Equipment Emergency Procedures, Asepsis, Medical Terminology, Body Structure, Body Function, Personal Care, and Assessment. Career training rotates on a two-year cycle. Areas of study for the 2010-2011 school year are: Medical Assistant, Pharmacy Technician, and Dental Aide. Areas of study for the 2011-2012 school year are: Nurse Aide, Veterinary Aide, Physical Therapy Aide, and Pre EMT. An important part of the program is the on-the-job experience in the various community health agencies. Students must maintain a "C" in this course. Students may earn a science credit in this course when simultaneously taken with Anatomy & Physiology and earn a "C" in each trimester of the course.

BUSINESS SERVICES AND TECHNOLOGY**TECHNOLOGY, EMPLOYABILITY, AND CAREERS****1 credit****Grade 9****T.E.C. A**

This class is offered to all freshmen as a requirement for graduation. T.E.C. A will provide students with common business and foundation skills. These skills are considered necessary for lifelong learning. Topics covered include:

- Various keyboard skills
- Identify types of computer hardware and software
- Perform basic and advanced word processing options
- Management and leadership skills
- CAREERSCOPE Interest and Aptitude Assessment
- Define computer-related terms
- Diversified communications skills
- Positive work habits
- Smart Internet searches
- Work toward completion of Michigan Merit Curriculum 20 hour Online Experience Requirement

T.E.C. B

This class is offered to all freshmen as a requirement for graduation. T.E.C. B will provide students with common business and foundation skills. These skills are considered necessary for lifelong learning. Topics covered include:

- Basic and intermediate spreadsheet operations
- Multimedia presentations using PowerPoint through the advanced level
- Applied mathematical skills
- Basic database operations using Access
- Completion of an Electronic EDP (Educational Development Plan)
- Completion of the Michigan Merit Curriculum 20 hour Online Experience Requirement
- Various career planning components
- Integrated Microsoft Office simulations

INFORMATION PROCESSING I**1 credit****Grade 10, 11, 12**

Prerequisite: T.E.C. A & B ("C" grade or better)

Job Title: Office Assistant

This course is designed to prepare students for office employment opportunities in today's rapidly changing business environment. Students will:

- Acquire skills and knowledge of office procedures and equipment
- Apply skills and knowledge gained in the TEC classes
- Develop personal characteristics, work attitudes, soft skills, and communication skills essential for success on the job
- Develop a knowledge base in the following: essential business skills, employment skills, professional development, information management, marketing, human resources, and international business

Competencies will be completed in such areas as:

- Telephone skills
- Bookkeeping skills (payroll, sales, invoices)
- Alphabetic and numeric filing
- Document processing

Students will be able to earn Visual, Performing, and Applied Arts credit.

INFORMATION PROCESSING II**1.5 credits****Grade 11, 12**

Prerequisite: Information Processing I (“C” grade or better)

Job Title: Office Specialist

This course is designed to prepare students for advanced employment opportunities in today’s rapidly changing business environment. These changes in today’s office have created a demand for workers with a broader variety of skills, an awareness of the interrelatedness of office functions, and a knowledge of new procedures and terminology. Students will:

- Build upon skills acquired as an Office Assistant
- Utilize electronic communication tools (email)
- Apply document processing procedures
- Further enhance their knowledge base in the following: entrepreneurship, advanced applications, financial analysis, business law, and strategic management
- Develop critical thinking skills
- Complete a simulation in office procedures using Microsoft Office Suite
- Bookkeeping skills (payroll, sales, invoices, purchasing)

Students enrolled in Information Processing II will be eligible for testing to become certified as a Microsoft Office User Specialist in Word, Excel, PowerPoint, Outlook, or Access. Students may earn a 1/2 credit for English 12 if a student earns a “C” for each trimester of the course.

WEB DESIGN**1 credit****Grade 11, 12**

Students will identify and research various types of web search engines, evaluate web sites, and practice web page authoring using a variety of techniques. Students will learn the following web page development tools: XHTML, Dreamweaver, Flash, Fireworks, Cascading Style Sheets, and JavaScript. Students will use and import images to enhance web design, practice advanced layout principles, create buttons and navbars, and develop live, interactive web. Students will be able to earn Visual, Performing, and Applied Arts credit.

DESKTOP PUBLISHING**1 credit****Grade 10, 11, 12**

Desktop Publishing is a business course designed to allow students to develop proficiency in using document publishing software to create a variety of printed publications. Students will incorporate journalistic principles in design and layout of print and web publications including integration of text and graphics and use sophisticated hardware and software to develop and create quality materials for business related tasks. Students will incorporate the process of analyzing information and audience and choosing the appropriate visual signals to communicate the desired message effectively.

COMPUTER PROGRAMMING**1 credit****Grade 11, 12**

Prerequisite: Algebra I and T.E.C.

An elective course designed for the student that has a strong math background as well as a good understanding of basic technology principles and is considering a career in information technology services. This course provides a fundamental understanding of operating systems, hardware, DOS, assembly language, Visual Basic, object oriented programming, database management, JavaScript, HTML, and Java. In addition to programming languages, digital design concepts will be covered using Flash and Fireworks.

ADVANCED PROGRAMMING**1 credit****Grade 12**

Prerequisite: successful completion of Computer Programming and permission of the instructor

This class is designed for students who are interested in the Business/Technology career pathway. Coursework will consist of C++ and Java Programming, advanced database (Access) topics, Advanced HTML, and Dreamweaver. The advanced programming student will also learn advanced scripting methods used in Flash to create interactive programs. In addition, students will gain valuable skills in the field of computer repair/troubleshooting. Students will assume “team leader” roles and practice total quality management. Finally, advanced programming students will be responsible for working with the High School Technical Help Desk.

DIGITAL IMAGING**1/2 credit****Grade 10, 11, 12**

Students will learn to use Adobe Photoshop to design, create, and manage digital images of text, graphics, and slides. Students will explore both the technical aspects of image manipulation and the artistic aspects of creating images. They will become familiar with Photoshop through watching demonstrations and completing assignments and projects. This is an elective course. Course topics will include:

- Digital photography
- Digital cameras
- Basic Photoshop use
- Digital planning
- Using digital photos and scanning images
- Creating montages and collages

FINANCE

COMPUTERIZED ACCOUNTING I

1 credit

Grade 10, 11, 12

Prerequisite: T.E.C.

Job Title: Accounting Assistant

Introduction to accounting principles designed to prepare students to have a stronger financial background. Emphasis is placed upon understanding financial information and the accounting cycle as it pertains to individuals and businesses. Students will computerize applications to enhance the effectiveness and efficiency of financial information. Assets, liabilities, and owner's equities as they relate to proprietorships and corporations, payroll and taxes, stocks and investments will be covered.

The student can earn a 4th year senior math credit in this course. The student must earn a "C" in each trimester of this course to earn a math credit when the student takes this course in their senior year.

COMPUTERIZED ACCOUNTING II

1 credit

Grade 11, 12

Prerequisite: Computerized Accounting I with a "C" or higher

This course is a continuation of the accounting principles relating to the role of managerial accounting information. Emphasis is placed upon departmentalized accounting, corporate accounting, cost accounting, inventories, budgeting, and financial analysis and decision-making.

The student can earn a 4th year senior math credit in this course. The student must earn a "C" in each trimester of this course to earn a math credit when the student takes this course in their senior year.

DRAFTING

INTRODUCTION TO DRAFTING/ARCHITECTURE

1 credit

Grade 9, 10, 11, 12

This course is designed to introduce students to the basic fundamentals of drafting. The student will be exposed to blueprint reading, sketching, shape, description, and an introduction to Computer Aided Design (CAD). Upon completion of this course, the students will understand and be able to demonstrate practical knowledge in basic house development and design, drafting techniques and fundamentals, modular applications, room planning, material selection, design and drawing basic floor plans, and perspective drawings. Computer Aided Drafting and career opportunities will also be a part of this course.

ARCHITECTURAL DESIGN

1.5 credits

Grade 10, 11, 12

Prerequisite: Introduction to Drafting/Architecture

This is a more advanced drafting course in architecture. Upon completion of this course using AutoCAD, students will have developed a complete set of architectural working drawings, renderings, and models. Students will become more familiar with construction techniques and processes in architecture. This course will also allow students to further explore careers in this field. This course fulfills the Visual, Performing, and Applied Arts credit.

