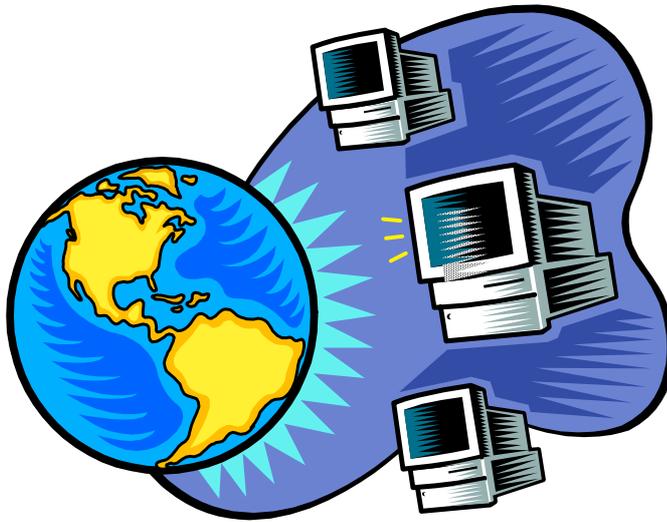# Clintondale Community Schools

Technology Plan
7/01/2013 – 6/30/2016

CLINTONDALE COMMUNITY SCHOOLS
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Macomb Intermediate School District
District # 50070

Technology Plan
http://seatwaitingforyou.com/images/departments/pdfs/tech-plan2013.pdf

CLINTONDALE COMMUNITY SCHOOLS

DISTRICT PROFILE

- *Located in Southeastern Macomb County*
- *Northern Border is shared with the County Seat - Mount Clemens*
- *2323 Students in K-12*
- *Suburban Residential District*

Schools

• *Clintondale High School*
  35200 Little Mack
  Clinton Twp., MI 48035
  41 Teachers - 545 Students

• *Clintondale Middle School*
  35300 Little Mack
  Clinton Twp., MI 48035
  22 Teachers – 383 Students

• *McGlinnen Elementary School*
  21415 Sunnyview
  Clinton Twp., MI 48035
  14 Teachers – 274 Students

• *Rainbow Elementary School*
  33749 Wurfel
  Clinton Twp., MI 48035
  11 Teachers – 286 Students

• *Parker Elementary School*
  22055 Quinn Road
  Clinton Twp., MI 48035
  18 Teachers – 416 Students

• *Clintondale Administration Building*
  35100 Little Mack
  Clinton Twp., MI 48035

The mission of Clintondale Community Schools is to promote quality educational programs and the cultivation of individual strengths and talents in a supportive environment where individual differences and respect for the rights of others guide school and community behavior.

The Clintondale Community School District comprises approximately four square miles and is located in southeastern Macomb County. In these four square miles you will find three elementary schools, one middle school and a high school. The socioeconomic status of our students ranges from middle class suburban to the lower ranges of urban levels. Clintondale is a school of choice district and enjoys a representative mix of ethnic and minority students.

The Clintondale Community School District began planning for and using personal computer based technology to support its curriculum as early as the 1984-1985 school year. This school year marked the presentation of Phase 1 of the District's "Computer Program". While computers had been in use prior to the release of this document, the efforts of the committee at this time were focused on a logical and sequential plan for implementation of technology across the curriculum and throughout the district. Phase 2 of the "Computer Program" began in the 1985-1986 school year. Elements of the "Computer Program" included computer coordinators, computer labs, modem connections and networking to allow students and staff access to technology as it existed then.

In 1991, encouraged by the rapid expansion of technology into everyday life and the passage of district bond issues, the District's technology committee was again called to service. After performing a needs analysis for the district, and with the help of district staff, school board members, parents and concerned technology professionals, the second district technology plan was released. "Project Tomorrow...Today" became the framework for technological growth and implementation in the district and through its several revisions remains the foundation of this document. Notable elements of "Project Tomorrow...Today" included the integration of voice, data and video into the classroom and the creation of Local Area Networks in the school buildings that were tied together into a district Wide Area Network able to offer not only internet access but also provide for access to library research materials for the residents of the district.

> The mission of the Clintondale Community Schools Technology Committee is to provide appropriate technology and training to students and staff throughout the curriculum to increase student achievement. The committee will monitor the district's technological resources, investigate and recommend hardware and software purchases and makes informed recommendations to further the efficient use of technology in the school district.

The technology plan underwent major revisions in 1997, 2001, 2002, 2005 and 2006. The current plan is designed to guide technology development and integration through June of 2016 school year.

Throughout the planning stages, the concern and effort on the part of the school board, administration, staff, parents and students has remained constant and sincere in the face of

rapid technological change and financial uncertainty. The essential purpose of this technology plan is to successfully integrate technology into the curriculum used for all of our students. While the acquisition and implementation of hardware and software is critical to the success of this plan, these purchases are only one of several critical steps. Our goal remains to increase student achievement and to provide them with skills that are critical for their success through the use of technology as an instrument that enhances the district's curriculum.

The Clintondale technology plan supports both the district's mission statement and school improvement plans. The technology plan is driven by the needs of curriculum and as such needs to be flexible and adaptable to provide the quality educational programs described in the mission statement.

We must, as educators, work to find the best ways to prepare our students to compete effectively in the future and to realize their full potential. Our vision is to provide the tools necessary for our children to realize success, both personal and professional, in a world that daily grows more dependant on the use of technology for information processing, effective communication and increased productivity. Student interactions with technology should promote higher-order thinking skills, collaboration and problem solving skills in an ethical manner. The integration of technology into teaching and learning is an on-going process and as such is a constant element of our technology planning.

The technology committee recognizes that technological development is also an on-going process. To establish and maintain a current technological environment for education, we will use educational technologies combined with best practices throughout the district to enhance student-learning processes and to expand their capabilities and skills. Clintondale schools will continue to provide access to hardware, software and appropriate training for students and staff to maintain this environment. Goals for our mission are as follows:

- Students will use software applications including word processors, spreadsheets and databases as tools for problem solving and decision-making

- Students will use the Internet to communicate globally and locally to prepare written reports, presentations and evaluations

- Students will access, analyze, interpret and exchange information obtained from Internet resources and other technology based sources as technologies develop

- Students will construct and publish reports and projects using a variety of formats including audio, video, graphics, print and presentation applications

- Students will have available to them an online support system to assist in their educational achievement

- Teachers will use a variety of resources to support the delivery of curricular concepts to their students including word processors, spreadsheets, databases and presentation software and hardware

- Teachers will use technological devices like smart boards, Elmo's, projectors and telecommunications in their teaching assignments

- Teachers will use technology to enhance personal and professional productivity through the use of administrative and software applications

- Teachers will increase communication with parents and colleagues through the use of electronic communications and telecommunications

- All staff and students will be provided a secure, ethical and safe technology environment

Monitoring and Evaluation

Technology use and effectiveness within the Clintondale district will be reviewed every three years by the school board's technology committee with annual needs assessments contributing to the amendment of the district's plans. The district will also use the State of Michigan's technology literacy suggestions as a recommended guideline for evaluating our technology proficiency. Annual assessments will focus on the implementation of technology and its impact on the students, teachers and instruction. Developing technologies will also be explored annually to facilitate the efficient use of technology in the district. Plans developed every three years will take into account both the successes of students and staff as well as the areas in need of improvement.

Annual assessments will gauge the extent to which the technology plan is working. They will document actual use, examine the effects of technology integration on student achievement, explore changes in delivery systems and focus on gaps which may exist between needs identified in the plan and actual technology implementation.

Success will be determined by comparing student performance and participation before and after the implementation of technology strategies. The ultimate performance indicators are standardized tests however, establishing a direct correlation between standardized tests and technology integration remains a perplexing challenge. Improvements in student content specific performance (math, reading, etc.) is relatively easy to determine and several of our planned implementations contain detailed performance reports including pre and post tests.

