

Chassell Township School

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School Code: 31050

Technology Plan July, 2014- June, 2017

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Copper Country Intermediate School District

**Technology Plan URL:
www.chassellschools.org Select "Technology"**

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Introductory Material - Section 2

DISTRICT SCHOOL IMPROVEMENT VISION/MISSION STATEMENT

The community of Chassell develops academic, social, and moral excellence to foster lifelong learning.

Motto: *"Learning For Life"*

SCHOOL INTRODUCTION

Chassell is a small, rural community located on the shore of Lake Superior in the Upper Peninsula of Michigan. The school was built in 1993 with additions in 1995, 1997, & 2002. The Chassell Township School District is a K-12, one building district, employing 16 teachers for approximately 255 students. Additionally we have 7 teacher aides working in the building each day. 52% of our student body qualify for free or reduced lunch, and 25 % of these students are Title 1 eligible or Students At-Risk.

DISTRICT TECHNOLOGY TEAM MEMBERS

Ted Belej, Support-Net Representative
Tricia Tervo, Science Teacher, School Improvement
Rick Chiochios, 6th Grade, School Improvement
Chris Davidson, Superintendent/Principal

Vision and Goals - Section 3

DISTRICT TECHNOLOGY VISION/MISSION STATEMENT

Recognizing the impact of computers and technology on schools, the workplace, and the community, it is the goal of the Chassell Township School staff and administration to continually innovate and improve the use of technology to provide our students with the knowledge and skills needed to effectively use technology and to improve the learning environment for all students.

TECHNOLOGY GOALS

Goal #1: Expand the effective integration of technology to reflect current trends in relevant educational technology that support curriculum, instruction and assessment.

Goal #2: To review and update the K-12 computer curriculum

Goal #3: To develop skills among students and staff in utilizing technology to communicate, to obtain information, and to serve as an effective productivity tool.

Goal #4: To continue to support school-improvement goals.

I. CURRICULUM

A. Curriculum Integration – Section 4

Technology goals have been established for 1-12 and are implemented through required computer time and other curricular areas. All goals are aligned by grade level with the Michigan Educational Technology Standards (METS).

Our three computer labs, classroom set of iPads for the elementary, and classroom set of Chromebooks for the high school provide staff and students with greater access to computers, enhancing their competence in the use of technology and communication, for all students. In the elementary iPads are used for centers, differentiating instruction, research, word processing, presentation slides, and the many educational apps that reinforce what is being taught in the classroom. In the high school Chromebooks are being utilized to create a blended learning environment and other grade level computing activities. Some classrooms are now equipped with a Smartboard allowing teachers and students to interact with technology in a 21st Century classroom.

Teachers design, develop and implement student learning activities that integrate technology. Teachers can effectively use computers and multimedia technologies as teaching and learning tools, allowing various learning styles to be explored and enhance the curriculum and instruction needs of the individual learners. In particular, with the purchase of appropriate software, the technologies will be utilized to address school-improvement objectives at all grade levels.

Each year during the teacher in-service cycle we evaluate the district's technology curriculum and its alignment to the METS by meeting in grade/content level groups. Changes to our curriculum will be made based on the outcomes of these meetings. Teachers will then receive professional development to effectively integrate technology curriculum into their instruction. The District will continue to identify and apply resources for staying current in applications of informational technology.

See attached Addendum *Technology Curriculum* for specific goals for students at each grade level, including objectives for technology literacy.

B. Student Achievement – Section 5

Chassell Township Schools continues to integrate technology into curricula to support the Common Core Standards and Michigan Grade Level and High School Content Expectations. This integration is based on best practice research to improve academic achievement. The following are currently integrated into curricula to improve student achievement by providing for all learning styles.

Graphing calculators are used in mathematics classrooms to provide student with \ a visual learning tool.

Internet (Wifi and fiber), on-line services and web page access for student research and information are available to all grades first through twelfth.

Computer labs, with certified instructors, are available at all building levels for the purpose of computer instruction as well as to support the State standards and benchmarks.

Three (3) computer labs are available throughout the building.

The following technology has been implemented since the inception of this Technology Plan (July 1, 2011):

Updated two computer labs with new computers.

One (1) classroom set of iPads are available to all elementary grades.

One (1) classroom set of Chromebooks are available to all high school grades.

OdysseyWare is used for Seat Time Waiver students.

Addition of Smartboards in some classrooms.

Piloted online MEAP and Smarterbalance assessments using Chromebooks.

See attached Addendum *Technology Curriculum* for specific goals for students at each grade level, including objectives for technology literacy.

C. Technology Delivery – Section 6

Odyssey Ware

Our students utilize on-line courses in the following situations: schedule conflicts with required classes, to enroll in unique classes that our curriculum does not provide, for our at-risk students to fulfill their graduation requirements, and for seat time waiver students.

Video Streaming

Video Streaming is utilized by our elementary and high school staff to provide concrete examples of abstract concepts. We also have the capability to provide virtual field trips to all levels.

Planning, implementation and evaluating is an ongoing process in which student's success in classes, feedback from the teachers, and parental input is considered for continuation of the class.

D. Parental Communication and Community Relations – Section 7

Chassell Schools' educational technology plan is available to the community via our website at www.chassellschools.org, and at our district office in hard copy. *Power School*, our student management software, allows parents to access student grade and attendance information. Technology is regularly discussed at board meetings and teacher meetings. Our Journalism class produces the school newsletter in which articles regarding technology use in the classroom are featured.

During parent/teacher conferences Chassell Schools will host workshop sessions designed to educate parents and minors about appropriate on-line behavior including interacting with other individuals on social networking web sites and in chat rooms, and cyberbullying awareness and response.