ENGINEERING AND INDUSTRIAL DESIGN

1.5 credits

Grade 10, 11, 12

Prerequisite: Introduction to Drafting/Architecture

This course is designed to not only enhance basic principals of engineering and mechanical drafting, but upon completion of this course, students will be able to read and draw complete sets of mechanical and engineering drawings. They will be efficient in freehand drawings, AutoCAD, and creating models. Students will also be introduced to geometric dimensioning and tolerance that will give them an edge in the career field or at the post-secondary level. This course fulfills the Visual, Performing, and Applied Arts credit.

The student can earn a 4th year senior math credit in this course. The student must earn a "C" in each trimester of this course to earn a math credit when the student takes this course in their senior year.

AUTOCAD/COMPUTER AIDED DESIGN

1.5 credits

Grade 11, 12

Prerequisite: Architectural Design or Engineering and Industrial Design

This is an advanced drafting and design course that upon completion, the student will become more familiar with the commands and functions of the CAD system. Students will begin to apply what they have learned to create working drawings. Each student will have the option of choosing one of the following specialties: Architectural CAD, Mechanical and Engineering CAD, or Interior Architectural CAD.

The student can earn a 4th year senior math credit in this course. The student must earn a "C" each trimester of this course to earn a math credit when the student takes this course in their senior year.

**ADVANCED AUTOCAD/COMPUTER AIDED DESIGN
SENIOR PORTFOLIO**

1.5 credits

Grade 12

Prerequisite: AutoCAD

This class is designed for students who have shown exceptional skill in Computer Aided Drafting and related courses and are planning to continue on in this career area. Students will be required to concentrate on expanding knowledge of basic AutoCAD skills, as well as continuing to become competent in area of 3-D modeling and rendering. Students will be required to gain increased knowledge in the area of mechanical design. They will be required to create HVAC, electrical, and lighting schedules and details for their designs. Students will also be required to complete a portfolio which will include all previous accomplishments throughout his or her 3+ years in the Drafting Technology field as well as being prepared for college level entrance work.

The student can earn a 4th year senior math credit in this course. The student must earn a "C" each trimester of this course to earn a math credit when the student takes this course in their senior year.

SPECIAL PROGRAMS

COURSE	CREDIT	GRADE	TRIMESTER
Cooperative Education	1-2	12	2-3
Work Experience (paid/non-paid)	.5-1	12	1-2
Dual Enrollment (eligibility requirements apply)	2	11-12	2-3
Yearbook	1	10-12	2
Independent Study	.5	12	1

COOPERATIVE EDUCATION

1-2 credits

Grade 12

The Cooperative Education Program is designed to provide students with the opportunity to extend their learning beyond the classroom by working in a career-related occupation while attending high school classes. Student must have already completed at least one year of the Career and Technology Program that relates to their job. Students must also be concurrently enrolled in the related CTE program as well as having senior status. The Cooperative Education Coordinator arranges appropriate placement with the local employer and completes all necessary documentation prior to the beginning of the program. Students must average 10 hours of paid work per week at their job. A Cooperative Education Application, safety training meeting, copy of the student's EDP, and training plan are also required to be enrolled. A letter grade is earned in this program.

WORK EXPERIENCE

.5-1 credits

Grade 12

The off-campus work experience program is designed to provide students with the experience of working for a minimum of one trimester within a specific career field. Placements can include both paid and non-paid work experiences and students must be in the career pathway that directly relates to their job duties. Students must average 6 hours per work week and placements can be scheduled during any school hour. Students receive credit for this program if they receive a satisfactory job evaluation from their employer as well as complete weekly time records. An application, safety training meeting, copy of the student's EDP, and training plan are also required to be enrolled.

WORK STUDY

.5-1.5 credits

Grade 12

A planned program for special education students who are participating in a supervised special education school-to-work transition program. This must be included in the student's Individualized Education Plan (IEP) Meeting. Students must average 6-10 hours of work per week at their job. Work experiences include off-campus paid jobs, off-campus non-paid jobs, and in-school placements.

YEARBOOK

1 credit

Grades 10, 11, 12

The purpose of this class is to produce the CAHS Yearbook. Students will be trained in all areas of computerized technological yearbook production. Additional training will occur in writing copy and captions, digital graphic layout, digital photography, advertising, and fund-raising to support this project. This class simulates to world of work with regard to attendance, work ethic and behaviors, decision making, problem solving, and adhering to deadlines. **This class does not count as an English credit towards graduation.**

INDEPENDENT STUDY

1st Trimester .5 credit
2nd Trimester .5 credit
3rd Trimester .5 credit

Grade 12
Grade 12
Grade 12

Prerequisite: Approval of teacher sponsor, principal, and Assistant Superintendent for Curriculum and Instruction prior to the beginning of a trimester

Independent Study is designed primarily for the purpose of providing an opportunity for students to acquire learning experiences which are not a part of the regular course offerings. It is generally limited to students who have demonstrated exceptional ability in a specific area.

The student and his sponsoring teacher prepare a formal "Request for Independent Study" which must include specific objectives of the activity, resources required to accomplish to objectives, and a plan for evaluation of the work. Such projects require the approval of the sponsoring teacher, parent, counselor, principal, and Assistant Superintendent for Curriculum and Instruction.

Please note: Independent Study is not an approved course for Career and Technology Education courses.

Section 6: Delivery of Technology

We provide the following technology access for all students and staff:

- Internet access (up to 3 Mbps) to all classrooms and buildings.
- Interactive video via Learn 360.
- Online courses including Michigan Virtual High School, Nova Net, and online high school courses from colleges/universities.
- The use of Moodle to provide teachers and students a blended learning experience provided by the COP-ESD.
- The district website and, in particular, teacher WebPages continue to be a location in which teachers are communicating with their students and making available lessons, support materials, and additional resources to enhance learning.
- As of 2009, the middle school (grades 5-8) is equipped with wireless access to the Internet. We will continue to make available more laptop devices for students to have access.
- Electronic Educational Development Plans through My Dream Explorer.
- Staff can access Michigan LearnPort, a web-based professional development delivery system.

Section 7: Parental Communications and Community Relations

Below is a list of specific technology related communications between the district, parents, and our community:

- Website - teacher interaction, district information, school closings
- Progress Reports via the student management system online
- Parent access to student information via the student management system
- Monthly published newsletters for parents - hard copy and via the Internet by building
- High school absences reported through auto-dialer by phone, email, and the student management system
- Homework hotline and hot pages are made available via phone and Internet
- Publish School Improvement Meetings
- Digital community billboard to announce school and non-profit community events.
- Parents and community members are included on the District Technology Team (listed below) to plan, implement, and assess the Technology Plan.

In addition to the above communications, this three year technology plan is made available on our website for anyone with Internet access to view and read

District Technology Team

Name	Occupation
Eric Becks	Engineer / Board of Education
Sarah Bonnett	Elementary Teacher
Darwin Chase	District Computer Technician
Linda Chase	Middle School Administrator
Michelle Chase	Elementary Teacher
Tim Davis	REMC
Mark Dombroski	Superintendent
Mike Duvall	Elementary Teacher
Jason Friday	High School Teacher
Eric Hall	Elementary Teacher
Shawna Hancock	Parent
Jacqueline Herman	Career and Technology Education Administrator
Sandra Jeannotte	Elementary Administrator
Julie Lohela	Elementary Teacher
David McCauslin	District Technology Director
Mark Oberman	High School Administrator
Steve Parker	Alternative High School Administrator
Tim Reed	Alternative High School Teacher
Bob Speeter	Middle School Teacher
Gerald Spray	Student
Cathleen Stone	Elementary Administrator
Amanda Tanner	High School Teacher
James Weidman	High School Teacher

Section 8: Collaboration

The Cheboygan Area Schools continues to articulate programs with the Michigan Training Education Center (M-TEC) in Gaylord and North Central Michigan College (NCMC) in Petoskey. Information is provided to our students, staff, and community on training opportunities within these organizations as well as our own professional development provided by Cheboygan Area Schools and the Cheboygan-Otsego-Presque Isle Educational Services District (COP-ESD). Courses are offered at Cheboygan Area High School through a partnership with NCMC. GED is offered in partnership with the County of Cheboygan.