Another measure of the success of technology integration is less concrete but potentially as revealing. Logs of requests by teachers for repair or the installation of new applications or devices often indicate usage and comfort levels. All of our building level assessments contain space for anecdotal comments and suggestions. These anecdotal responses are reviewed, trends are forecasted and this information is included in the design of subsequent offerings.

Existing staff will complete major portions of the annual assessments. Building administration, the building technology coordinators and the district coordinator can provide assessments of the extent to which curriculum goals are being met. Additional support may be needed from community members and experts in instructional technology to consider the impact on student skills and teacher effectiveness as well as any changes in instructional climate.

The coordination of the above will be the responsibility of the district technology director and the district curriculum director(s) who will work in cooperation with the board technology committee. The responsibility for in-house data collection will lie in the hands of the building principals and their building computer coordinators.

Curriculum

Curricular integration of technology strives for the incorporation of information processing goals and the use of technological tools throughout the curriculum. As access to Internet resources increases it is unlikely that students or teachers will be able to continue to learn and work without integrating technology to an increasing degree in their daily lives.

Through curriculum integration, students will develop skills, which they will carry with them for life. They will also enhance the development of their skills, knowledge and understanding across customary academic disciplines. Integration requires that technology be viewed as an essential tool in the learning environment and that it seamlessly supports both teaching and learning (Cuban, 1998; Schwab & Foa, 2001).

A primary tenet of this integration philosophy is that the integration of technology will increase student interest and performance levels in most areas of study as well as to increase opportunities to fully develop and understand the disciplines under study The incorporation of information processing goals across curricular areas will encourage the development of application and advanced skills on the part of students, beyond rote recall and memorization.

Technology integrated into the curriculum will increase the chances of true learning and understanding on the part of students (Dede 1998). Special Education students are included in regular classroom situations whenever possible. The flexibility and individualization potential of technology is well suited for servicing students with special needs. Adaptive technology for students with identified special needs are coordinated through the special services department, the students IEP and the district's adaptive technology specialist. (See Assistive Technology Appendix)

The major goals of information processing to be integrated into all areas across the curriculum include: Information Processing, Communications and Productivity. The enhancement of teaching, training and student achievement are outcomes based upon the successful integration of technology into the curriculum. A general overview of K-12 goals for each of these categories is presented below and is followed by more detailed goals arranged by grade level.

Clintondale Schools does offer both Adult Education and Continuing Education instruction. This instruction is offered through ATS and as such, ATS provides their own computing equipment and infrastructure.

General Goals for Curriculum Integration

Information Processing:

Students will use technology to access, retrieve, interpret and evaluate information.

- Students will access and retrieve information

    - Use a variety of software programs for research and information collection
    - Use search engines and strategies to collect information
    - Use available electronic resources (encyclopedias online and off line), indexes, hand-held devices and catalogs
    - Use network resources to access electronic information including on-line databases, web sites, libraries, archives and libraries
    - Use networks to send and receive information: E-mail and bulletin boards

- Students will interpret and evaluate information to support learning in content areas

    - Use electronic and traditional methods to verify the credibility and reliability of information
    - Apply critical thinking to gathered materials to determine appropriateness

Communications:

Students will use different technologies to record and communicate their ideas.

- Students will use technology to effectively and creatively communicate their thoughts and ideas

    - Use application software for communication
    - Create appropriate documentation: Documents, Spreadsheets & Presentations
    - Use computer-based design tools

- Students will communicate graphically, visually and artistically using technology-based techniques, resources and skills

    - Employ a variety of technology resources including computer programs, camcorders, web cams, cameras, scanners, copiers, projection devices and video and audio equipment and other appropriate equipment in their work

- Students will use network resources for communication

    - Use file sharing and online storage for workgroups and classes, e-mail, voice mail and web pages to communicate ideas

Productivity:

Students will increase skill levels and personal and group productivity through the use of appropriate technologies.

- Students will develop technology skills

- Select and access technology appropriate to their needs
- Use proper start up and shutdown procedures
- Develop appropriate keyboarding skills
- Develop skills necessary to operate peripheral equipment
- Employ various technologies individually and in groups
- Display safe and ethically correct use of technology

- Students will enhance their productivity using technology

- Develop learning and workplace skills using technology
- Develop content area skills through the use of technology
- Develop strategies for problem solving, critical thinking and creative thinking
- Create multi-media presentations using technology
- Use technology to develop innovation and creativity

- Students will use various technologies as mediums for original works in the fine arts area

- Create digital portfolios for creative writing and fine arts

Grade Level Technology Goals

The following grade level goals are consistent with the MDE Instructional Technology Across the Curriculum (ITAC) benchmarks and the National Educational Technology Standards for Students (NETS), Michigan Educational Standards (METS) as well as the district's learning and content standards. These goals are intended to be used as guidelines for teachers when they prepare lessons and design learning situations. Sheingold and Hadley (1990) summarize that many teachers are able to master different practices and approaches within six years of teaching with computers.

These identified goals can be accomplished on many different levels. While the goals are intended to provide basic direction for experiences with technology in the classroom, they also can be approached with different expectations of proficiency for the varying levels of difficulty and complexity required at different grade levels. A goal, such as "Create a document using word processing skills and a publishing program", might find a high school senior writing a lengthy report with self-generated graphics, charts and tables, and a first grader composing a simple sentence and perhaps adding a graphic from a publishing program. The goal remains the same in both examples but the product can be radically different depending upon the student's ability levels and the appropriateness of the exercise as determined or developed by the teacher.

As goals can be accomplished on different levels for different groups of students, so too can the medium of instruction be attuned to specific groups. We operate two video-based distance learning labs (one mobile) in the district which can be used to supplement traditional instruction for students and which give a whole new meaning to the term 'Field Trip'. All classes have access to the distance labs and video carts are stationed in each building for external and internal video-based learning experiences.

The Web remains a technology of choice for students and teachers who need to go beyond the traditional classroom.

Teachers and curriculum teams in all buildings will be supplied with examples of best practices and given training on curricular integration of technology using best practice models and techniques. We will develop our own series of best practices for shared use by building teams of content area teachers as well as for distribution.

Grade level and subject curriculum teams at individual school sites would help to develop and modify these guidelines as the plan is implemented. These guidelines are not intended to be added on to the existing curriculum, but rather, to be viewed as supporting activities for teachers and students to better accomplish goals as lifelong learners.

The essence of the role of technology in improving MEAP scores is contained in the following quotation from David Perkins of Harvard University:

"In the long-term, education must aim for active use of knowledge and skill. Students gain knowledge and skills in schools so they can put them to work in professional roles—scientist, engineer, designer, doctor, business person, writer, artist, musician—and in lay roles—citizen, voter, parent—that require appreciation, understanding, and judgment."

'Active use', as it pertains to the MEAP tests, consists of higher-order thinking skills and, specific to MEAP testing, constructed responses. These items require students to apply thought processes that go beyond the facts and to draw from many content and skill areas. The final stage of this process is to apply what they have learned to a new situation – judgment. Students who can solve problems, make decisions, plan and analyze are the students employers seek to hire.

Technology can provide a forum for students to practice the above skills.

Grades K through 2 - Technology Standards and Expectations - (by the end of Grade 2)
1. Basic Operations and Concepts.
a. Students demonstrate a sound understanding of the nature and operation of technology systems
　1) Students understand that people use many types of technologies in their daily lives (e.g., computers, cameras, audio/video players, phones, televisions).
　2) Students identify common uses of technology found in daily life
　3) Students recognize, name, and label the major hardware components in a computer system (e.g., computer, monitor, keyboard, mouse, and printer).
　4) Students identify the functions of the major hardware components in a computer system.

5) Students discuss the basic care of computer hardware and various media types (e.g., diskettes, CDs, DVDs, videotapes).
6) Students proofread and edit their writing using appropriate resources including dictionaries and a class developed checklist both individually and as a group.

b. Students are proficient in the use of technology.
　1) Students use various age-appropriate technologies for gathering information
　　(e.g., dictionaries, encyclopedias, audio/video players, phones, web resources).
　2) Students use a variety of age-appropriate technologies for sharing information (e.g., drawing a picture, writing a story).