E. Collaboration – Section 8

Through the interactive distance learning system Chassell Schools is a satellite campus of Gogebic Community College and offers adult night classes for professional enrichment and degree completion. We belong to a consortium of schools that provides adult education. The District does not provide a GED certification program.

II. PROFESSIONAL DEVELOPMENT

F. Professional Development – Section 9

Professional development is seen as a key component of the District's Technology Plan. All staff will receive regular training in expanding their understanding and use of technology in their curriculum area. State and national standards guide professional development planning. Staff members are able to attend, state, regional and local technology conferences, and are required to attend periodic in-house training sessions where technology integration in the classroom is discussed. New teachers will receive orientation on administrative software, and training on the school's computer network. As new software is purchased, teachers will receive orientation to integrate the software into the curriculum at the next available in-service date.

On the first in-service day the staff will attend workshop sessions designed to educate staff about appropriate on-line behavior including interacting with other individuals on social networking web sites and in chat rooms, and cyber bullying awareness and response.

G. Supporting Resources - Section 10

The District has resource people on staff and within the community who will be available to assist staff members and will provide technical support in the areas of curriculum, software, hardware, and networking.

Professional development days will be scheduled each year and they will be used to provide ongoing training. Such training includes the development of teacher webpages, Power School student information system training, Accelerated Reader training, iPad's in the classroom, Chromebooks, Smartboards, using technology to differentiate instruction, and the use of educational technologies to create a 21st Century Learning environment. Summer training may be offered as an option. All supporting software for these training programs will be provided. Teachers are encouraged to research and request additional software to enhance curriculum. Staff personnel and outside vendors are used as trainers.

Contracts exist with Pearson Learning, Opus Web, Optimal Solutions, and REMC1 for support of district administrative software.

The district has contracted with REMC 1 - SupportNet to provide network, software, and hardware consulting.

Additionally, we can access the Discovery Education video streaming library from REMC 1.

Chassell Schools' website is located at <http://www.chassellschools.org>. It provides all district information, schedules, extracurricular activity schedules, hot lunch menus, etc. Since 2007-08, all students K-12 and their parents have access to online attendance and grade reports.

An online helpdesk ticket and relationship tracking program exist to track technical support issues. This ticket tracking program is maintained by REMC 1 and tracks information such as machine, time to repair, problems and solutions, allowing the technology staff to access past experiences when working on current problems. It will also be used as an indicator of successfully resolving technology issues. The district also has access to a local support hotline provided by REMC1 for real-time support.

The Chassell Township Public School Foundation has assisted in supporting the school district in acquiring hardware, software and other resources.

REMC1 provides the district e-mail lists which allow school faculty and administration to communicate efficiently with student, parent, and community groups. They also provide internet filtering.

Charter Cable Company provides cable distribution to all district classrooms and supports a public access channel, such as PBS, the History Channel, etc.

The Michigan Department of Education and the US Office of Education provide various resources for school districts.

III. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE

H. Infrastructure Needs/Technical Specifications, and Design – Section 11

Our district uses a combination of Apple and Windows computers. Most of our district computers are Apple computers, with one lab of Windows computers for student exposure to a business office software environment. Microsoft Office Suite is available on both lab and teacher computers. There are a few Windows computers used by staff where their software needs require a Windows computer.

All teaching staff has an Apple MacBook available for their use. All teacher laptops can use the district's wireless network to allow the teacher movement around the building with all their documents. All classrooms have a ceiling mounted projector for use with the teacher's laptop or with other A/V equipment. All teachers are allowed to take their laptop to and from home, and on summer recess to continue using district software and for any professional development needs.

We have one lab of thirty (30) Windows computers updated in January 2011, for business and computer aided design (CAD) software. We have two labs of Apple computers. One (1) lab of sixteen (16) iMacs was updated in 2012 with 10 iMacs for Title 1 use. The other lab of thirty-three (33) Mac's updated in 2013, is available for basic computer use classes, multimedia classes, and is open for general use by other classes when not in use by a specific computer class. The resource room has 5 iMacs.

The district maintains and purchases software for staff computers and student access computers based on the district's Technology Curriculum Plan. All student-use software purchases are evaluated by teaching staff to see if the software fits with district curriculum needs. We also attempt to purchase district/site licenses for software purchases, so that we can use the software on all computers.

Our technical support consists of a contracted support person available for technical support of PowerSchool, our district administrative software, and one-on-one professional development with staff. Additionally, we have contracted with REMC1 - SupportNet for 1 day every other week onsite computer and network support, daily helpdesk phone, and remote server support.

Our network consists of two different wiring closets connected by fiber optic cabling. We have purchased HP Procurve network switches with lifetime warranties. All switches are connected together via 1000Mbps (gigabit Ethernet) and the two wiring closets are connected together via fiber optics for high bandwidth between the wiring closets. The teaching staff MacBooks use an 802.11b/g wireless network supplied by a Ruckus Wireless network with approximately 10 wireless access points. In 2013 we updated UPS's, the network core, the network edge, and the phone system to voice over I.P. Pending funding, during this Technology Plan we plan to increase the number

wireless HUB's around the building and update existing ones in preparation for more student computing devices, consider virtualizing the file server, review performance of teacher MacBooks in consideration of updating, and review performance of Resource Room iMac's in consideration of updating.

Each classroom and staff area in the district is supplied with a telephone to allow for better parent-teacher communications and increased classroom safety. Parents are able to call into the district and be routed to their child's teacher for a quick update on their child. By having telephones in each classroom, teachers and the offices can communicate any safety problems quickly and quietly without having to use the school intercom, possibly alarming the students. In 2013 we updated our old AT&T/Lucent Merlin phone system to voice over I.P. We also use cellular phone service for communication during school field trips, sports trips, and by traveling district staff to stay in communication with the main office.