The district currently collaborates with the community's local library. Technological support for the library includes the provision of high speed Internet access via a wireless connection which conversely helps the school by providing parents and students after hours access to district resources such as the student management system/online grading system, district web pages (such as teacher web portals), and access to email so they can stay connected with teachers.

Opportunities for collaboration also exist with the Cheboygan Area Chamber of Commerce. The Cheboygan Area Schools will remain vigilant for such opportunities throughout the duration of this technology plan.

At this time we have no proposed future collaborative agreements planned because no more opportunities currently exist. However, we intend to maintain all of the articulate partnerships above over the life of this plan. If opportunities arise, we will take advantage of future collaborations.

Section 9: Professional Development

Strategies

Encourage the effective integration of technology into the classroom through needs-based professional development and on-going support.

Special emphasis will be placed on customizing Professional Development (PD) in-service opportunities based on grade level/curricular responsibilities and level of user expertise. All trainings are aligned with state and federal technology standards and based on individual curricular needs.

The purpose of staff development in the Cheboygan Area Schools is to increase student achievement by increasing the instructional capacity of certified and non-certified staff. Planning for staff development activities occurs at district, building, and staff member levels.

District staff development planning is a function of the District School Improvement Team. District planned staff development supports common building goals and district goals. District planned staff development accompanies all district curriculum reviews and supports implementation of revised curriculum and technology integration.

All teachers new to the district are provided with mentor teachers. Mentor teachers are provided for teachers through their third year of teaching. A one-day new staff orientation is also provided each August for all staff in their first year with the district.

Each building budget includes funds for staff development. Building level administrative approval of requests by staff to attend local, ESD, state, and national conferences, is based upon the potential of conference participation outcomes to support building school improvement goals. The staff development component is recognized to be a crucial strategy for meeting student academic goals in each building. This training keeps an awareness of state and national standards addressing minimal technology competencies for teachers, administrators, and all instructional staff.

The following chart illustrates three main areas of focus for professional development including a timeline.

GOAL	STANDARD	EXAMPLE	TYPE OF WORKSHOP/ACTIVITY AND TIMELINE
Goal A: Basic Technology Operations and Concepts	A.1. Teachers will be able to use voice, video, and data networks to communicate with students, colleagues, administrators, and parents.	Voice Distribution Email - Newsletters, student management system	<ul style="list-style-type: none"> ▪ Annual inservice for new teachers or interested staff. ▪ Inservice per building ▪ Newsletter
	A.2. Teachers will be able to use terminology related to computers and technology to identify and relay error messages to technology support personnel.	<ul style="list-style-type: none"> ▪ Hardware terms ▪ Error messages ▪ Software terms 	Ongoing access to online tutorials, help desk, newsletters, email

GOAL	STANDARD	EXAMPLE	TYPE OF WORKSHOP/ACTIVITY AND TIMELINE
Goal A: Basic Technology Operations and Concepts	A.3. Teachers will be able to operate a computer system with related peripheral devices for multimedia, data, and communication software programs.	<ul style="list-style-type: none"> ▪ Presentation ▪ Spreadsheet ▪ Database ▪ Desktop publishing ▪ Multimedia ▪ Word processing ▪ Email ▪ Pad cameras ▪ Interactive white boards ▪ Projectors ▪ Instant response systems 	<ul style="list-style-type: none"> ▪ Workshops determined by building need ▪ Ongoing
	A.4. Teachers will be able to connect technological devices which support imaging - including scanners, digital cameras, and/or video cameras.	<ul style="list-style-type: none"> ▪ Scanning text ▪ Graphics ▪ Downloading graphics, pictures, Clip Art ▪ Inputting video frames or action ▪ Learn 360 	<ul style="list-style-type: none"> ▪ Workshops determined by building need ▪ Ongoing
	A.5. Teachers, secretaries, and administrators will be able to participate in the use of audio/video conferencing.	<ul style="list-style-type: none"> ▪ Audio/video conferencing via the Internet/Intranet 	<ul style="list-style-type: none"> ▪ Audio/video conferencing workshop ▪ Ongoing
	A.6. Teachers will be able to participate in the use of broadcast instruction, audio/video conferencing, and other distance learning or web based applications.	<ul style="list-style-type: none"> ▪ MI Streamnet ▪ Discovery Network ▪ Learn 360 	<ul style="list-style-type: none"> ▪ Awareness presentations at staff meetings ▪ Webinars ▪ Workshops determined by building needs ▪ Ongoing
	A.7. Teachers will be able to identify and implement basic troubleshooting techniques related to using a multimedia system with related devices or printers.	<ul style="list-style-type: none"> ▪ Hardware terms ▪ Multimedia setup ▪ Error messages 	<ul style="list-style-type: none"> ▪ Multimedia training as needed ▪ Ongoing
Goal B: Professional and Personal Use of Technology	B.1. Teachers, secretaries, and administrators will be able to apply tools for enhancing their own professional growth and productivity.	<ul style="list-style-type: none"> ▪ Word processing ▪ Desktop publishing ▪ Personal web space ▪ Internet projects ▪ Internet lesson plans ▪ Multimedia / presentation software 	<ul style="list-style-type: none"> ▪ Workshops as determined by building needs ▪ Ongoing

GOAL	STANDARD	EXAMPLE	TYPE OF WORKSHOP/ACTIVITY AND TIMELINE
Goal B: Professional and Personal Use of Technology	B.2. Teachers will be able to use technology in conducting research, solving problems, and data collecting.	<ul style="list-style-type: none"> ▪ Internet projects ▪ Internet resources 	<ul style="list-style-type: none"> ▪ Internet workshops as determined by building needs ▪ Ongoing
	B.3. Teachers will be able to plan and participate in activities that encourage lifelong learning and promote equitable, ethical, and legal use of technology resources.	<ul style="list-style-type: none"> ▪ Acceptable Use Policies ▪ Copyright law ▪ Internet safety 	<ul style="list-style-type: none"> ▪ Newsletters ▪ Handouts ▪ Internet ▪ Evening parent presentations ▪ Curriculum development ▪ Ongoing
	B.4. Teachers will be able to use and apply productivity tools for personal and professional use.	<ul style="list-style-type: none"> ▪ Word processing ▪ Databases ▪ Spreadsheets ▪ Presentations ▪ Page layout 	<ul style="list-style-type: none"> ▪ Workshops as determined by building needs ▪ Ongoing
Goal C: Application of Technology in the Curriculum	C.1. Teachers will be able to apply technologies to support instruction in their grade level and subject areas and create professional products.	<ul style="list-style-type: none"> ▪ Word processing ▪ Databases ▪ Spreadsheets ▪ Curriculum software 	<ul style="list-style-type: none"> ▪ Arranged departmental sharing of information ▪ School improvement committees ▪ Opportunities to attend professional development in curricular areas ▪ Ongoing
	C.2. Teachers will be able to plan, explore, evaluate, and deliver instructional units that integrate a variety of technologies.	<ul style="list-style-type: none"> ▪ Curriculum activities ▪ Software ▪ Internet 	<ul style="list-style-type: none"> ▪ Arranged departmental sharing of information ▪ School improvement committees ▪ Opportunities to attend professional development in curricular areas ▪ Grade level and department meetings ▪ Ongoing
	C.3. Teachers will be able to apply specific research software for learning and application in curricular areas.	<ul style="list-style-type: none"> ▪ Electronic reference library resources ▪ Online search engines ▪ Michigan Technology Standards 	<ul style="list-style-type: none"> ▪ Arranged departmental sharing of information ▪ School improvement committees ▪ Opportunities to attend professional development in curricular areas ▪ Ongoing