3) Students recognize the functions of basic file menu commands (e.g., new, open, close, save, print).

2. Social, ethical, and human issues.
a.Students understand the ethical, cultural, and societal issues related to technology
  1) Students identify common uses of information and communication technologies.
  2) Students discuss advantages and disadvantages of using technology.

b. Students practice responsible use of technology systems, information, and software.
  1) Students recognize that using a password helps protect the privacy of information.
  2) Students discuss scenarios describing acceptable and unacceptable uses of age-appropriate technology (e.g., computers, phones, 911, Internet, email) at home or at school.
  3) Students discuss the consequences of irresponsible uses of technology resources at home or at school.

c. Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.
  1) Students understand that technology is a tool to help them complete a task.
  2) Students understand that technology is a source of information, learning and entertainment.
  3) Students can identify places in the community where one can access technology.

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

b. Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.
  1) Students are aware of how to work with others using technology tools (e.g., word processors, drawing tools, presentation software) to convey ideas or illustrate simple concepts relating to a specified project.

4. Technology communications tools
a. Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
  1)_ Students will identify procedures for safely using basic telecommunication tools (e.g., e-mail, phones) with assistance from teachers, parents, or student partners.

b. Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.
  1) Students know how to use age-appropriate media (e.g., presentation software, newsletters, word processors) to communicate ideas to classmates, families, and others.
  2) Students will know how to select media formats (e.g., text, graphics, photos, and video), with assistance from teachers, parents, or student partners, to communicate and share ideas with classmates, families, and others.

5. Technology research tools
a. Students use technology to locate, evaluate, and collect information from a variety of sources
  1) Students know how to recognize the Web browser and associate it with accessing resources on the Internet.
  2) Students will use a variety of technology resources (e.g., CD-ROMs, DVDs, search engines, websites) to locate or collect.

b. Students use technology tools to process data and report results.
  1) Students will interpret simple information from existing age-appropriate electronic databases (e.g., dictionaries, encyclopedias, spreadsheets) with assistance from teachers, parents, or student

partners.

c. Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.
    1)Students can provide a rationale for choosing one type of technology over another for completing a specific task.

6. Technology problem-solving and decision-making tools
a. Students use technology resources for solving problems and making informed decisions.
    1) Students discuss how to use technology resources (e.g., dictionaries, encyclopedias, search engines, websites) to solve age-appropriate problems,

b. Students employ technology in the development of strategies for solving problems in the real world.
    1) Students identify ways that technology has been used to address real-world problems (personal or community).

Grades Three through Five - Technology Standards and Expectations -- (by the end of Grade 5)

1. Basic Operations and Concepts.
a. Students demonstrate a sound understanding of the nature and operation of technology systems.
    1) Students discuss ways technology has changed life at school and at home.
    2) Students discuss ways technology has changed business and government over the years.
    3) Students recognize and discuss the need for security applications (e.g., virus detection, spam defense, popup blockers, firewalls) to help protect information and to keep the system functioning properly.

b. Students are proficient in the use of technology.
    1) Students know how to use basic input/output devices and other peripherals (e.g., scanners, digital cameras, video projectors).
    2) Students know proper keyboarding positions and touch-typing techniques.
    3) Students manage and maintain files on a hard drive or the network
    4) Students demonstrate proper care in the use of hardware, software, peripherals, and storage media.
    5) Students know how to exchange files with other students using technology (e.g., e-mail attachments, network file sharing, diskettes, flash drives).
    6) Students identify which types of software can be used most effectively for different types of data, for different information needs, or for conveying results to different audiences.
    7) Students identify search strategies for locating needed information on the Internet.
    8) Students proofread and edit writing using appropriate resources (e.g., dictionary, spell check, grammar check, grammar references, writing references) and grade level appropriate checklists both individually and in groups.

2. Social, ethical, and human issues.
a. Students understand the ethical, cultural, and societal issues related to technology.
    1) Students identify cultural and societal issues relating to technology.

    2)   Students discuss how information and communication technology supports collaboration, productivity, and lifelong learning.
    3)   Students discuss how various assistive technologies can benefit individuals with disabilities.
    4)   Students discuss the accuracy, relevance, appropriateness, and bias of electronic information sources.
b. Students practice responsible use of technology systems, information, and software.
    1)   Students discuss scenarios describing acceptable and unacceptable uses of technology (e.g., computers, digital cameras, cell-phones, PDAs, wireless connectivity) and describe consequences of inappropriate use.
    2)   Students discuss basic issues regarding appropriate and inappropriate uses of technology (e.g.,

copyright, privacy, file sharing, spam, viruses, plagiarism) and related laws
3) Students use age-appropriate citing of sources for electronic reports.
4) Students identify appropriate kinds of information that should be shared in public chat rooms.
5) Students identify safety precautions that should be taken while on-line.

2c. Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.
1) Students explore various technology resources that could assist them in pursuing personal goals.
2) Students identify technology resources and describe how those resources improve the ability to communicate, increase productivity, or help them achieve personal goals.

3. Technology productivity tools.
a. Students use technology tools to enhance learning, increase productivity, and promote creativity.
1) Students know how to use menu options in applications to print, format, add multimedia features; open, save, manage files; and use various grammar tools (e.g., dictionary, thesaurus, spell-checker).
2) Students know how to insert various objects (e.g., photos, graphics, sound, video) into word processing documents, presentations, or web documents.
3) Students use a variety of technology tools and applications to promote [their] creativity.
4) Students understand that existing (and future) technologies are the result of human creativity.

b. Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.
1) Students collaborate with classmates using a variety of technology tools to plan, organize, and create a group project.

4. Technology communications tools
a. Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
1) Students use basic telecommunication tools (e.g., e-mail, WebQuests, IM, blogs, chat rooms, web conferencing) for collaborative projects with other students.

b. Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.
1) Students use a variety of media and formats to create and edit products (e.g., presentations, newsletters, brochures, web pages) to communicate information and ideas to various audiences.
2) Students identify how different forms of media and formats may be used to share similar information, depending on the intended audience (e.g., presentations for classmates, newsletters for parents).

5. Technology research tools
a. Students use technology to locate, evaluate, and collect information from a variety of sources.
1) Students use Web search engines and built-in search functions of other various resources to locate information.
2) Students describe basic guidelines for determining the validity of information accessed from various sources (e.g., web site, dictionary, on-line newspaper, CD-ROM).
b. Students use technology tools to process data and report results.
1) Students know how to independently use existing databases (e.g., library catalogs, electronic dictionaries, encyclopedias) to locate, sort, and interpret information on an assigned topic.
2) Students perform simple queries on existing databases and report results on an assigned topic.

5c. Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.
1) Students identify appropriate technology tools and resources by evaluating the accuracy, appropriateness, and bias of the resource.

2) Students compare and contrast the functions and capabilities of the word processor, database, and spreadsheet for gathering data, processing data, performing calculations, and reporting results.

6. Technology problem-solving and decision-making tools
a. Students use technology resources for solving problems and making informed decisions.
   1) Students use technology resources to access information that can assist [them] in making informed decisions about everyday matters (e.g., which movie to see, which product to purchase).

b. Students employ technology in the development of strategies for solving problems in the real world.
   1) Students use information and communication technology tools (e.g., calculators, probes, videos, DVDs, educational software) to collect, organize, and evaluate information to assist with solving real-life problems (personal or community).