Chassell Township School is also part of a consortium of local school districts that receive Internet access via a consortium leased fiber plant running over a 1Gb/s (gig-e / gigabit-ethernetover-fiber) network. By being part of this larger consortium with the installed equipment, we have been able to aggregate Internet access via our local REMC 1 WAN and received higher bandwidth Internet Access. We have also switched our video distance learning room to Video over IP using Polycom H.323 cameras and equipment, along with the other schools in the consortium. Now, not only can we video conference our students with other schools in our region, but with museums, schools, and businesses worldwide for opportunities we did not have before.

Long-term technology goals are to maintain our existing technology investment and add additional new technologies as appropriate or as new state and federal programs become available. We will continue to evaluate national and state programs for one-to-one student-to-computer initiatives, electronic textbook replacement programs, community Internet access programs through the school, and increased teacher to student and parent electronic communications.

The district has installed a security video camera system (DVR), which allows the Superintendent/Principal the ability to monitor the hallways and entrances to the school.

The district building maintenance staff has the ability to remotely monitor and control our HVAC heating and cooling system.

We plan to purchase equipment with unrestricted lifetime equipment warranties, when possible. Network equipment prices have fallen enough to make this procedure prudent. By getting lifetime warranties, we maximize our investment and avoid sudden, unavoidable repair costs when equipment fails. We will also continue to work together with other school districts and our local REMC 1 and Copper Country Immediate School District to stretch our technology funding by taking advantage of consortium agreements and purchases as much as possible, to our staff and student's advantage. We plan to follow a desktop and laptop replacement schedule that keeps our staff and student access computers completely functional and available for use.

I. Increase Access – Section 12

The district has had and will continue to provide computer software and hardware as needed for specific students with special needs. On occasion, we've purchased a giant monitor and software to magnify the computer screen to help with vision impairment. No specific, long-term plan exists to cover all special needs, but the district's goal is to evaluate any student special needs with teacher, staff and parents then implement as needed.

IV. FUNDING AND BUDGET

J. Budget and Timetable – Section 13

See attached Addendum - Technology Budget/Chassell Township School

K. Coordination of Resources – Section 14

Potential financial resources to support the technology plan are as follows:

- 1) *Technology Line Item*—The district's budget will include a line item for technology, which will be dedicated to implementing and supporting technology throughout the district.
- 2) *Foundation Funds*—The Chassell Township Public School foundation has provided funds to the district each year that are earmarked for the academic program. The Foundation board has indicated its strong support for the use of these funds for technology by purchasing library computers, the Accelerated Reader Software, and computers for the 1st Grade Room.
- 3) *Universal Service Fund Discounts*—These discounts will be used to reduce costs of expanding the district's voice, video, and data networking and for telecommunication services.
- 4) *Other Sources*—Various other sources will be used as available. These include community businesses and service groups, foundations; consortium grants coordinated through REMC 1 and the Copper Country ISD; and other resources that may be identified. The district participates in an area wide distance learning consortium and a vocational center consortium.

V. MONITORING AND EVALUATION

L. Evaluation – Section 15

Every three years, the administration, teaching staff and school improvements members will assess the district's K-12 computer curriculum. The revised K-12 computer curriculum document will be published, included in the district's long-range technology plan, and shared in the annual report.

The district will continue to develop student assessments and monitor student performance trends. Both Dibels and AIMS web will be used to assess weak curricular areas in the elementary school that technology can support. Classroom teachers and Title I aides will utilize these software tools to assess student performance twice a year. In the high school, annual analysis of MEAP scores will indicate core curriculum which needs strengthening. With these identified targets, we will utilize technology to address these weaknesses. Improved test scores will indicate our success.

Professional development records will be maintained by each teacher. Information from the professional development records and staff surveys will be used in planning professional development activities during the upcoming year.

M. Acceptable Use Policy – Section 16

Chassell Township Schools Electronic Resources Policy

The Chassell Township School District has a variety of electronic resources and access to the Internet available for educational and informational purposes.

The Internet is a vast network of computer networks linking thousands of computers around the world used by educators, businesses, the government, the military, and other organizations, as well as individuals. In schools and libraries it can be used to educate and inform in the same way as learning resources such as books, magazines, videos, CD-ROM, and other informational resources. Students and staff can use the Internet to communicate with other schools, colleges, and organizations, and to participate in distance learning activities. They are able to consult with experts, locate material, research subjects, learn concepts, and meet their informational needs.

Because the Internet is a constantly changing environment, it is impossible to predict with certainty what information users may locate. It is essential for each user of the Internet to recognize his/her responsibility in having access to vast services, sites, systems, and people. The user is ultimately responsible for his/her actions in accessing the Internet.

Institutional Rights and Responsibilities

Our school has the right to allocate resources in accordance with our mission.

Our school has the right to establish policies and procedures, which govern the use and security of electronic resources. This may include disciplinary restriction of computer access.

Our school has the right to review files to restore system integrity and to insure that the system is being used responsibly.

Our school has a responsibility to respect the privacy of individuals whenever possible.

Our school has a responsibility to provide equal access to all users of electronic resources.

Our school has a responsibility to train and support students and staff to effectively use information technology.

Our school has the responsibility to provide adequate filtering for privacy and Internet safety in compliance with The Children's Internet Protection Act.

Individual Rights and Responsibilities

Users access to electronic resources shall not be denied without just cause.

All users have ownership rights over their own intellectual work.

All users have the right to be informed of policies pertaining to the use of electronic resources.

Each user is responsible to the learning community for recognizing that all electronic resources are shared and that all users are responsible for refraining from acts that waste time and resources or prevent others from using them.