GOAL	STANDARD	EXAMPLE	TYPE OF WORKSHOP/ACTIVITY AND TIMELINE
Goal C: Application of Technology in the Curriculum	C.4. Teachers and administrators will be able to use electronic mail and web browser applications for communicating and researching online communications networks.	<ul style="list-style-type: none"> ▪ Internet activities ▪ Moodle ▪ Student management system ▪ Email 	<ul style="list-style-type: none"> ▪ Ongoing departmental sharing of information ▪ Grade level and department meetings ▪ Ongoing
	C.5. Teachers will be able to identify, select, and incorporate digital images and video in presentations and products that support instruction.	<ul style="list-style-type: none"> ▪ Scanning images ▪ Digital images ▪ Video capture ▪ Clip Art ▪ Learn 360 	<ul style="list-style-type: none"> ▪ Workshops ▪ Arranged departmental sharing of information ▪ Opportunities to attend professional development in curricular areas ▪ Ongoing
	C.6. Teachers will be able to use computer projection devices to support and deliver presentations.	<ul style="list-style-type: none"> ▪ Presentations using projectors 	<ul style="list-style-type: none"> ▪ Workshops as determined by building needs ▪ Ongoing
	C.7. Teachers, administrators, and media specialists will be able to conduct research and evaluate online sources of information that support and enhance the curriculum.	<ul style="list-style-type: none"> ▪ Internet activities ▪ Internet lesson plans ▪ Internet projects ▪ Library resources ▪ Electronic references 	<ul style="list-style-type: none"> ▪ Workshops as determined by building needs ▪ Ongoing

Section 10: Supporting Resources

- Acceptable Use Policy (www.chebschools.com)
- CAS website (www.chebschools.com)
- CAS Moodle (COP-ESD)
- Microsoft Office printed resources from the training
- Training for interactive white boards
- Learn 360, REMC
- Provide follow-up to all training through email, website, newsletter, building expert, request for information, etc.
- Maintain a local technology support
- Sustain on-demand training and support
- Establish technology orientation training for new staff members
- Recognize those staff members using technology by providing tangible incentives (release time, send to conferences, etc.)
- Assure accessibility to technology
- Upgrade hardware and software as needed
- Support and promote peer coaching and mentorship programs
- Always be planning for the future - proactive approach toward the use of technology in education
- Encourage the sharing of successes
- Provide a lead teacher in each building for support
- Online subscription services (e.g. MEL.org and Follett)
- REMC support providing a trainer in the areas of video delivery, Microsoft Office Suite, etc. (upon request)
- NCMC purchased technology equipment that remains in our high school classrooms
- Video Lending Library from REMC
- Encourage membership in professional organizations which support the use of technology in education (i.e., MACUL, NCTM, MSTA)

Cheboygan Area Schools

Acceptable Use Policy - Student

STUDENT USE OF NETWORK RESOURCES AND THE INTERNET

Introduction: Network resources and Internet access are now available to qualifying students, teachers, staff, and administrators. These services include access to electronic resources of the District's Local Area Network, Wide Area Network, and the Internet itself. Our goal is to provide innovation and educational excellence by using Internet technology tools for research, worldwide resource sharing, and communication.

The Internet is an electronic highway connecting thousands of computers all over the world. Internet services provide access to electronic mail, public shareware of all types, many university card catalogues, and massive databases on computer networks at universities, government agencies, and private industry.

Issues: With access to computers and people all over the world also comes the availability of material that may not be considered to be of educational value in the context of the school setting. The Internet may contain material that is objectionable from many points of view. There is, however, a wealth of educational material available. Parents and guardians need to decide whether to permit their children to access the Internet.

The District has chosen to filter the Internet content with a software filter and a firewall, in an effort to protect the children from lewd or obscene material. The filter software is designed to identify sites that are not suitable for the school environment, and to prohibit access to those sites. The District makes every effort to protect our children from these sites, but no system is perfect. On a global network, it is impossible to control access to all materials that are objectionable or inappropriate. In addition, an industrious user may be able to gain access to sites that are supposed to be filtered. The District does not and cannot guarantee that users will not have access to inappropriate or objectionable material. Parents and guardians must consider this in deciding whether to permit their children access to the Internet.

Responsibilities: Internet access is coordinated through a complex association of government agencies and regional and state networks. In addition, the smooth operation of the network relies upon the proper conduct of the end-users who must adhere to strict guidelines. These guidelines are provided so that you are aware of the responsibilities you are about to acquire. In general, your responsibilities require **ethical, efficient, and legal use** of the network resources. Each student having Internet access will participate in a discussion with his or her sponsoring teacher regarding acceptable behavior and use of the network.

If a District user violates any of these terms and conditions, his or her Internet access will be terminated and future access could be denied. The signature(s) at the end of this document is (are) legally binding and indicate(s) the party (parties) who signed has (have) read the terms and conditions carefully, and understand(s) their significance and agree(s) to abide by these terms.

Terms and Conditions – Cheboygan Area School District

1. **Acceptable Use:** Internet use must be consistent with the educational objectives of the District.
 - Only the authorized holder of the account shall use Internet accounts. No attempt to gain unauthorized access to accounts is permitted.
 - Attempts to gain access to restricted sites, servers, databases, etc. are prohibited. Unauthorized access to other systems (e.g. "hacking") is prohibited.
 - Use of Internet games, MUDs (Multi User Dungeons), and IRC (Internet Relay Chat) is not allowed.
 - Transmission of any material in violation of any law is prohibited. This includes, but is not limited to: copyrighted material, threatening or obscene material, pornography, or material protected by trade secrets.
 - Personal information, i.e. home addresses, telephone numbers, or financial information should not be used in network communication.
 - Passwords shall be kept private, and should be changed frequently.
 - Internet use for commercial purposes, financial gain, personal business, product advertisement, or political lobbying (including student body elections) is prohibited.
 - Vandalism is not permitted and will be strictly disciplined. Where applicable, any vandalism or attempted vandalism may result in criminal prosecution, and/or restitution. Vandalism is defined as any attempt to harm or destroy data of another user, agency, or network that is connected to the Internet. Vandalism includes, but is not limited to, the uploading, downloading, or creation of computer viruses. It also includes attempts to gain access to a network that is connected to the Internet.

2. **Privileges:** Internet and network use is a privilege, not a right. Inappropriate use will result in a loss of network privileges, disciplinary action, and/or referral to legal authorities. Local technology support will close an account when necessary. A building administrator or faculty member may request local technology support to deny, revoke, or suspend specific user access and/or user accounts.
3. **Netiquette:** You are expected to abide by the generally accepted rules of network etiquette. These include, but are not limited to the following: Be polite. Do not be abusive in your messages to others. Use appropriate language. Do not swear, use vulgarities, or any other language inappropriate in a school setting.
4. **Services:** The District makes no warranty of any kind, whether expressed or implied, for the service it is providing. The District will not be held responsible for any damages you suffer while on this system. These damages include loss of data resulting from delays, non-deliveries, misdeliveries, or service interruptions caused by negligence, errors, or omissions. Use of any information obtained via Internet is at your own risk. The District specifically denies any responsibility for the accuracy or quality of information obtained through its services.
5. **Security:** Security is a high priority on computer networks. If you identify a security problem, you must notify local technology support immediately. Do not demonstrate the problem to other users. You may not use the Internet to discuss or disseminate information regarding security problems or how to gain unauthorized access to sites, servers, files, etc.
6. **Updating:** If any information on your account changes (e.g., telephone number, address) it is your responsibility to notify local technology support to have your account updated.

Cheboygan Area Schools District Guidelines for Access and/or Accounts

1. Elementary and secondary students applying for access and/or an account will participate in a discussion with their sponsoring teacher regarding this Acceptable Use Policy (AUP).
2. Users may be granted an account for as long as they are associated with the District on the following conditions:
 - a. All users must read and agree to follow all guidelines outlined in the AUP. This agreement is formalized through their signature on the application.
 - b. Students must obtain the signature of a parent or guardian on the application.
 - c. Students must have at least one teacher sponsor sign the application.
3. Elementary students in grades 3-5, Middle School and High School are allowed individual e-mail accounts. Elementary classrooms in grades K-2 are given a classroom e-mail account. Continuation of these e-mail accounts is at the discretion of local technology support personnel and the District Administrative Staff.
4. User accounts will be deleted upon the student leaving the District.
5. Users will be issued their UserID and password after attending an orientation meeting.

Please Note: Although the District policy strictly forbids unauthorized access to network resources and the Internet, the District cannot guarantee that students will not gain unauthorized access. The District is not liable for such unauthorized access.

SPONSORING TEACHER: I have read this contract and agree to promote this agreement with the student. Because the student may use the network for individual work or in the context of another class, I cannot be held responsible for the student's use of the network. As the sponsoring teacher, I agree to instruct the student on acceptable use of the network resources including the Internet, and in proper network etiquette.