Grades Six through Eight – Technology Standards and Expectations – (by the end of Grade 8)

1. Basic Operations and Concepts.
a. Students demonstrate a sound understanding of the nature and operation of technology systems.
   1) Students understand that new technology tools can be developed to do what could not be done without the use of technology.
   2) Students describe strategies for identifying, and preventing routine hardware and software problems that may occur during everyday technology use.
   3) Students identify changes in hardware and software systems over time and discuss how these changes affected various groups (e.g., individual users, education, government, and businesses).
   4) Students discuss common hardware and software difficulties and identify strategies for trouble-shooting and problem solving.
   5) Students identify characteristics that suggest that the computer system hardware or software might need to be upgraded.
b. Students are proficient in the use of technology.
   1) Students use proper keyboarding posture, finger positions, and touch-typing techniques to improve accuracy, speed, and general efficiency in operating a computer.
   2) Students use accurate technology terminology.
   3) Students use a variety of technology tools (e.g., dictionary, thesaurus, grammar-checker, calculator) to maximize the accuracy of technology-produced products.
   4) Students identify a variety of information storage devices (e.g., floppies, CDs, DVDs, flash drives, tapes) and provide a rationale for using a certain device for a specific purpose.
   5) Students identify technology resources that assist with various consumer related activities (e.g., budgets, purchases, banking transactions, product descriptions).
   6) Students can identify appropriate file formats for a variety of applications.
   7) Students can use basic utility programs or built-in application functions to convert file formats.
   8) Students proofread and edit writing using appropriate resources (e.g., dictionary, spell check, grammar check, grammar references, writing references) and grade level appropriate checklists both individually and in groups.

2. Social, ethical, and human issues.
a. Students understand the ethical, cultural, and societal issues related to technology.
   1) Students understand the potential risks and dangers associated with on-line communications.
   2) Students identify security issues related to e-commerce.
   3) Students describe possible consequences and costs related to unethical use of information and communication technologies.
   4) Students discuss the societal impact of technology in the future

b. Students practice responsible use of technology systems, information, and software.

1) Students provide accurate citations when referencing information from outside sources in electronic reports.
2) Students discuss issues related to acceptable and responsible use of technology (e.g., privacy, security, copyright, plagiarism, spam, viruses, file-sharing).

2c. Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.
1) Students use technology to identify and explore various occupations or careers.
2) Students discuss uses of technology (present and future) to support personal pursuits and lifelong learning.
3) Students identify uses of technology to support communication with peers, family, or school personnel.

3. Technology productivity tools.
a. Students use technology tools to enhance learning, increase productivity, and promote creativity.
1) Students apply common software features (e.g., thesaurus, formulas, charts, graphics, sounds) to enhance communication and to support creativity
2) Students use a variety of resources, including the Internet, to increase learning and productivity.
3) Students explore basic applications that promote creativity (e.g., graphics, presentation, photo-editing, programming, video-editing).
4) Students use available utilities for editing pictures, images, or charts.

b. Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.
1) Students use collaborative tools to design, develop, and enhance materials, publications, or presentations.

4. Technology communications tools
a. Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
1) Students use a variety of telecommunication tools (e.g., e-mail, discussion groups, IM, chat rooms, blogs, video-conferences, web conferences) or other online resources to collaborate interactively with peers, experts, and other audiences.

b. Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.
1) Students create a project (e.g., presentation, web page, newsletter, information brochure) using a variety of media and formats (e.g., graphs, charts, audio, graphics, video) to present content information to an audience.

5. Technology research tools
a. Students use technology to locate, evaluate, and collect information from a variety of sources.
1) Students use a variety of Web search engines to locate information.
2) Students evaluate information from various online resources for accuracy, bias, appropriateness, and comprehensiveness.
3) Students can identify types of Internet sites based on their domain names (e.g., edu, com, org, gov, au).

b. Students use technology tools to process data and report results.
1) Students know how to create and populate a database.
2) Students can perform queries on existing databases.
3) Students know how to create and modify a simple database report.

c. Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.
1) Students evaluate new technology tools and resources and determine the most appropriate tool to use for accomplishing a specific task.

6. Technology problem-solving and decision-making tools
a. Students use technology resources for solving problems and making informed decisions.
  1) Students use database or spreadsheet information to make predictions, develop strategies, and evaluate decisions to assist them with solving a basic problem.

b. Students employ technology in the development of strategies for solving problems in the real world.
  1) Students describe the information and communication technology tools to use for collecting information from different sources, analyze their findings, and draw conclusions for addressing real-world problems.

Grades Nine through Twelve – Technology Standards and Expectations – (by the end of Grade 12)

1. Basic Operations and Concepts
a. Students demonstrate a sound understanding of the nature and operation of technology systems.
  1) Students discuss emerging technology resources (e.g., podcasting, webcasting, compressed video delivery, online file sharing, graphing calculators, global positioning software).
  2) Students identify the capabilities and limitations of emerging communication resources.
  3) Students understand the importance of both the predictable and unpredictable impacts of technology.
  4) Students identify changes in hardware and software systems over time and discuss how these changes might affect them personally in their role as a lifelong learner.
  5) Students understand the purpose, scope, and use of assistive technology.
  6) Students understand that access to online learning increases educational and workplace opportunities.

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

2. Social, ethical, and human issues
a. Students understand the ethical, cultural, and societal issues related to technology.
  1) Students identify legal and ethical issues related to use of information and communication technology.
  2) Students analyze current trends in information and communication technology and assess the potential of emerging technologies for ethical and unethical uses.

3) Students discuss possible long-range effects of unethical uses of technology (e.g., virus spreading, file pirating, hacking) on cultures and society.
4) Students discuss the possible consequences and costs of unethical uses of information and computer technology.

b. Students practice responsible use of technology systems, information, and software.
1) Students identify ways that individuals can protect their technology systems from unethical or unscrupulous users.
2) Students demonstrate the ethical use of technology as a digital citizen and lifelong learner.
3) Students explain the differences between freeware, shareware, and commercial software.
4) Students adhere to fair use and copyright guidelines.
5) Students create appropriate citations for resources when presenting research findings.
6) Students create appropriate citations for resources when presenting research findings.

c. Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.
1) Students explore career opportunities and identify their related technology skill requirements.
2) Students design and implement a personal learning plan that includes technology to support his/her lifelong learning goals.

3. Technology productivity tools
a. Students use technology tools to enhance learning, increase productivity, and promote creativity.
1) Students complete at least one online credit, or non-credit, course or online learning experience.
2) Students use technology tools for managing and communicating personal information (e.g., finances, contact information, schedules, purchases, correspondence).
3) Students have access to and utilize assistive technology tools.
4) Students apply advanced software features such as an application's built-in thesaurus, templates, and styles to improve the appearance of word processing documents, spreadsheets, and presentations.
5) Students use an online tutorial and discuss the benefits and disadvantages of this method of learning.
6) Students develop a document or file for inclusion into a web site or web page.
7) Students use a variety of applications to plan, create, and edit a multimedia product (e.g., model, web cast, presentation, publication, or other creative work).
8) Students have the opportunity to participate in real-life experiences associated with technology-related careers.

b. Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.
1) Students identify technology tools (e.g., authoring tools or other hardware and software resources) that could be used to create a group project.

4. Technology communications tools
a. Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
1) Students identify and describe various telecommunications or online technologies (e.g., desktop conferencing, listservs, blogs, virtual reality).

2) Students use available technologies (e.g., desktop conferencing, e-mail, groupware, instant-messaging) to communicate with others on a class assignment or project.
3) Students collaborate in content-related projects that integrate a variety of media (e.g., print, audio, video, graphic, simulations, and models) with presentation, word processing, publishing, database, graphics design, or spreadsheet applications.
4) Students plan and implement a collaborative project using telecommunications tools (e.g., groupware, interactive web sites, videoconferencing).

b. Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.
1) Students use a variety of media and formats to design, develop, publish, and present products (e.g., presentations, newsletters, web sites) to communicate original ideas to multiple audiences.

5. Technology research tools
a. Students use technology to locate, evaluate, and collect information from a variety of sources.
1) Students compare, evaluate, and select appropriate Internet search engines to locate information.
2) Students determine if online sources are authoritative, valid, reliable, relevant, and comprehensive.
3) Students distinguish between fact, opinion, point of view, and inference.
4) Students evaluate resources for stereotyping, prejudice, and misrepresentation.

b. Students use technology tools to process data and report results.
1) Students formulate and use evaluation criteria (authority, accuracy, relevancy, timeliness) for information located on the Internet to present research findings.

c. Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.
1) Students develop a plan to gather information using various research strategies (e.g., interviews, questionnaires, experiments, online surveys).