Each user is responsible for respecting the rights of privacy of other users, respecting the

equipment, respecting the diversity of opinions, avoiding abusive language, and complying with legal restrictions regarding the use of information resources as outlined in the User's Agreement and Code of Conduct.¹⁰

Each user will be required to read and understand the policies and procedures required by this School District pertaining to the use of electronic resources.

Electronic Resources User's Agreement and Code of Conduct

The Chassell Township Schools provide access to a wide collection of electronic resources. This agreement sets forth the conditions for the use of these resources. One of these resources is the Internet. The Internet links computer networks around the world giving users in our school district access to a wide variety of computer and information resources. In general, electronic traffic passes freely in a trusting atmosphere with a minimum of constraints. The Chassell Township Schools provide access to these local, national, and international sources of information and collaboration, which are so vital to our students and staff members today. The Internet is seen as an extension of our school's resources, and every user has rights and responsibilities, including the responsibility to respect and protect the rights of other users in our school and on the Internet. Users are expected to act in a responsible, ethical, and legal manner in accordance with the school mission statement, code of conduct, policies of network access providers, and State and Federal laws.

All users of electronic resources in the Chassell Township Schools will be held responsible for their actions and activity. Unacceptable uses of these resources will result in the suspension or revoking of these privileges. Some examples of such unacceptable use include but are not limited to :

1. Using electronic resources for any illegal activity, including violation of copyright or other contract, harassment, or plagiarism.
2. Using the electronic resources of our school district for financial or commercial gain
3. Degrading or disrupting equipment or system performance.
4. Vandalizing data of another user.
5. Wastefully using finite resources.
6. Gaining unauthorized access to resources or entities.
7. Invading the privacy of individuals.
8. Using an account owned by another user.
9. Posting personal communications without the author's consent.
10. Posting anonymous messages.
11. The knowing or inadvertent spread of computer viruses.
12. Deliberately sending, retrieving, or displaying text or graphics, which may reasonably be construed as obscene or abusive.

Disciplinary Action

Discipline will be based on the severity and frequency of the offense and may include:

1. A user may be suspended from using all computer equipment at the Chassell Township Schools for a period of up to one year.
2. A user may be required to make full financial restitution.
3. A user may be banned from access to the Internet.
4. A student may be suspended from school.
5. A user may be denied use of school and library computers.¹¹

Email Policy

1. Only one e-mail account (approved by the Board) per user is permitted.

2. User must have written parental approval
3. E-mail user name must be registered with the System Administrator (George Stockero).
4. You must access your e-mail account from your Chassell Township School login only.
5. No Internet-based games allowed
6. No chat room usage allowed.
7. No downloads allowed except for school related activities. Students MUST have teacher approval before downloading. All software installations must be approved by the System Administrator.
8. No on-line auctions, purchases, or gambling.

If a student creates/modifies a personal website it must be done as a class project with teacher supervision.

ADDENDUM: Technology Curriculum

Grades K-2

Creativity and Innovation	<p>Students will: use a variety of digital tools such as word processors & drawing tools K: type alphabet letters & name 1st: type spelling words & sight words 2nd: type sentences :will create and convey original ideas by drawing & choosing fonts</p>
Communication & Collaboration	<p>Students will work together using digital tools to create or illustrate simple concepts, and communicate ideas to classmates, families or others. K: Paint pictures for letter of the week</p>
Research & Information Literacy	<p>Students will interact with Internet based resources 1st: Learning Centers 2nd: Research PPer Students will use digital resources to locate and interpret information with the assistance of teachers or aides.</p>
Critical Thinking, Problem Solving, & Decision Making	<p>Students will use digital resources (dictionaries, encyclopedias, search engines, web sites) with assistance of teachers or aides. 1st: spelling words 2nd: reading projects</p>
Digital Citizenship	<p>Students will describe appropriate and inappropriate uses of technology, identify personal information that should not be shared on the internet, and the Michigan Cyber Safety Initiatives. K-3rd: Discussed during initial use of computers and as classes progress.</p>
Technology Operations and Concepts	<p>Students will discuss advantages and disadvantages of using technology, perform common menu and key commands, discuss basic care of hardware, use appropriate terminology when talking about technology, and understand that technology is a tool to complete a task, gain information or entertainment. K-3rd: Discussed during initial use of computers and as classes progress.</p>

Grades 3-5

Creativity and Innovation	Students will use a variety of technology tools and applications to modify works of art or presentations, and discuss how technology has affected human creativity. 3 rd : Mother's Day Card 4 th : Christmas Card 5 th : Easter Card
Communication & Collaboration	Students will use online resources for group learning projects and identify how software could be used to share information with a variety of audiences. 4 th : National Park Slideshow
Research & Information Literacy	Students will identify websites and search strategies for analyzing inaccurate information.
Critical Thinking, Problem Solving, & Decision Making	Students will use digital resources to access information related to everyday life and use digital resources to identify state, national or global issues.
Digital Citizenship	Students will discuss acceptable and non-acceptable uses of technology, discuss ethics, describe precautions of online usage, and identify personal information that should not be given out on the Internet. 3 rd -5 th : Discussions on proper usage, plagiarism, texting, and personal safety.
Technology Operations and Concepts	Students will use devices such as digital cameras, printers, and projectors with the assistance of teachers or aides. Students will also demonstrate proper care of these devices along with hardware, software and storage media. 4 th : National Park Slideshow
Typing Skills	Students will use and be assessed with Typing Time.