Teacher's Name (please print): _____

Teacher's Signature: _____ Date: ___/___/___

**Cheboygan Area Schools
ACCEPTABLE USE POLICY AGREEMENT**

User Application/Contract: I certify that I have read the District's Acceptable Use Policy (AUP). I understand and agree to follow the above terms and Conditions for the District's network and Internet use. I understand any violation of the District's AUP will result in the loss of Internet and/or network privileges; may result in other disciplinary action; and may constitute a criminal offense. I agree to report any misuse or abuse of the network resources or Internet to local technology support personnel. I use the Internet entirely at my own risk, and hereby release the District from any claims arising from said network and Internet use.

Note: This contract will be placed in the user's permanent file.

User Name (please print): _____

Student ID # or Social Security #: _____

User Signature: _____ Date: __/__/__

I wish to apply for an individual e-mail account: ___ Yes ___ No

PARENT or GUARDIAN: As the parent or guardian of this student, I have read the District's Acceptable Use Policy (AUP) and this contract. I understand that access to the network and Internet resources is designed for educational purposes. I understand that controversial material is available on the Internet, and I permit my child to use this resource despite this potential availability. I will not hold the District responsible for materials my child acquires on the network. My child uses the network and Internet at my child's own risk and at my own risk. I hereby release the District from any claim arising from my child's use of the network and/or Internet. I agree to report any misuse or abuse of network resources to a District administrator. I accept full responsibility for supervision if and when my child's use is not in a school setting. I understand that my child's violation of the District's AUP will result in the loss of Internet access and/or my child's user account; may result in other disciplinary action; and may constitute a criminal offense. I hereby give my permission to the District to issue a user account for my child, and to allow my child to access the Internet as indicated below. I certify that the information contained in this application is correct.

Parent or Guardian Name (please print): _____

Parent or Guardian Signature: _____ Date: __/__/__

Network Access: ___ Yes ___ No Internet Access: ___ Yes ___ No

Cheboygan Area Schools Acceptable Use Policy - Staff

NETWORK AND INTERNET ACCESS AGREEMENT FOR STAFF MEMBERS

This agreement is entered into this _____ day of _____, 20____ between _____, hereinafter referred to as Staff Member, and the CHEBOYGAN AREA SCHOOLS, hereinafter referred to as District. The purpose of this agreement is to provide Network (Electronic Mail and Electronic Bulletin Board) and Internet access, hereinafter referred to as Network, for educational purposes to the Staff Member. As such, this access will (1) assist in the collaboration and exchange of professional information, (2) facilitate personal growth in the use of technology, and (3) enhance information gathering and communication skills.

The intent of this contract is to ensure that Staff Members will comply with all Network and Internet acceptable use policies approved by the District.

In exchange for the use of the Network resources at school, I understand and agree to the following:

- A. The use of the Network is a privilege which may be revoked by the District at any time and for any reason. Appropriate reasons for revoking privileges include, but are not limited to, the altering of system software, the placing of unauthorized programs or information, computer viruses or harmful programs on or through the computer system in either public or private files or messages. The District reserves the right to remove files, limit or deny access, and refer the Staff Member for other disciplinary actions.
- B. The District reserves all rights to any material stored in files which are generally accessible to others and will remove any material which the District, at its sole discretion, believe may be unlawful, obscene, pornographic, abusive, or otherwise objectionable. A Staff Member will not use his/her District-approved computer account/access to obtain, view, download, or otherwise gain access to such objectionable materials.
- C. All information services and features contained on District or Network resources are intended for the private use of its registered users and any use of these resources for commercial-for-profit or other unauthorized purposes (i.e. advertisements, political lobbying), in any form, is expressly forbidden.
- D. The District and/or Network resources are intended for the exclusive use by their registered users. The Staff Member is responsible for the use of his/her account/password and/or access privilege. Any problems which arise from the use of a Staff Member's account are the responsibility of the account holder. Use of an account by someone other than the registered account holder is forbidden and may be grounds for loss of access privileges.
- E. Any misuse of the account will result in suspension of the account privileges and/or other disciplinary action determined by the District. Misuse shall include, but not be limited to:
 - (1) Intentionally seeking information on, obtaining copies of, or modifying files, other data, or passwords belonging to other users.
 - (2) Misrepresenting other users on the Network.
 - (3) Disrupting the operation of the Network through abuse of the hardware or software.
 - (4) Malicious use of the Network through hate mail, harassment, profanity, vulgar statements, or discriminatory remarks.
 - (5) Interfering with others use of the Network.
 - (6) Extensive use for noncurriculum-related communication.
 - (7) Illegal installation of copyrighted software.
 - (8) Unauthorized downsizing, copying, or use of licensed or copyrighted software.
 - (9) Allowing anyone to use an account other than the account holder.
- F. The use of District and/or Network resources are for the purpose of (in order of priority):
 - (1) Support of the academic program
 - (2) Telecommunications
 - (3) General Information
- G. The District and/or Network does not warrant that the functions of the system will meet any specific requirements the user may have, or that it will be error free or uninterrupted; nor shall it be liable for any direct or indirect, incidental, or consequential damages (including lost data, information, or time) sustained or incurred in connection with the use, operation or inability to use the system.

- H. The Staff Member will diligently delete old mail messages on a daily basis from the personal mail directory to avoid excessive use of the electronic mail disk space.
- I. The District and/or Network will periodically make determinations on whether specific uses of the Network are consistent with the acceptable-use practice. The District and/or Network reserves the right to log Internet use and to monitor electronic mail space utilization by users.
- J. The Staff Member may transfer files from information services and electronic bulletin board services. For each file received through a file transfer, the Staff Member agrees to check the file with a virus-detection program before opening the file for use. Should the Staff Member transfer a file, shareware, or software which infects the Network with a virus and causes damage, the Staff Member will be liable for any and all repair costs to make the Network once again fully operational and may be subject to other disciplinary measures as determined by the District.
- K. The Staff Member may not transfer file, shareware, or software from information services and electronic bulletin boards without the written permission of local technology support personnel. The Staff Member will be liable to pay the cost or fee of any file, shareware, or software transferred, whether intentional or accidental, without such permission.
- L. The District reserves the right to log computer use and to monitor fileserver space utilization by users. The District reserves the right to remove a user account on the Network to prevent further unauthorized activity.
- M. The staff member is responsible for the proper use of the equipment and will be held accountable for any damage to or replacement of equipment caused by abusive use.

In consideration for the privileges of using the District and/or Network resources, and in consideration for having access to the information contained on the Network, or by the Network, I hereby release the District, Network, and their operators and administration from any and all claims of any nature arising from my use, or inability to use the District and/or Network resources.

To the extent that proprietary rights in a work product would vest in the staff member upon creation, I agree to assign those rights to the District.

I agree to abide by such rules and regulations of system usage as may be further added from time-to-time by the District and/or Network. These rules will be available in hardcopy form in the Principal's office.

(Sign and return to the District Network/Internet Director.)

Signature of Staff Member

Date

FOR OFFICE USE ONLY

User name (assigned by the system):

Type of access (check all that apply):

- Local Account
- Internet Account
- _____ Account

Date Local Account Approved ____/____/____

Revoked ____/____/____

Date Internet Account Approved ____/____/____

Revoked ____/____/____

Date _____ Account Approved ____/____/____

Revoked ____/____/____

Section 11: Infrastructure Needs / Technical Specification and Design

Goal

To provide as much access to technology tools while maintaining a 95% up time on the equipment.

In 1996, the first bond issue was passed that started the technology infusion that we have at our district today. Since then, we had the original computer installation and have been through two computer refresh cycles with many other upgrades along the way. The next section describes all the technology that has been implemented district-wide over the past 12 years.