6. Technology problem-solving and decision-making tools
a. Students use technology resources for solving problems and making informed decisions.
1) Students use a variety of technology resources (e.g., educational software, simulations, models) for problem solving and independent learning.
2) Students describe the possible integration of two or more information and communication technology tools or resources to collaborate with peers, community members, and field experts.

b. Students employ technology in the development of strategies for solving problems in the real world.
1) Students formulate a research question or hypothesis, then use appropriate information and communication technology resources to collect relevant information, analyze the findings, and report the results to multiple audiences.

Parental Involvement and Communication

Under the direction of the Clintondale Board of Education Technology Committee, a new web site was implemented in August of 2007. (www.clintondale.k12.mi.us). The site contains many informative links to events and other happenings in our district. School calendars and lunch menus are merely part of the wealth of information available to parents and other interested individuals. The technology section of the district's web site will include the technology plan itself as well as staff development activities and goals and other items of interest. The new website provides a full "multi-media" experience whereas we provide a video information component that highlights various aspects of Clintondale Schools.

The Clintondale homepage also has a link to our premiere "multi-media" website called "C-Tube". The C-tube site can be found @ http://videos.clintondaleschools.net/ . The Clintondale C-Tube website highlights many of the daily classroom activities for our parents and community to "virtually" visit and enjoy.

Information is disseminated to community members through the use of the web site, communications from individual schools (traditional mailings and e-mail to and from teachers) and the regular distribution of the district's newsletter, the Communicator. Parents are reminded at teacher and PTO meetings to use the web site as a resource and to share it with their non-district friends and associates.

The district also uses a phone "blast message" system that allows information to be sent to various phone devices (home phones, cell phones or work phones) of our parents. This messages may be informational for things like open house, school plays or the sending home of progress reports. The system is also used to report things like school closings as a result of weather or building related issues.

Staff members are currently undergoing training for the ISD's Macomb Online Staff Training (MOST) program. This program utilizes web-based resources based on Blackboard.com software models and practices for each teacher and each class. Staff is able to keep up-to-the-minute information available to parents for their children's classes and activities including homework and long-term assignment information.

Collaboration

Technological enhancements including stand alone computers and networked computer labs are available to students enrolled in Clintondale's Adult Education program and have been for the last several years. Clintondale Adult Education students have been able to choose from computer based classes ranging from Computer Applications, taught in a lab setting, to the more individualized English as a Second Language offering that utilized computer education and computerized education. The ESL program was developed, at least in part, through a grant from the state.

Currently, computers are employed in a networked arrangement to supplement instruction for students enrolled in basic education classes as well as in G.E.D. classes. Students are

assigned to instructional modules that are designed to supplement and to enforce skill areas presented in the classes. Where appropriate, students and staff have access to the Web and to e-mail.

Adult Education students are currently able to use the district's main library, which provides access to a word processor, spreadsheet and database programs. Students may also use a computerized library management program called Athena. Research material and internet access are also available to students using the school libraries.

The Macomb Intermediate School District offers many services to the district. The MISD is the district's Internet service provider as well as the agent through which our initial Internet filtering (N2H2) is accomplished. The District also provides a second layer of Internet filtering using a product called Fortigate. The Fortigate solution was added in the spring of 2007 to give the district's technology team more localized control over Internet content. Among the services offered by the MISD are: Assistive Technology, The Teacher's Workshop, Interactive Learning, the REMC bid list and the MISD's Technology Plan.

Clintondale also has articulation agreements with Baker College. The Clinton Township Campus of Baker College is within walking distance of our high school. Students may take classes at Baker in a dual-enrollment situation with credit in certain classes applying to both institutions.

Integration Timeline

Technology integration into curricula and instruction, as has been mentioned, is an on-going process. We believe that three general steps to integration best serve our needs and our ability to support integration activities. These steps are 1.) Acquisition of Baseline Skills, 2.) Trainer Assisted Integration and 3.) Integration Sharing or Demonstration by Teachers to Teachers. 4.) Continually enhance our staff training to keep in line with state requirements for technology competencies and national standards These four items form a replicable cycle that can be adjusted for both existing and new staff members.

Our timeline includes increased use of technology in instruction through teacher training and specific technology integration training based on best practices. All of our teachers have received at least part of the planned initial training. Our efforts for the period of this plan will focus on integration training and the introduction of new technologies into the classroom. All of the building principals are scheduling time during in services for technology integration training for the 2012/2013 thru 2013/2014 school year.

Additional training will be offered before and after regular school hours but we have found that these sessions are primarily attended by those seeking particular or specific knowledge of programs or equipment. Please see the professional development section for more details.

Clintondale took a strong initiative to expand educational delivery beyond the traditional Monday through Friday 7:30 to 3:30 timeframe. The process started in January of 2009 and will continue through the 2016 school year. The process will start with the various knowledge

and technologies that we know are currently available and will most likely expand into areas that may still be under development (at the time of this writing) out in the market place.

The 2013-2014 initiatives include:
1. Secondary teachers using their own website to communicate education plans and lessons to parents and students.
2. The use of online programs like Success Maker, Study Island to enhance education delivery.
3. The use of mobile devices (cell phones etc.) to receive educational assistance.
4. Internal online video database that students and parents can use to reinforce learning.
5. High School online (and live) tutors available via webcam for student assistance for things like homework. Math and English are the current target areas.
6. Internal online teacher forum for the secondary teachers to use to better communicate education delivery (expansion of a professional learning community).

The 2014-2015 initiatives include:
1. Continuation of the 2013-2012 initiatives
2. Expand of the use of mobile devices with the intent to create "in house" curriculum based applications for student use.
3. Expand the online teacher forum to the elementary teachers.
4. Start planning to make the High School and Middle School Library a comprehensive multi-media center. This process will include the evaluation of all current library material and the expansion of additional technologies. Early consideration includes: pod cast stations, video creation stations, additional computers and large screen monitors to allow for greater student calibration on assignments.
5. Explore the use of projection devices (projectors and Elmo's) along with various "Smartboard" technologies.
6. Start the migration of accepted technologies to the elementary level

The 2015-2016 initiatives include:
1. Continuation of the 2014-2015 initiatives.
2. Continued evaluation of the current technologies that may be available for educational delivery.
3. Implement the multi-media technologies in the combined High School/Middle School Library complex.
4. Convert our current PC based system to a "smart device" to better allow customized content delivery to the student desktop.

Technology Planning Team

Name:	Role:
• Michael Kanan	Inacomp Computer/Integrator
• Jason Davidson	School Board President
• Rick Yaworski	Parent/School Board/ Technology Committee
• Ira Hamden	Middle School Principal
• Greg Green	High School Principal
• Karen Hessler	Parker Elementary Principal
• Donald Trahan	Rainbow Elementary Principal
• Jill Gerhardt	District Network Specialist
• Cathy LaMont	McGlinnen Elementary Principal
• Steve Howey	Technology Department
• Kris Trobaugh	Technology Secretary
• George Sassin	Superintendent / Technology Committee
• Meloney Cargill	High School Assistant Principal
• Len Lewandowski	Technology Director
• Ken Austin	CEA President/Middle School Coordinator
• Vince Lumetto	Parent

Professional Development

The success of any technology plan depends upon the ability of an organization to properly train its personnel in the use of the technologies to be employed. Many technology advocates underestimate the amount of work and effort required for teachers to implement technological changes into their skills and practices. It is preferable that as technology increases incrementally that training in that technology follow suit. As an area or department is upgraded to new technology, the training for that technology should be presented to the staff involved. Maximum benefit is most likely to accrue from focusing on teachers in buildings where technology is present and teachers are willing to move forward with the implementation of this technology into their presentations and work lives.