Grade 6

Writing a Letter	Students will use formatting tools such as “alignment and spacing.”
2 Voice Poems	Students will play with alignment and spacing and use the differences to explain “Comparison.”
Slang Usage	Students will explain the difference between proper/formal language and friendly/slang language using the internet for research.
Citation Pages/Bibliographies	Students get an introduction to the importance of citing their work. They are introduced to on-line citation engines to help them in future classes.
Thesaurus/Spellchecker	Students are taught and assessed on applying common tools used often in writing papers and assignments for classes. They use the tools in created assignments.
Proof-Reading	Previous lessons contain basic proof-reading and typing combinations. Students would proof-read a paper or poem, and re-type the text.
Columns/Wish List	Students learn how to make columns using formatting tools. They put them to use by making lists (Christmas list) as part of a separate assignment. For example, spell check assignment could require them to make a column before using the grammar tools.
Attachments/Email Writing	Students learn to attach files using email. This is often used in other classes. Students demonstrate their knowledge by sending an attached file to the teacher’s email address.
Tables and Charts	Students create a homework guide for themselves by modifying the “Tables” feature
Computer Language/Lingo Hunt	Students work in groups to identify with particular basic language often used with technology but unknown to younger students.
Journals	This is basic typing practice extended from the Type To Learn program. Journal topics try to make students think of deeper topics.
Multi-Genres/Using Images in Context	<p>Students are introduced to using different genres to communicate or tell a story. This involves a lot of research time and guidance. They also do some peer reviewing.</p> <p>“The Other You” project: Students create an I.D. card for their imaginary character, as well as do some journaling. This project provides some typing practice and familiarity with Microsoft Word, but it also gets students to compare the character they have created against their own personal characteristics.</p>
Microsoft Power Point	Students create a Power Point presentation after learning some basic functions of the program such as transitions and sound effects.
Dialogue	Students work in pairs or groups of three to create and type out a dialogue/story based on given RAFT prompt. They will then perform or read the dialogue. This

	provides more practice with typing, proof-reading, and formatting within the Microsoft Word program.
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Course Description: Computers 7

General Course Description:

Computers 7 is a nine-week course for seventh-grade students. In this course, students use PC computers to learn to use the Microsoft Word software.

Course Objectives: (See pacing guide for more details.)

Students will...

- Learn a little about computers in society
- Learn a little about uses of technology
- Learn the basics of PC computer use
- Learn how to access and work with the school server
- Learn how to use the Microsoft Word software
- Demonstrate their ability to use the Microsoft Word software
- Create a variety of projects using Microsoft Word

With Microsoft Word, students will learn how to...

- Create new documents
- Format a document setup
- Navigate documents efficiently
- Format characters
- Use Microsoft Word tools
- Set tabs, breaks, indents, etc.
- Use character effects
- Manipulate columns
- Create and format tables
- Use drawing tools
- Insert and format clip art
- Insert and format charts
- Create labels
- Create envelopes
- (For more details and specifics, see the pacing guide for this course. The pacing guide includes all of the detailed topics, concepts, and objectives.)

Pacing Guide: Computers 7

General Course Objective:

Computers 7 is a nine-week course for seventh-grade students. In this course, students use PC computers to learn to use the word processor Microsoft Word.

Week	Skills	Standard
Week 1	<ul style="list-style-type: none">▪ Computers in society▪ Technology & its uses▪ Keyboarding▪ Basics of PC computer use▪ Creating & saving documents to school server▪ Menu bar	9-12.DC.1 9-12.DC.2 9-12.TC.3

Week 2	<ul style="list-style-type: none"> ▪ Save vs. SaveAs ▪ New, Open, Close ▪ Navigate document ▪ Selecting text ▪ Print preview ▪ Printing (Printer options) ▪ Character Formatting ▪ Space after paragraphs ▪ Line Spacing ▪ Insert Date & Time ▪ AutoCorrect features ▪ Undo & Redo actions ▪ Center page vertically ▪ Applications 	9-12.DC.1
Week 3	<ul style="list-style-type: none"> ▪ Setting, changing, deleting tabs ▪ Changing case ▪ Bulleted and numbered lists ▪ Breaks (Line, Page, etc.) ▪ Margins ▪ Indents (paragraph, 1st line, hanging) ▪ Page numbers ▪ Header & Footer ▪ Character Effects ▪ Symbols & Special characters ▪ Cut, Copy, Paste ▪ Applications 	9-12.DC.1
Week 4	<ul style="list-style-type: none"> ▪ Find & replace text ▪ Borders & shading ▪ Columns ▪ Column breaks ▪ Tools (Spell & Grammar Check, Thesaurus, etc.) ▪ Applications 	9-12.CI.1 9-12.TC.13
Week 5	<ul style="list-style-type: none"> ▪ Tables <ul style="list-style-type: none"> ○ Create table ○ Resize table ○ Move within table ○ Select cells ○ Format text in cells ○ Change row height, column ○ Align table on page ○ Add rows, columns to g table ○ Delete rows, columns from ○ Shade cells ○ Merge and split cells ○ Change line weights ○ Eraser tool ○ Border tool ○ Distribute row/columns ○ Sort cells ○ Change direction of text in 	9-12.DC.1

	<ul style="list-style-type: none"> ○ AutoFormat table 	
Week 6	<ul style="list-style-type: none"> ▪ Table applications ▪ Tables within other applications 	9-12.CI.3 9-12.DC.1
Week 7	<ul style="list-style-type: none"> ▪ Drawing tools ▪ Applications 	9-12.CC.2 9-12.DC.1
Week 8	<ul style="list-style-type: none"> ▪ Insert Clip Art ▪ Format Clip Art ▪ Applications 	9-12.DC.5 9-12.DC.6 9-12.TC.12 9-12.DC.1
Week 9	<ul style="list-style-type: none"> ▪ Insert Charts ▪ Applications ▪ Create label ▪ Envelopes 	9-12.CI.1 9-12.CC.2 9-12.DC.1

Course Description: Computers 8

General Course Description:

Computers 8 is a nine-week computer course for eighth-grade students. In this course, students use PC computers to review the use of word processor Microsoft Word and to learn to use Microsoft PowerPoint.