Implementation from 1997-2000 (Bond Project)

Hardware Summary

- Expended a bond issue of \$1.4 million on technology
- Purchase and installation of 550 Acer and 40 Apple computers
- Creation and installation of Windows NT Domain
- District-wide school fiber optic ATM Data WAN
- Implemented ESD provided email for all staff
- Created filtered Internet access for every computer on our network, utilizing two providers for greater up time
- Implemented a student management system with all teachers using electronic grade books
- Phone in every classroom K-12
- Implemented a centralized voicemail system
- Developed a professional development program for staff and administrators
- Integrated 240K of Teacher Technology Initiative funds

Services

- Hired a Director of Technology
- Hired a Computer Technician

Elementary Instructional Software

- MS Office with resource CD for all computers
- Follett
- Ainsworth Keyboarding
- Math Keys
- Jumpstart Series
- SkillsBank

Middle School Instructional Software

- Microsoft Office Professional 97
- Windows emulation software for Apple computers

High School Instructional Software

- Microsoft Office Professional 97
- Microsoft Word 2000 - complete concepts and technologies
- Microsoft Access 2000 - complete concepts and technologies
- Microsoft PowerPoint 2000 - complete concepts and technologies
- Microsoft Excel 2000 - complete concepts and technologies

- Microsoft Visual Basic 6.0
- Introduction to Computer Science Using C++
- Visual C++ Learning Edition 6.0
- HTML and JavaScript programming techniques
- Microsoft Front Page 2000
- Dreamweaver

Upgrades 2001-2009

Hardware Summary

- Upgraded infrastructure backbone between buildings to 100MB
- Upgraded computers in all the buildings
- Upgraded building servers and increase data storage capacity
- Installed projection units in every classroom at West Elementary and wireless networking
- Implement wireless laptop carts at East Elementary and implemented wireless networking in one classroom at the middle school
- Microsoft Office Professional 98
- Microsoft Office 2003

Hardware Detail

Teacher Work Station

Each teacher has been assigned a desktop computer which is used as a tool for simplifying their day-to-day recordkeeping tasks and for providing a special link to student information. This computer is connected to the district-wide network. Email and direct Internet access is also an available communication/teaching tool.

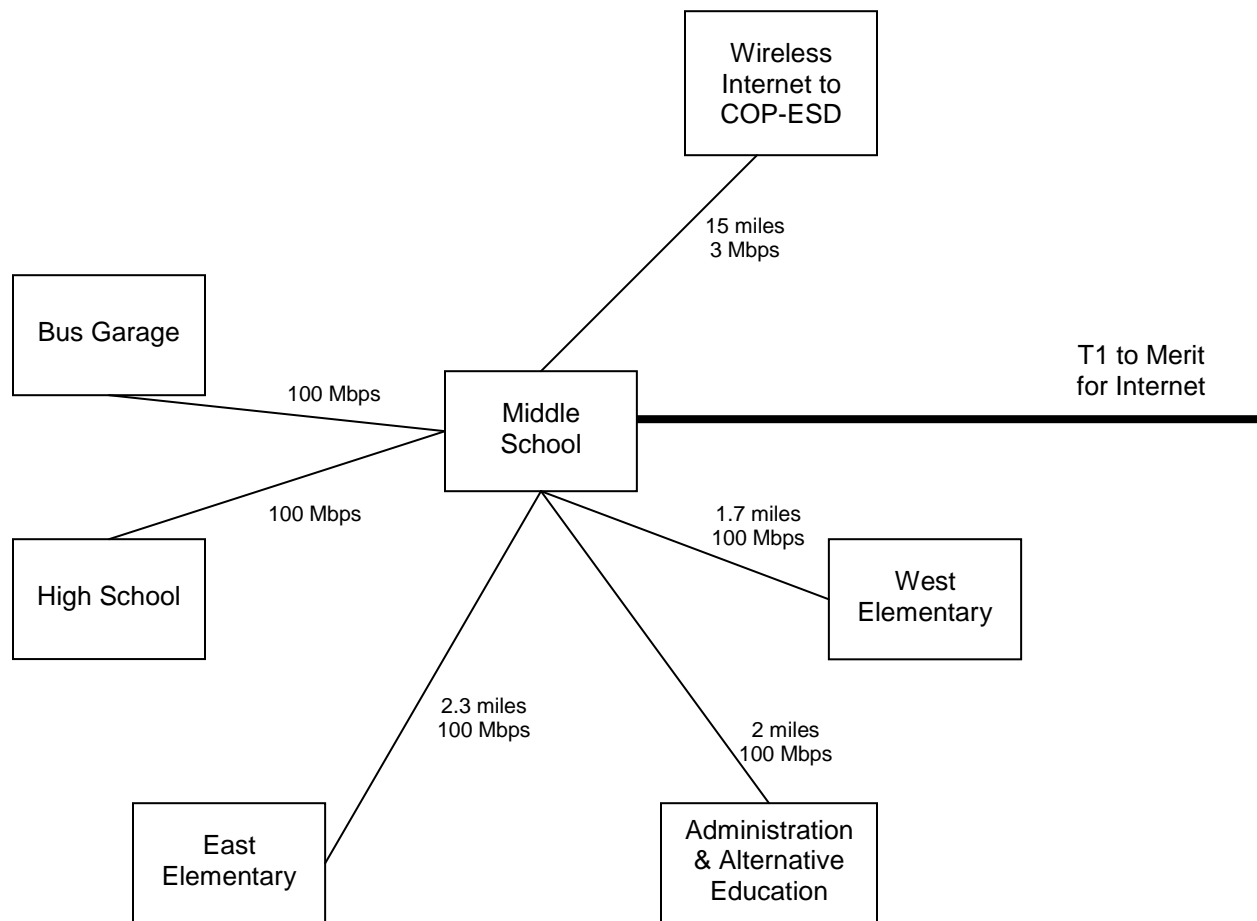
Classroom and District Network

The computers in each classroom are networked to an instructional Microsoft network. By assembling a dedicated building network, the instructional network is not dependent upon outside sources to be functional. Local CD-ROM, applications, and other services are stored, controlled, and hosted by the building file server. Site licenses for application programs are far less costly than individual applications. Information is shared and worked on in groups across the building network. Local servers are housed in a server farm at Cheboygan Middle School for better access for monitoring and updating.

Scanners, digital cameras, science probes, ELMOS, and laser printers will all be made available in each building on an as needed basis.

The district-wide area network is comprised of fast-Ethernet fiber provided by Charter. This allows us to centralize the file servers for the buildings along with running the centralized web server, email system, web access, phone system, voicemail system, and backup systems.

Cheboygan Area Schools District Schematic



General Information about the District's Network

The Cheboygan Area Schools utilize the middle school as the central hub for the fiber optic WAN. The high school and bus garage are directly connected via fiber optic fast Ethernet. The remaining buildings are all connected to the WAN. All network traffic from building to building has to pass through the middle school. Physical placement of the hubs in this building's head end ensures the least amount of hops to get information distributed.

All classrooms are cabled with a minimum of four Ethernet ports. The power distribution plant has been upgraded to provide isolated ground protection to all data circuits in all classrooms. The district has built in an upgrade path to expand upon the base established during the building bond issue of 1996.

The current scenario includes a Windows NT domain structure and a Windows 2003 active directory domain, with all workstations being members of those domains. The plans are to fully retire the Windows NT domain during summer 2010. There are 16 servers that deliver curriculum content to staff and students, one server for student administration, one server for district financial data, and two proxy servers for Internet access. This proxy also houses a content filter, per CIPA regulations. Users are required to log on to the network for access to any district resources.

Software

- Digital curriculum and Learn 360 added district-wide
- Implementing new imaging software to increase support of workstations

Software Acquired to Improve Instruction

This plan provides a description of the supporting resources, such as services (online and other), software and print materials, which will be acquired to ensure successful and effective use of technologies that are acquired. We are continuing to implement online textbooks as well as electronic forms of textbooks and teacher resources to be used in all curricular areas.

Phone System

The current phone system is now 12 years old. It is still working. We may be looking at replacing our phone system in the life of this three-year technology plan which is dependent on funding. We will look at an IP phone system that will integrate with our existing data network infrastructure.

Technical Support

The district is committed to supporting the technology that has and will be implemented district-wide. To support our present and future technology initiatives, the technology department consists of the following staff members:

- Local Technology Support Personnel
- Technology Technician
- Lead Teachers (leaders in technology integrations willing to share)

The technology department staff has set goals to keep equipment up and running while putting students' needs first. Building coverage is split between the tech staff so that the responsibilities are spread out equally. This tech support coverage is monitored and adjusted as building needs change, however, we also understand that as technology has been increasing in our buildings the amount of technology support has not. With this in mind, we are continually looking at ways to improve our efficiency. The following systems will be implemented to help improve efficiency:

Ghost Imaging Software: This is a new implementation. When complete, all computers in the district will be created from an image. Software will then be fixed within a few hours of the repair order. This process is continually being streamlined.