Our intent is to provide appropriate sustained training activities over the three-year term of this plan. Our timeline includes continued baseline training in the first phase, baseline training correlated to integration in the second phase and transitioning to teacher incorporation and

sharing of technology into their daily activities. Since all staff cannot be treated as if they possess the same level of skills, it is unrealistic to assume that large portions of the teaching staff can complete training and incorporate successful integration strategies at specific intervals. We are prepared to modify our training calendar to reflect the needs of the teachers (and the availability of funding) by organizing groups of teachers with like skills and training needs into smaller groups and providing appropriate training according to our master plan.

For technology to be successfully integrated into the curriculum, staff development and curriculum development must be coordinated. Implementation time lines for technology should coincide with staff development. Goals for development can be arranged into six levels. The first level involves the adoption of technology implementation throughout curricular areas by all teachers to allow equity of access for all students. Secondly, teacher-led instruction focused on declarative and procedural knowledge needs to shift to a student-based environment supporting the development of skill in the areas of problem solving, knowledge application, development and testing of hypotheses, recognizing patterns, analytical thinking and the processing of information. Third, providing a transitional period for teachers to incorporate technology into their working lives in a timely fashion using realistic professional goals. This step is to be coordinated between building and central administration as well as with technology specialists.

A team approach to teaching that emphasizes collaboration in decision-making, information processing and personal development is the fourth level in this process. The fifth level requires the identification of staff development leaders drawn from building level staff who will undertake staff development events, offer support to their colleagues, initiate curriculum revision and who participate in a program of ongoing staff development aimed at the development of all teachers. The final level in this process calls for fine-tuning staff development goals through regular communication between building staff and administration.

Clintondale staff members have embraced the efforts to integrate technology into their classroom curriculum. We are currently building an online knowledge base of instruction for our staff that will provide smaller content specific technology training. The knowledge base components may be written, video or also delivered using the latest "screen capture" technology. It is our long-term goal to provide the needed training/answers to our staff's technology related questions "on demand". We will use the trend requests to continually develop future training components.

Staffs in Clintondale are also trained using a variety of means. These include lessons modeled by proficient users, lessons delivered by the building technology coordinators, in-service activities, college courses and classes offered at the I.S.D. Staff members may also use the on-line course offerings associated with the Michigan TTI initiative. Access to in-services, workshops and conferences will be given to staff to pursue not only general knowledge, but to develop particular interests including subject areas. Parents, PTO members, building and central administrators and support personnel will also be provided training opportunities and experiences in using technology.

TECHNOLOGY STANDARDS FOR TEACHERS

In combination with basic skill training and integration activities, the following standards are the expected outcome of our professional development program and are used with the permission of the International Society for Technology in Education (ISTE):

Standard I

Teachers will demonstrate a sound understanding of technology operations and concepts.

Teachers will be able to:

A. demonstrate introductory knowledge, skills, and understanding of concepts related to technology.

B. demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

Standard II

Teachers will plan and design effective learning environments and experiences supported by technology. Teachers will be able to:

A. design developmentally appropriate learning opportunities that apply technology enhanced instructional strategies to support the diverse needs of learners.

B. apply current research on teaching and learning with technology when planning learning environments and experiences.
C. identify and locate technology resources and evaluate them for accuracy and suitability.
D. plan for the management of technology resources within the context of learning activities.
E. plan strategies to manage student learning in a technology enhanced environment.

Standard III

Teachers will implement curriculum plans that include methods and strategies for applying technology to maximize student learning. Teachers will be able to:

A. facilitate technology enhanced experiences that address content standards and student technology standards.

B. use technology to support learner centered strategies that address the diverse needs of students.
C. apply technology to develop students' higher-order skills and creativity.
D. manage student-learning activities in a technology-enhanced environment.

Standard IV

Teachers will apply technology to facilitate a variety of effective assessment and evaluation strategies. Teachers will be able to:

      A. apply technology in assessing student learning of subject matter using a variety of assessment techniques.
      B. use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.
      C. apply multiple methods of evaluation to determine students appropriate use of technology resources for learning, communication and productivity.

Standard V

Teachers will implement curriculum plans that include methods and strategies for applying technology to maximize student learning. Teachers will be able to:

      A. use technology resources to engage in ongoing professional development and lifelong learning.

      B. continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.
      C. apply technology to increase productivity as a teacher.
      D. use technology to communicate and collaborate with peers, parents and the larger community to nurture student learning.

Standard VI

Teachers understand the social, ethical, legal and human issues surrounding the use of technology in PK-12 schools and apply that understanding in practice. Teachers will be able to:
      A. model and teach legal and ethical practice related to technology use

.

      B. apply technology resources to enable and empower learners with diverse backgrounds, characteristics and abilities.

      C. identify and use technology resources that affirm diversity.

      D. promote safe and healthy use of technology resources.

      E. facilitate equitable access to technology resources for all students.

TECHNOLOGY STANDARDS FOR ADMINISTRATORS

Administrators must also be competent users of information and technology tools common to information-age professionals. The effective administrator today is an active user of technology. A large portion of the benefits of technology are lost for administrators who rely on someone else to do their e-mail, manipulate data, or handle technology tasks for them. While technology empowers administrators by the information it can readily produce and communicate, it exponentially empowers the administrator who masters the tools and processes that allow creative and dynamic management of available information.

Leadership has a responsibility to ensure digital equity and administrators who recognize the potential of technology understand the implications of this. Successful administrators also know that technology can unlock the potential of learners and staff with special and diverse needs. Administrators are responsible for incorporating technologies that enable a school system to comprehensively serve students.

Successful school districts align educational initiatives to address the priorities of the district. The shared vision for technology must be consistent with the district's overall educational vision, and technology plans must smoothly integrate with overall planning for school effectiveness.

In light of this, the Clintondale Schools Technology Plan will also provide professional development for administrative staff to help them meet the following standards (This material was originally produced as a project of the Technology Standards for School Administrators Collaborative and is used with the permission of the International Society for Technology in Education - ISTE.

Leadership and Vision

Educational leaders inspire a shared vision for comprehensive integration of technology and foster an environment and culture conducive to the realization of that vision. Educational leaders:

A. facilitate the shared development by all stakeholders of a vision for technology use and widely communicate that vision
B. maintain an inclusive and cohesive process to develop, implement, and monitor a dynamic, long-range, and systemic technology plan to achieve the vision
C. foster and nurture a culture of responsible risk-taking and advocate policies promoting continuous innovation with technology
D. use data in making leadership decisions
E. advocate for research-based effective practices in use of technology
F. advocate on the state and national levels for policies, programs, and funding opportunities that support implementation of the district technology plan.

Learning and Teaching

Educational leaders ensure that curricular design, instructional strategies, and learning environments integrate appropriate technologies to maximize learning and teaching. Educational leaders:

A. identify, use, evaluate, and promote appropriate technologies to enhance and support instruction and standards-based curriculum leading to high levels of student achievement.

B. facilitate and support collaborative technology-enriched learning environments conducive to innovation for improved learning.