Course Objectives: (See pacing guide for more details.)

Students will...

- Refresh and demonstrate their knowledge of Microsoft Word
- Learn how to use the Microsoft PowerPoint software
- Demonstrate their ability to use the Microsoft PowerPoint software
- Learn and demonstrate some knowledge of good design

With Microsoft PowerPoint, students will learn how to...

- Create presentations
- Insert slides and choose layouts
- Format slide backgrounds
- Insert and format text boxes
- Insert and format photos and clip art
- Insert and format charts
- Set animations
- Set transitions
- Insert and manipulate sound clips
- Import video
- Create hyperlinks
- Create and format action buttons
- Format slide masters
- Use presentation tools
- Design good presentations
- Rehearse and set timings
- (For other specifics, see the pacing guide for this course. The pacing guide includes all of the detailed topics, concepts, and objectives.)

Pacing Guide: Computers 8

General Course Objective:

Computers 8 is a nine-week course for eighth-grade students. In this course, students use PC computers to review the use of word processor Microsoft Word and to learn to use Microsoft PowerPoint.

Week	Skills	Standard
Week 1 & 2	<ul style="list-style-type: none"> ▪ Review of Microsoft Word <ul style="list-style-type: none"> Character formatting, Line spacing, AutoCorrect, Tools, Vertical page alignment, Tabs, Changing case, Lists (bulleted, numbered), Breaks (Line, page, column), Margins, Indents, Page numbers, Header & footer, Character effects, Replace text, Borders & shading, Columns, Creating and formatting tables, Drawing tools, Clip Art, Charts, etc.) 	9-12.DC.1 9-12.DC.2 9-12.CI.1 9-12.TC.13 9-12.TC.12
Week 3	<ul style="list-style-type: none"> ▪ Microsoft PowerPoint <ul style="list-style-type: none"> ○ Create & Save presentation ○ Use gallery ○ Saving backup copy ○ Insert slide ○ Duplicate slide ○ Choose slide layout ○ Format slide design ○ Format slide background ○ Photo as slide background ○ Insert text box ○ Edit text box ○ Format text box 	9-12.CI.1
Week 4	<ul style="list-style-type: none"> ▪ Microsoft PowerPoint <ul style="list-style-type: none"> ○ View rulers ○ Insert clip art ○ Insert photo ○ Format clip art/photo ○ Change transparency of photo/clip art ○ Change transparency of text box ○ Insert chart ○ Insert table ○ Organization charts 	9-12.CI.1
Week 5	<ul style="list-style-type: none"> ▪ Microsoft PowerPoint <ul style="list-style-type: none"> ○ Customize animations ○ Animate lists ○ Animate chart content ○ Slide transitions ○ Change order of slides ○ View presentation ○ Find & Replace text ○ Drawing toolbar 	9-12.CI.1
Week 6	<ul style="list-style-type: none"> ▪ Microsoft PowerPoint <ul style="list-style-type: none"> ○ Insert music/sound ○ Insert video ○ Create hyperlink ○ Create action button ○ Tabs ○ Symbols 	9-12.CI.1 9-12.TC.12

	<ul style="list-style-type: none"> ○ Replace font ○ Format slide masters 	
Week 7	<ul style="list-style-type: none"> ▪ Microsoft PowerPoint <ul style="list-style-type: none"> ○ Recolor clip art ○ Animated clip art ○ Color schemes ○ Hide slides ○ Presentation tips ▪ Create presentation (project) 	9-12.CI.1 9-12.CC.3 9-12.RI.1 9-12.RI.2 9-12.RI.7 9-12.DC.6
Week 8	<ul style="list-style-type: none"> ▪ Microsoft PowerPoint <ul style="list-style-type: none"> ○ Use of text in presentation ○ Import slides from another presentation ▪ Work on presentation project 	9-12.CI.1 9-12.CC.3 9-12.RI.1 9-12.RI.2 9-12.RI.5 9-12.DC.6 9-12.TC.12
Week 9	<ul style="list-style-type: none"> ▪ Microsoft PowerPoint <ul style="list-style-type: none"> ○ Creating a custom show ○ Set and rehearse timings ○ Annotating slides during presentation ○ Set up show ▪ Work on finalizing presentation ▪ Present to class 	9-12.CI.1 9-12.CC.3 9-12.RI.1 9-12.DC.6

Advanced Computers & Multimedia (Grades 9-12)

General Course Description:

Advanced Computers/Multimedia is a one-year course designed to introduce students to a variety of technology and software. Each module will provide an opportunity to learn the application, an opportunity to see the potential of the application, and incentive and tools to pursue specific interest in further studies or use on an individual basis.

The course begins with a unit on advanced computers work. It involves learning and using advanced features and techniques in Microsoft Office (Word, PowerPoint, Excel). This may be done on either Macintosh or PC computers. The larger portion of this class is spent learning a variety of technology and multimedia software. This portion of the class is completed using Macintosh computers.

Course Objectives: (See pacing guide for more details.)

Students will...

- Learn and demonstrate their knowledge of advanced Microsoft Word
- Learn and demonstrate their knowledge of advanced Microsoft PowerPoint
- Learn and demonstrate their knowledge of Microsoft Excel
- Learn and demonstrate their knowledge of good design
- Learn and use the Comic Life software
- Learn and use Adobe InDesign to create a variety of projects
- Learn and use Adobe Photoshop to create a variety of projects
- Learn and use the iMovie software to create and edit movies

Service Learning Component:

Students in the multimedia class also undertake several service learning projects during the course of the year. We do try to help with the multimedia aspect of school and/or community projects. The multimedia students have also partnered with elementary classes to assist them in projects involving multimedia components.