Desktop Remote Control: This feature will allow us to remotely control or see a workstation to help identify problems without having to physically go to the computer's location for troubleshooting. This system will be implemented in the future.

Maintenance Repairs

- A technology repair request document and tracking system has been implemented
- A budget of \$10K is provided for contracted services
- A budget of \$7K is provided for all district maintenance

Basic Supporting Resources

The following lists will be continually updated to support learning and operational goals of the district:

Policies: Acceptable Use Policy and website policy are on our website. (See website URL or Page 68-72).

COP-ESD: Technical support for some hardware and network issues.

Manuals and Printed Materials

- Maintained in library of building which is licensed
- Use technology staff as resource
- Ongoing classroom coaching and web software resources
- Inservice attendance
- Software licenses kept in each building’s office

Online Subscriptions

- Student management system technical support
- Student accounting support

Future Technology Upgrades and Initiatives

As technology needs arise, we want to be there to meet those needs. The following are some areas that the district will continue to monitor for future technology acquisitions during the course of this three year plan:

Computer Hardware Replacement

Below is a plan following a five-year cycle with each year replacing a different block of computers and printers. This is dependent on the availability of funding.

2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
<ul style="list-style-type: none"> ▪ HS non-BST computers ▪ 1 BST lab ▪ Teaching stations in HS ▪ MS lab printers 	<ul style="list-style-type: none"> ▪ Upgrade storage servers (2) ▪ MS library, administration office, and Alt. Ed. computers ▪ 1 BST lab 	<ul style="list-style-type: none"> ▪ 1 BST lab ▪ Office computers ▪ Elementary teaching stations 	<ul style="list-style-type: none"> ▪ HS drafting lab ▪ Auto shop computers ▪ East cart computers 	<ul style="list-style-type: none"> ▪ West lab ▪ West printers

Replacement of our computers will require finding a means of placing or repurposing the old computers. We will look into the following options for the old computers:

- Use the trade-in option and get reimbursed for the value of the old computers.
- Find a third party vendor that buys old equipment, refurbishes them and sells them.
- Try and put together a program to sell the computers to community members for a value we may be able to get from other markets.
- Work with community services to set up a program to get computers to needy families in the community.
- Contract with recycler for removal of obsolete and non-repairable equipment.

Software

Curriculum software needs in the district will be continually evaluated through the district curriculum committees. As the need for new software is determined, we will also keep up on software upgrades so as not to fall too far behind on our software needs. Base software upgrades will take place during the year of the computer upgrades for each building. Software is continually looked at as a tool to support the curriculum. If we determine that a software package does not meet our criteria then we will not bring it into the district.

Other software options that are becoming more and more viable are internet based software and some open source software. Again the software must support the curriculum prior to being approved for use within the district.

Infrastructure Upgrades

In the original bond issue, we were again very fortunate that the community was able to support technology. Part of the purchases from the original bond was putting into place a solid wiring infrastructure that will carry us into the future. This is not to say that changes are not needed as our systems grow in use, but the changes can be done with networking equipment without making changes to the wiring. We have upgraded all of our data systems from their original configuration of 100 MB backbone with 10 MB shared to every desktop computer to 100 MB switched to every desktop. The priority to increase the infrastructure from its current state will be determined by systems analysis of our current usage and changes are being made as we determine the need and secure funding. We will continue to expand the wireless systems that are currently in place.

Printers Upgrades, Multimedia Equipment

As our current printers break down, or are no longer productive for their needs, we have replaced them with new printers. Some printers are over ten years old and are still working great. As we determine the need for additional multimedia equipment like digital equipment, scanners, etc. we will make that purchase to meet the needs of the curriculum. Our printer replacement cycle will follow the computer replacement cycle when and if they need replacing. Alternatives to printers, such as networking copiers will also be considered.

Building Video Connections

Currently, televisions and DVD/VCR players are installed in all classrooms. These systems connect to Charter and a computer system with Internet connection. All of these systems allow all types of video/computer media to be available to the teachers to use as a tool to teach their curriculum. As funding becomes available, we will explore future needs.

Section 12: Increase Access

The district is taking steps and strategies to increase technology for all students and all teachers. Listed below are the steps that will be taken to ensure all students and teachers have increase access to technology.

TYPE OF TECHNOLOGY	CURRENT STATUS
Computer Workstations	Replacement plan for computer workstations on an annual basis.
Sound Enhancement	Installed sound enhancement systems in specified classrooms at the elementary level. This will be added to the middle school and high school.
Wireless Access Points	Wireless access is available at the Middle School and West Elementary. A wireless laptop cart is used at East Elementary.
Peripherals	Sound enhancement systems, printers, scanners, projectors, flash drives.
Assistive Technology	<ul style="list-style-type: none"> ▪ Alpha Smart portable computing devices ▪ COP-ESD Assistive Technology Consultant ▪ Assistive technologies are provided to students on an as needed basis ▪ Adaptive Technology Plans are used to define technology for students with special needs across the district
COP-ESD Web Access	Email web access from anywhere, anytime for all district staff network account holders.
Staff Intranet Site	Intranet/Internet web site for staff members for easy access for instructional services (student management system)
Web Sites	<ul style="list-style-type: none"> ▪ Student management system with online grades and attendance for parents and students ▪ Cheboygan Area Schools Web Site

Each building's School Improvement Plan will contain a section identifying activities to address the needs of high poverty, at-risk students which will include the integration of technology.

Section 13: Budget

ANNUAL DISTRICT TECHNOLOGY BUDGET

ITEM	2010-2011	2011-2012	2012-2013
SALARIES AND BENEFITS			
Technical Staff	125,000	130,000	135,000
CONTRACTED SERVICES			
Northern PC	600	600	600
Professional Development	10,000	10,000	10,000
Childs and Associates	6,000	6,000	6,000
HARDWARE			
New Equipment	25,000	25,000	25,000
Replace office machines as per Replacement Plan	1,000	1,000	1,000
Replace desktop computers annually as per Replacement Plan	10,000	10,000	10,000
MAINTENANCE AND SERVICE COSTS			
Copiers	55,000	56,000	57,000
LICENSE AGREEMENTS			
Skyward	20,000	0	0
PowerSchool	0	0	0
Optimal Solutions	6,000	6,500	7,000
Follett Library Services	1,500	1,750	2,000
Websense	3,500	3,500	3,500
Avira (7,250 for 3 years)	2,400	2,400	2,400
NovaNet	10,000	0	0
E2020	0	15,000	7,500
NETWORK COSTS			
Merit	3,500	3,750	4,000
Charter	42,000	42,000	42,000
COP-ESD	3,000	3,000	3,000
TOTAL	324,500	316,500	316,000

Section 14: Coordination of Resources

A variety of funding sources will be utilized to implement our technology plan:

- Title I, Title IID and Title VI grants
- USF/E-rate funding will be used for telephone services and Internet access fees
- Public and private grants will be sought to assist in funding professional development, software licenses, and equipment purchases
- Sources of funding for replacement cost of equipment and technical support staffing will be explored
- Internally, a coordination of technology department funds, curriculum support, and building level expenditures will provide funding for all areas of technological need
- A bond issue is currently being discussed in the area of technology
- PTO's at the elementary schools donate a portion of their fund raising toward providing technology equipment and software for staff and students

Section 15: Monitoring and Evaluation

Evaluation toward progress in implementation of the technology plan will be reviewed by the technology committee. The following focus areas have been identified and will be addressed as per the timeline. Focus areas will be evaluated based on yearly reports provided by buildings as they make progress on their building technology integration plans. Progress toward school improvement goals that pertain to technology will also be reviewed. Given the specified timeline, with ongoing review, the technology committee will determine specific targets to ensure that no goal is left unmet.