C. provide for learner-centered environments that use technology to meet the individual and diverse needs of learners.

D. facilitate the use of technologies to support and enhance instructional methods that develop higher-level thinking, decision-making, and problem-solving skills
E. provide for and ensure that faculty and staff take advantage of quality professional learning opportunities for improved learning and teaching with technology

Productivity and Professional Practice

Educational leaders apply technology to enhance their professional practice and to increase their own productivity and that of others. Educational leaders:

A. model the routine, intentional, and effective use of technology

B. employ technology for communication and collaboration among colleagues, staff, parents, students, and the larger community

C. create and participate in learning communities that stimulate, nurture, and support faculty and staff in using technology for improved productivity

D. engage in sustained, job-related professional learning using technology resources.

E. maintain awareness of emerging technologies and their potential uses in education.

F. use technology to advance organizational improvement

Support, Management, and Operations

Educational leaders ensure the integration of technology to support productive systems for learning and administration. Educational leaders:

A. develop, implement, and monitor policies and guidelines to ensure compatibility of technologies

B. implement and use integrated technology-based management and operations systems

C. allocate financial and human resources to ensure complete and sustained implementation of the technology plan

D. integrate strategic plans, technology plans, and other improvement plans and policies to align efforts and leverage resources

E. implement procedures to drive continuous improvement of technology systems and to support technology replacement cycles

Assessment and Evaluation

Educational leaders use technology to plan and implement comprehensive systems of effective assessment and evaluation. Educational leaders:

> A. use multiple methods to assess and evaluate appropriate uses of technology resources for learning, communication, and productivity
> B. use technology to collect and analyze data, interpret results, and communicate findings to improve instructional practice and student learning
> C. assess staff knowledge, skills, and performance in using technology and use results to facilitate quality professional development and to inform personnel decisions
> D. use technology to assess, evaluate, and manage administrative and operational systems
> E. making sure to align to state and national standards for technology competencies

Social, Legal, and Ethical Issues

Educational leaders understand the social, legal, and ethical issues related to technology and model responsible decision-making related to these issues. Educational leaders:

> A. ensure equity of access to technology resources that enable and empower all learners and educators
>
> B. identify, communicate, model, and enforce social, legal, and ethical practices to promote responsible use of technology
>
> C. promote and enforce privacy, security, and online safety related to the use of technology
>
> D. promote and enforce environmentally safe and healthy practices in the use of technology
>
> E. participate in the development of policies that clearly enforce copyright law and assign ownership of intellectual property developed with district resources.

Infrastructure, Hardware, Technical Support and Software

Each of our 187 classrooms has been equipped with a student computer (minimally) and a teacher workstation. All classrooms have TV/VCR units and the ability to project PC images onto the classroom TV as well as access to SmartBoards and interactive projection devices. We also have added "portable Chromebook carts" to our technology offering during 2013. At this time we have 1 cart (with 36 Chromebook computers) in each of our buildings. We will monitor the effectiveness to see if additional Chromebook carts are justified. We recognize the

importance to placing the newest technology (chromebooks, tablet devices, netbooks, smart phones etc.) into the hand of our staff and are continually looking for ways to fund the need. The district is currently in a deficit position and as such needs to apply proper prioritization to many district needs.

The district will be installing wireless coverage throughout all of our buildings in the summer of 2013.

The district will be replacing 310 of our current desktop (lab) computers during the summer of 2013. We will be dividing up the removed 310 computers to be added as additional classroom computers for basic internet and word processing assistance. Additionally, the district will be purchasing 306 Chromebook computers. These computers will be part of a timeline to move toward a 1-1 computing environment. As part of this purchase the district will be issuing one Chromebook computer to each 6th grade student to use throughout their school day. These students will maintain these computes as 7th graders next school year and it is our intention to purchase new Chromebook computers for the incoming 6th graded in the 2014/15 school year.

We are in the process of implementing smartboard technology through our classrooms. To date we are piloting 15 smartboards through all five of our buildings.

Over the past several years we have installed projectors and document cameras in almost 60% of our classrooms and we intend to continue filling the remaining classrooms within the next two school years.

It is our intention that all students and staff have the proper access to technology throught the school day. We have several building who use the Title1 money to add additional computing infrastructure to those buildings that meet the requirements of Title1.

All of the PCs in the district are able to access the Internet and to send and receive e-mail. Each school building has progressed from relying on its' own local server to a centralized set of servers for data, connectivity and specialized applications. We also employ specialized servers required for Windows 2010 network operating system dependant programs, document imaging and our OS2 dependant phone and messaging systems. Networked printing is utilized wherever possible. We have network printing in all of the IMCs, building offices and computer labs as well as the business office and administration building.

Technologies to be acquired by the Clintondale Community School District in this three year cycle include only items that are compatible with the districts IBM compatible standard thus permitting interoperability between existing individual computers, classrooms, laboratories, buildings and networked applications. Existing technologies will be implemented into systems as fully as possible given the rapidly increasing baseline performance standards for new software, operating systems and networks.

We have recently upgraded our switch infrastructure to better allow faster network traffic. Our recent purchase will allow gigabit speed to the desktop. The upgraded switch infrastructure will allow us more bandwidth to add items such as our own e-mail exchange server.

Clintondale Community Schools supports/encourages the use of the "Distant Learning Lab" offerings through the ISD. We intend to increase teacher usage of our two labs in each of the three years covered within this plan. We anticipate a 25% growth (in DLL utilization) in each of the next three years.

At a personal use level, acquired technologies include additional computers and the software necessary for students and staff to complete their designated tasks. This includes not only word processing, spreadsheet and database programs but software and hardware that promotes connectivity to classrooms, schools, the district and the internet as well as content-specific software and integrated learning systems recommended by administrators and building level committees. Supplemental materials will continue to be purchased for use either in individual classrooms, laboratories or libraries and their purchase will be directed by the Curriculum Committee.

Classroom level materials consist of instructional, supplemental and multimedia products designed to contribute to classroom instruction and to supplement individual or group instruction. Classroom materials include video, CD ROM and software resources as well as projection devices, scanners, printers, cameras and other hardware for classroom use. Classroom level acquisitions also include adaptive technology to assist challenged students in completing their assigned tasks with the assistance of technology.

Classroom level technologies also include the installation of and staff training for Power School. These programs have replaced the paper based record systems used in the past. The training and cost of these programs was largely underwritten by the Macomb ISD. We utilize a technology secretary as the Power School liaison and she is responsible for troubleshooting and maintaining the programs as well as for supporting the staff in their use of the software.

Building level technologies to be acquired include the above but also include the continued upgrading of network devices and software of the schools media centers and laboratories to promote ease of administration as well as to allow internet access and access to the districts resource material whether these materials are found in a particular buildings library or in any other library in the district. Building level technologies also include the cabling, electrical components servers, and other hardware associated with the continued operation of a local area network for each school. This building network will permit the sharing of resources and communication between staff and students in each school. Building LANs have been drawn together into a district Wide Area Network.

District level technologies to be acquired include elements of the above but also the continued improvement of the design and implementation of the WAN. District level technologies will also include document imaging, dial up capabilities, WAN administration and maintenance and internet connectivity as well as business office and security devices and programs. The appropriate cabling, servers, routers and switches, and the software to run them, are considered a part of district level technology.

Academic and administrative resources will continue to be distributed through the LANs and the WAN. Our district WAN permits data and resource sharing for students and staff and promotes enhanced curricular choices including software, CD ROM, distance learning and video resources. Standards for connectivity and data exchange are the same for each school building and provide for video conferencing and a local online student forum.

Technical Support available in the district currently operates on four levels. The first level is the building technology coordinator who performs basic installation and troubleshooting in

each of the buildings. The second level is two full time roving technicians assisted by local college interns who visit every school on a weekly schedule to resolve matters that the building coordinator cannot. The third level is our help desk, which is maintained by the district's technology staff and is quite proficient at resolving basic software and hardware problems. Finally, users can readily contact (phone, fax or e-mail) either the technology director or the network specialist to resolve more difficult issues. We have long promoted the formation of teams within the individual buildings to help each other navigate through their difficult moments and to offer support and suggestions with regard to software, hardware and any specific concerns they may have.

To ensure that all students and teachers have increased access to technology we have worked with both the ISD and our special service department to determine appropriate technologies for students with special needs. These technologies range from audio and video devices to software and hardware specifically designed to assist the nontraditional learner. We have also implemented networked systems to provide individualized self-paced instruction including Accelerated Reader in the elementary schools and Star Math and Accelerated Math in the high school. We have adopted the SucessMaker ILS at our middle school and one of our elementary schools in the summer of 2010 witch identified high-need student populations to gauge the effectiveness of this program and to gather information for use in sustaining these efforts.

Acceptable Use Policy

The acceptable use policy (AUP) for Clintondale Community Schools has gone through several revisions since first incorporated in 1997. The current version contains space for both parents and students to sign indicating that they have read, understand and agree to follow the rules and procedures detailed in the document. A copy of the AUP can be found on the next page.