Technological Components/Equipment:

Students learn to use a variety of equipment. Examples are given in the list here.

1. Macintosh computers
2. PC computers
3. Scanner
4. Digital cameras
5. Video cameras
6. Poster plotter
7. Laminating machine
8. Projector (for presenting interfaced with computer)
9. Macintosh computers
10. PC computers
11. Scanner
12. Digital cameras
13. Video cameras
14. Poster plotter
15. Laminating machine
16. Projector (for presenting)

Advanced Computers & Multimedia (Grades 9-12)

Marking Period	Software or Topic	Skills	Standard
1st Marking Period	1. Advanced Microsoft Word 2. Microsoft Excel 3. Design Principles 4. Advanced Microsoft PowerPoint	1. Tables, charts, hyperlinks, etc. 2. Creating spreadsheets, formatting spreadsheets, using formulas, creating charts, working across sheets, etc. 3. Proximity, alignments, repetition, contrast, use of text 4. Review of PowerPoint basics, formatting photos/clip art, formatting text boxes, customize animations, animating lists, transitions, import sound, import video, hyperlinks, replacing font styles, organization charts, insert and format charts, recolor clip art, animated clip art, drawing tools, color schemes, edit slide masters, custom show, action buttons, integrating with other presentations, import slides from other PowerPoint, hiding slides, set timings, annotation during presentation, set up show	9-12.CI.1 9-12.CI.3 9-12.CC.3 9-12.CT.1 9-12.CT.2 9-12.TC.12 9-12.TC.13
2nd Marking Period	4. Advanced Microsoft PowerPoint 5. Comic Life	4. Complete Powerpoint topics 5. Create comics, format frames, import photos/clip art, format word and though bubbles, etc.	9-12.TC.12 9-12.TC.13 9-12.DC.5 9-12.DC.6 9-12.DC.1
(2nd Marking Period Continued...)	6. Adobe InDesign	6. Creating document, page setup, columns, gutter, margins, text frames, character formatting, paragraph formatting, paragraph styles, placing images, formatting text boxes, changing order of objects, working with color, grid lines, alignment palette, grouping objects, transform, scale, duplicating, transparency, transparency knockouts, blending options,	9-12.TC.2 9-12.TC.7 9-12.TC.10 9-12.TC.12 9-12.TC.13

		fitting content of picture to frame, edit photo, etc.	
3rd Marking Period	7. Adobe Photoshop 8. Poster making	7. Import photos, lasso tools, cropping, straightening, smart objects, black & white, grayscale, using filters, changing photo exposure, using the cloning tool, removing unwanted objects from photo, photographic effects, blending photos into collage, perspective pasting, creating digital frames, fixing skin imperfections, changing lighting, photo sharpening, photo grid posters, faking images, extracting objects, replacing backgrounds, adding canvas, text, brushes, sketching, etc. 8. Create posters using InDesign software, Print using poster plotter	9-12.TC.2 9-12.TC.7 9-12.TC.10 9-12.TC.12 9-12.DC.5 9-12.DC.6 9-12.DC.1
4th Marking Period	9. Morph 10. iMovie	11. Import photos/clip art, morph from one image to another 12. Import photos (still shots), import video, create movies from still shots, create movies from video clips, edit movies, import sound	9-12.TC.2 9-12.TC.7 9-12.TC.10 9-12.TC.12

Sample Projects: Students study the advanced computers and multimedia concepts through a variety of project types. Some examples of the kinds of projects students create are listed below:

- PowerPoint presentations
- Business card
- Postcard
- Letterhead
- Brochures and flyers
- Newsletter
- Magazine
- Photo editing
- Faked scene
- Sketch
- Poster
- Advertisements
- Comics
- Movies
- Greeting car
- Tables
- Spreadsheets

Computer Aided Design (CAD) Grades 9-12

Course Objectives

Computer Aided Design (CAD) is designed to provide students with an in depth study of the features associated with CadKey and other associated software. The course presents logical and well tested, step-by-step instructions about the CadKey commands. Mode settings, drawing aides, shortcuts, and other valuable characteristics of CadKey are used.

Course Goals

Students will be able to perform multiple viewpoints	9-12.C13, 9-12.CI.1
Students will be able to perform DOS functions within CadKey	9-12.TC.5
Students will be able to place note and specifications	9-12.CI.1
Students will be able to create a prototype drawing	9-12.CI.3, 9-12.CI.1
Students will be able to perform layer techniques	9-12.CI.3
Students will be able to create dimensional drawings	9-12.CI.3
Students will be able to write blocks	9-12.CI.1
Students will be able to create a symbol library	9-12.CT.1, 9-12.CI.1
Students will generate a bill of sale	9-12.TC.3, 9-12.TC.9
Students will be able to perform isometric drawings	9-12.CT.1
Students will be able to use X/Y/Z filters	9-12.CT.1
Students will be able to perform 3D revolutions and modeling	9-12.CT.1

Technology Integration into High School English Curriculum English 9

Quarter 1	<ul style="list-style-type: none"> • Use Microsoft Word to draft and revise essays • Use digital scanner to incorporate a photo into the display of an original poem • Use Comic Life software to create original comic strips that demonstrate grammatical knowledge of interjections
Quarter 2	<ul style="list-style-type: none"> • Use voice-recording software to record a personal reading of an essay • Use online resources to gather primary and secondary research for a cross curricular writing project • Learn how to utilize online library software through MEL.org • Use Microsoft Word to draft and revise essays
Quarter 3	<ul style="list-style-type: none"> • Use Power-Point to create a multi-media presentation for speech • Use Microsoft Word to draft and revise essays
Quarter 4	<ul style="list-style-type: none"> • Use Microsoft Word to draft and revise essays