REQUIRED COMPONENTS	ACCOMPLISHMENT	PROGRESS TOWARD GOALS	FUTURE FOCUS AREAS	TIMELINE
Infrastructure	Provided a stable technical environment for teaching and learning	<ul style="list-style-type: none"> ▪ 5 year replacement plan has been implemented ▪ Stability has improved over the course of the 06-09 plan. ▪ Tracking systems have been implemented. ▪ Head end upgrades have been made when fiscally possible. 	<ul style="list-style-type: none"> ▪ Improve wireless infrastructure 	2010-2013
Curriculum Integration	Implementation of Michigan Educational Technology Standards	<ul style="list-style-type: none"> ▪ Built awareness for standards. ▪ Shared curriculum via web and technology committee. 	<ul style="list-style-type: none"> ▪ Increase awareness of curriculum implications across content areas 	2010-2013
Collaboration	Collaborated with community partners to increase technological awareness and understanding	<ul style="list-style-type: none"> ▪ Classes offered through community resources. ▪ Learning opportunities at the State and local level. ▪ Technology highlighted in district publications and local news. 	<ul style="list-style-type: none"> ▪ Increase staff participation in collaboratively offered workshops 	2010-2013
Professional Development	Provided quality learning experiences for all staff	<ul style="list-style-type: none"> ▪ Training opportunities have changed from isolated sessions to just in time learning. ▪ All tech staff are prepared to offer training on an as needed basis. 	<ul style="list-style-type: none"> ▪ Increase awareness and use of offered opportunities locally and ESD provided training. ▪ Use current school initiatives to embed technical training (i.e., RTI and MiBlisi). ▪ Include advanced Internet skills in all training. 	2010-2013
Technical Support	Streamlined technology department and services.	<ul style="list-style-type: none"> ▪ Added data management to administrative responsibilities. ▪ Improved response times. 	<ul style="list-style-type: none"> ▪ Evaluate and continually fine tune structure to meet current needs. 	2010-2013

Supporting Resources	Developed strategies for obtaining technical information.	<ul style="list-style-type: none"> ▪ Implemented resources to support specific initiatives (e.g. student management system). ▪ Increased use of all reporting tools for communication. 	<ul style="list-style-type: none"> ▪ Develop web based tutorials for basic technologies to free up face to face time for higher order instruction. 	2010-2013
Timetable	Reviewed and updated Technology Plan annually	<ul style="list-style-type: none"> ▪ Technology Plan review done yearly. 	<ul style="list-style-type: none"> ▪ Review plan each year. 	Yearly
Cost Funding	Efficiently managed available resources	<ul style="list-style-type: none"> ▪ Managed district funds ▪ Established process for use of building funds for technology needs. 	<ul style="list-style-type: none"> ▪ Develop plan for efficiently working with budgeted decreases in funding. ▪ Explore grant and collaborative opportunities. 	2010-2013
Coordination of Funding Resources	Provided structure for fund management	<ul style="list-style-type: none"> ▪ Technology director and technology committee established 	<ul style="list-style-type: none"> ▪ Use collaborative processes to work through budgeting issues 	2010-2013
Acceptable Use Policy	Reliance on well written Acceptable Use Policies at all levels	<ul style="list-style-type: none"> ▪ Mandated strict implementation of AUP collection for staff and student prior to network usage 	<ul style="list-style-type: none"> ▪ Update AUP's ▪ Assist buildings with collection and monitoring of AUP's 	2010-2013
Communications	Increased communication about all aspects of technology	<ul style="list-style-type: none"> ▪ Increased communication with staff using technology ▪ Increased communication using technology (student management system) 	<ul style="list-style-type: none"> ▪ Work to maximize the use of new communications software 	2010-2013
Impact on Student Achievement	Improved access to data collection tools for student achievement and progress in multiple areas.	<ul style="list-style-type: none"> ▪ Teachers can easily access student achievement data on electronic portfolios ▪ Tools allow for easy correlation with standards and the ability to customize instruction to maximize individual gains 	<ul style="list-style-type: none"> ▪ Improve systemic use of all student data tools 	2010-2013

Section 16: Acceptable Use Policy

Cheboygan Area School's Internet Safety Policy

In compliance with the Children's Internet Protection Act (CIPA) requirements, Cheboygan Area Schools (CAS) has in place a filter that restricts access to inappropriate and harmful materials on the Internet for all CAS network users, including minors. CAS utilizes two different access points to the Internet. One is in-house and is a T1 connection from Merit Network. We filter this connection with Websense, an industry content filter. The other connection is from the COP-ESD and is filtered with Squid Proxy, an open-source filter.

Current building level acceptable use policies, as well as technological constraints on port traffic are in place to prevent unauthorized access or "hacking" activities by minors online.

The policies that are in place restrict CAS unauthorized disclosure, use, and dissemination of personal identification information regarding minors.

Cheboygan Area School's Acceptable Use Policy

Internet Use by Students and Staff

The purpose of this policy is to facilitate network (electronic mail and electronic bulletin board) and Internet access (all referred to as "Network"), for educational purposes for the staff and students where appropriate. As such, this access should (1) assist in the collaboration and exchange of information, (2) facilitate personal growth in the use of technology, and (3) enhance information gathering and communication skills. For the purpose of this policy, "user" includes both staff and students.

1. All District computers, servers and any information, student data, programs, or software provided by the District are the property of the District and are to be used for educational or communication purposes.
2. The use of the networks is a privilege. The District may review activities and use of computers and Internet at any time. Using the computer or Internet in a manner not authorized may result in disciplinary action or removal of access. The staff member is entitled to a review meeting and due process. Misuse of the networks includes, but is not limited to intentionally:
 - a. Altering of system software.
 - b. Placing or distributing of unlawful or unauthorized information.
 - c. Installing viruses or harmful programs on or through the computer system either in public or private files or messages.
 - d. Misrepresenting other users on the network.
 - e. Disrupting operation of the networks through abuse of equipment or software.
 - f. Malicious use of the networks through hate mail, harassment, profanity, vulgar statements, or discriminatory remarks.
 - g. Extensive use for non-curriculum related communication.
 - h. Illegal installation of copyrighted software.
 - i. Unauthorized copy or use of licensed copyrighted software.
 - j. Allowing anyone to use an account other than the account holder.
 - k. Intentionally seeking information on, obtaining copies of or modifying files, other data, or passwords belonging to other users.
3. The District retains the right to access and review all electronic mail, computer files, databases, and any other electronic transmissions contained in or used in conjunction with the District's system. Staff members should have no expectation that any information contained on such systems is confidential or private.
4. A staff member will not use his/her access to intentionally access or remove any material that is unlawful, obscene, pornographic, abusive, or objectionable; doing so will result in disciplinary action. If the staff member is not certain whether material falls outside of these parameters, approval should be sought from their immediate supervisor prior to accessing or transmitting such material.

5. All information services and features contained on the networks are intended for the educational use of its registered users and may not be used for commercial purposes. Staff members will not send or forward chain mail or unsolicited advertising.
6. The use of networks are resources for (in order of priority):
 - a. Support of the academic program
 - b. Telecommunications
 - c. General information
 - d. School communications
 - e. Reasonable personal or association communication to the extent that such use does not violate any express prohibitions of this agreement and does not interfere with assigned duties and responsibilities.
7. The District and/or Internet networks does not warrant that the functions of the system will meet any specific requirements that the user may have or that it will be error free or uninterrupted; nor shall it be liable for any direct or indirect, incidental or consequential damages (including lost data, information, or time) sustained or incurred in connection with the use, operation, or inability to use the system.
8. The staff member will diligently delete old mail messages on a weekly basis from the personal mail directory to avoid excessive use of the electronic mail disk space.
9. The District and/or Internet networks will periodically review and make determinations on whether specific uses of the networks are consistent with the acceptable use policies. The District and network reserves the right to log Internet use and to monitor electronic mail space utilization by users.
10. The staff member may not transmit digital material that is not licensed to Cheboygan Area Schools without the permission of the local technology support personnel. The staff member will be liable to pay for the cost or fee of any unlicensed material intentionally transferred without such permission.
11. Student supervision of networks use is expected to the extent possible. Staff members however, will be released from liability for inappropriate acts committed by a student with regard to the network or Internet without their knowledge.
12. The District will provide each staff member with a password for accessing the network and e-mail. The staff member will protect the password and provide for its security.
13. "For Student" computers will utilize a system or method that is designed to prevent a minor from viewing obscene matter or sexually explicit matter that is harmful to minors. The District may use passwords and or filters.

The District reserves the right to log computer use and to monitor fileserver utilization by users. The District reserves the right to remove a user account on the Network to prevent further unauthorized activity.

The user is responsible for the proper use of the equipment and will be held accountable for any damage to or replacement of equipment caused by abusive use.

MCLA 397.606 (6)