The district engaged in a review and re-write of the current AUP for the 2011/12 school year. Among the focus areas will be the need to address handheld mobile technology (cell phones, PDAs, netbooks etc.). We are seeing a dramatic increase in students requesting to bring in their own technology into our network environment.

Students are required to have a signed copy of the form in the technology office. Students are only required to complete the form once in their tenure at any particular school.

Filtering as Clintondale Community Schools is done through an agreement with the Macomb ISD and locally onsite using the Fortigate product. The Fortigate hardware is used to block out sites identified as unsafe or harmful for children according to the Children's Internet Protection Act (CIPA).

Clintondale Schools, as a member of the Macomb ISD Technology Consortium, will utilize Internet Access and telecommunications services provided through this consortium to support its mission. The Consortium will seek E-Rate funding discounts to provide Internet Access and telecommunications services to its members. The Internet Access acquired by the consortium and delivered to each member district through the Macomb County fiber wide area network will provide appropriate throughput, latency, and reliability to meet each member district's educational services needs. The telecommunications services to be acquired by the Consortium will include Digital Transmissions Services, including but not limited to, Integrated Services Digital Network (ISDN) PRI circuits that will be used to enable distance-learning experiences for member districts. Some, if not all, of the ISDN PRI circuits to be acquired will be from the Sprint ISDN VPN service which facilitates communications among other school districts and educational institutions (colleges, universities, etc.) who are also members of the Sprint VPN.

CLINTONDALE COMMUNITY SCHOOLS
TECHNOLOGY USER RESPONSIBILITIES

Technology Use Guidelines

The Clintondale Community School District provides technology resources to its students and staff for educational and administrative purposes. The goal in providing these resources is to promote educational excellence in the Clintondale schools by facilitating resource sharing, innovation, and communication with the support and supervision of parents, teachers, and support staff. The use of these technology resources is a privilege, not a right.

User Responsibilities

Individuals who use district technology are expected to:

1. Respect the privacy of other users. For example, users shall not intentionally seek information; obtain copies; modify files, data or passwords belonging to other individuals; represent themselves as another user, unless explicitly authorized to do so by that individual; or attempt to gain unauthorized access to files, programs or network services.

2. Follow copyright law, patent law and licensing agreements for software programs and other data. This includes, but is not limited to plagiarizing text, copying photographs, downloading Internet material and copying or "over installing" software disks or CDs.

3. Preserve the integrity of computers and network systems. For example, individuals shall not intentionally develop, distribute or implement programs that harass other users, infiltrate a computer or computer system and damage or alter software, a computer or a computing system.

4. Report any misuse of the network to the building administrator. Misuse comes in many forms. It is commonly viewed as any message or file sent or received that indicates or suggest pornography, violence, unethical or illegal solicitation, racism, sexism or inappropriate language.

5. Refrain from creating, sending, disclosing or accessing inappropriate materials. This includes text files, pornographic material, viruses or files dangerous to the integrity of the network. The district may review information such as e-mail, letters or reports without the author's permission.

6. Maintain the integrity of the electronic mail (e-mail) system. Individuals are responsible for all mail sent or received under their user account. An individual who receives material that may be objectionable should immediately report it to his/her building administrator. In addition, the content of any e-mail is neither private nor confidential and may be reviewed by district personnel at any time.

Clintondale Community Schools provides Internet content filtering both through the local ISD as well as locally using a Fortinet content filtering configuration. This filtering assures and acknowledges CIPA (The Children's Internet Protection Act).

Clintondale Community schools, through a designated representative(s), reserves the right to access, read and delete any information stored on the network including documents, e-mail or other files.

Individuals who do not adhere to Technology User Responsibilities are subject to disciplinary action including but not limited to loss of computer/network access. Disciplinary action will be based upon Clintondale Community Schools Board of Education policy and the applicable *Student Code of Conduct.*

This document is in effect until rescinded, in writing by the user, his/her parent/guardian or the school district.

I have read and understand the Clintondale Community Schools' Technology User Responsibilities and agree to adhere to all user responsibilities and technology use guidelines.

Print - Name

Signature

Print - Name of Parent/Guardian if for Minor Child

Signature of Parent/Guardian if for Minor Child

Check one: _____Staff _____Student _____Parent _____Community Member

Date _____

Budget

Annualized budgets for the 2013-2014, 2014-2015 and 2015-2016 are included on the following pages. Included with the annualized budgets are the timelines for major initiatives. Professional development, equipment replacement and maintenance as well as software upgrades are ongoing throughout the plan.

Long-term investment and sustainability are partially achieved through the maintenance of our voice, video and data infrastructure. An annual technology budget was established ten years ago and continues to this day. Considerable planning went into the design and construction of our infrastructure and it has become the backbone for most of our technological services. We carefully plan hardware purchases to be effective and affordable.

We as a district have benefited from Tech Literacy Grants, PAL Grants and Title I and Title V grants as well as from the E-Rate. We were a charter member of the E-Rate process and have employed their discounts to further technology for the last five years. Our ISD, grants and federal monies are all used to assist in providing appropriate technologies in our district. Individual building administrators and teachers have been successful in writing and receiving grants from groups ranging from AmeriTech to M.A.C.U.L.

The Clintondale Community School District is, and will continue to be, committed to searching out alternative funding sources and using these funds to promote technology acquisition and integration throughout the district.

It should be noted that the district outsourced the technology department in July of 2012. This agreement was mutually agreed upon by the district and the then local technology team. The technology employees (along with the Director of Technology) were retained by the outsource company. The financial savings to the district was approx. $60,000.00 per year.

Technology
Budget
2013-2014

Description	Line Item #	Amount	Typical Expenditures
Technology Hardware	6030	$ 250,000.00	Desktop PCs, Network Devices, Cabling, Wireless Chromebooks and Incidental Support Hardware
Technology Software	7843	$ 2,100.00	Network, Anti-virus, Office Suites, License-updates
Computer Supply	7849	$ 2,200.00	Supplies, Warehouse Orders, Printed Material
Contracted Services	6032	$ 35,000.00	Consultants, Integrators, Out of district Support/Repair
Conference and Workshops	7847	$ 1,500.00	Offsite Conferences, Workshops and training

Retirement	1445	$ 13,400.00	Required
Salary and Benefits		$ 212,000.00	Per Contract
Telecommunications		$ 26,000.00	Phone, Internet

Technology
Budget
2014-2015

Description	Line Item #	Amount	Typical Expenditures
Technology Hardware	6030	$ 56,000.00	PCs, Network Devices, Cabling, Printers Incidental Support Hardware
Technology Software	7843	$ 2,900.00	Network, Anti-virus, Office Suites, License-updates
Computer Supply	7849	$ 2,700.00	Supplies, Warehouse Orders, Printed Material
Contracted Services	6032	$ 39,000.00	Consultants, Integrators, Out of district Support/Repair
Conference and Workshops	7847	$ 1,800.00	Offsite Conferences, Workshops and training

Description	Line Item #	Amount	Typical Expenditures
Retirement	1445	$ 13,000.00	Required
Salary and Benefits	7845	$ 212,000.00	Per Contract
Telecommunications		$ 27,000.00	Phone, Internet

Technology
Budget
2015-2016

Description	Line Item #	Amount	Typical Expenditures
Technology Hardware	6030	$ 37,000.00	PCs, Network Devices, Cabling, Printers Incidental Support Hardware
Technology Software	7843	$ 3,400.00	Network, Anti-virus, Office Suites, License-updates
Computer Supply	7849	$ 3,200.00	Supplies, Warehouse Orders, Printed Material
Contracted Services	6032	$ 41,500.00	Consultants, Integrators, Out of district Support/Repair
Conference and Workshops	7847	$ 2,200.00	Offsite Conferences, Workshops and training
Retirement	1445	$ 13,000.00	Required

Salary and Benefits	7845	$ 212,000.00	Per Contract
Telecommunications		$ 28,000.00	Phone, Internet