English 11

Quarter 1	<ul style="list-style-type: none"> • Use Microsoft Word to draft and revise essays
Quarter 2	<ul style="list-style-type: none"> • Use Microsoft Word to draft and revise essays
Quarter 3	<ul style="list-style-type: none"> • Use Inspiration software to create mind maps for organizing the topics of a 6-9 page research project • Review skills for evaluating website credibility for research and for accessing a online library through MEL.org
Quarter 4	<ul style="list-style-type: none"> • Use message board software to participate in an online discussion of a novel

English 12

Quarter 1	<ul style="list-style-type: none"> • Use Microsoft word to draft and revise a resume and cover letter, including the use of templates and specific formatting features for those genre
Quarter2	<ul style="list-style-type: none"> • Use Microsoft Word to draft a 7-9 page multi-genre paper that includes text and images • Use Power-point and streamed videos to create a Multi-media presentation • Use Microsoft Word to draft and revise essays
Quarter 3	<ul style="list-style-type: none"> • Use Microsoft Word to draft and revise essays • Utilize message board software to participate in an online discussion of literature
Quarter 4	<ul style="list-style-type: none"> • Use Microsoft Word to draft and revise essays

Journalism & Yearbook

Quarter 1	<ul style="list-style-type: none">• Learn about digital photography• Learn about basic graphic design principles for layout
Quarter 2	<ul style="list-style-type: none">• Utilize an online software program to design the yearbook, including skills in uploading images, manipulating images, creating text features, and adding graphic design elements
Quarter 3	<ul style="list-style-type: none">• Utilize an online software program to design the yearbook, including skills in uploading images, manipulating images, creating text features, and adding graphic design elements
Quarter 4	<ul style="list-style-type: none">• Utilize an online software program to design the yearbook, including skills in uploading images, manipulating images, creating text features, and adding graphic design elements

ROBOTICS

The Robotics class consists of three phases.

In phase 1 during the fall and early winter of the school year, the students use Robot kits to build and program small robots. When completed these robots are able to perform various tasks, such as moving across a desk, scooping material from one container and putting it into another, and holding and moving a ping-pong ball between two links.

In phase 2, which goes from the beginning of January to approximately mid-March, the students build a robot for competition as part of the worldwide FIRST (For Inspiration and Recognition of Science and Technology) Robotics competition. In early January, the game (for which the students are building their competition robot) is announced and a “kit of parts” is distributed to each team. For the next two months or so the class designs, builds, programs, and tests the robot to get ready for the competition. In this competition the robot competes during a programmed competition and a student operated stage; where students drive the robots by way of wireless command. In 2010, the finished robot kicked soccer balls into goals. In 2011 the robot will pick up inflatable ringed tubes and put them onto pegs on a wall. Competitions take place with 5 other robots at a time in a caged arena.

In phase 3, which extends from the competition to the end of the school year, the students divide into groups and redesign the competition robot and previous robots to do specific tasks, which can be anything the students come up with.

ADDENDUM: Technology Budget

Chassell Township School District Technology Budget

	Technology Budget	Non-Technology Line Item Funds	Technology Budget	Non-Technology Line Item Funds	Technology Budget	Non-Technology Line Item Funds
	<i>2014-2015</i>	<i>2014-2015</i>	<i>2015-2016</i>	<i>2015-2016</i>	<i>2016-2017</i>	<i>2016-2017</i>
Technology Support						
Server Maintenance	\$ 1,300.00		\$ 1,400.00		\$ 1,500.00	
Back Up Service	350.00		375.00		400.00	
1 hour per day of technology support	6,350.00		6,900.00		7,500.00	
Network Administrator and Support	16,510.00		17,340.00		18,210.00	
Total Technology Support :	\$ 24,510.00		\$ 26,015.00		\$ 27,610.00	
Equipment Replacement/Upgrades						
PC Lab					\$ 25,000.00	
Smartboards	\$ 1,800.00		\$ 1,800.00		1,800.00	
Wireless Update			8,000.00			
Total Equipment Replacement :	\$ 1,800.00		\$ 9,800.00		\$ 26,800.00	
Software Purchases						
Various Software	\$ 1,000.00		\$ 1,000.00		\$ 1,000.00	
Total Software Purchases :	\$ 1,000.00		\$ 1,000.00		\$ 1,000.00	
Reoccurring Services & Fees						
PowerSchool Annual Maintenance	\$ 2,900.00		\$ 3,300.00		\$ 3,700.00	
Total Reoccurring Fees :	\$ 2,900.00		\$ 3,300.00		\$ 3,700.00	
USF Services						
<i>Services listed at School USF Discounted Rate-70% discount</i>						
Local/Long Distance Phone Service		\$ 3,425.00		\$ 3,425.00		\$ 3,425.00
Cellular Phone Service		180.00		180.00		180.00
Internet Access		4,540.00		4,765.00		5,005.00
Total USF Services :		\$ 8,145.00		\$ 8,370.00		\$ 8,610.00
Total Technology Budgeted :	\$ 30,210.00		\$ 40,115.00		\$ 59,110.00	
Total Non-Technology Line Items :		\$ 8,145.00		\$ 8,370.00		\$ 8,610.00
 USF Prediscounted Rates						
Local/Long Distance Phone Service		\$ 11,410.00		\$ 11,410.00		\$ 11,410.00
Cellular Phone Service		600.00		600.00		600.00
Internet Access/Email		15,140.00		15,890.00		16,690.00
Totals :		\$ 27,150.00		\$ 27,900.00		\$ 28,700.00
Discounted Total :		\$ 8,145.00		\$ 8,370.00		\$ 8,610.00

USF Discount : 70%