

Hanover-Horton School District TECHNOLOGY PLAN SUMMARY SHEET

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Years covered by this plan: July 2009 to June 2012		

TABLE OF CONTENTS:

	<u>Page</u>
Description of District	2
Technology Vision and Goals	3
Guiding Documents for Plan.....	4
Consortium Acknowledgment.....	4
Technology Planning Team.....	5
Description of Technologies to be acquired.....	6
Curriculum Integration Plan.....	7
Student Achievement.....	17
Technology Delivery.....	18
Professional Development	19
Technical Assistance	19
Supporting Resources.....	19
Projected Cost.....	20
Evaluation of Progress.....	21
Acceptable Use Policy.....	22
Communication/Public Relations (Optional).....	26

MDE Technology Planning Web Site:

<http://techplan.org>

Jackson County Intermediate School District

Hanover Horton School District

DISTRICT Mission
“Creating a better world, one student at a time”

School Buildings

Hanover-Horton Elementary
131 Fairview
Hanover, Michigan 49241

Hanover-Horton Middle School
10,000 Moscow Road
Horton, Michigan 49246

Hanover-Horton High School
10,000 Moscow Road
Horton, Michigan 49246

DISTRICT PROFILE

The Hanover-Horton School District is a small town atmosphere, yet with the proximity of the district to the I-94 corridor gives the residents of the community easy access to the cultural, educational, and recreational activities in Jackson, Lansing, Battle Creek, Kalamazoo, and Ann Arbor.

Over 1300 students are served in the district by a staff of 80 teachers. Elementary students in grades kindergarten through five are located at the elementary school in the village of Hanover. The district's secondary complex located midway between the villages of Hanover and Horton contains grades six through twelve. Construction was completed on a new library at the secondary complex in January of 2006. District wide all buildings are connected by fiber and networked to provide easy access to outside and internal electronic communication. Computer labs are accessible for all grade levels and curriculum related to the use of technology has been expanded.

TECHNOLOGY PLAN INTRODUCTION

Hanover-Horton Public School's technology plan first received State of Michigan approval in 1995. The original document focused on the development of technical infrastructure, while subsequent revisions placed greater emphasis on professional development and the integration of technology in the learning experiences of students in the district. During these past ten years...

- All buildings in the district have been connected to each other and the outside world by fiber optic cable, allowing internet access, data sharing, and telephone messaging throughout the district and to the community. Appropriate filtering software and firewalls have also been put in place.
- Individual classrooms in all buildings are wired with fiber optic cable for data, telecommunications, and video.
- Contracted support staff are in place to manage the system
- Six computer labs are installed in the three buildings of the district. One in the elementary complex in Hanover and five in the middle school/high school complex.
- All computers in classrooms and offices are equipped with Microsoft Office Professional, providing for word processing, spreadsheet, database and presentation software from any computer in the district. While “SDS” administrative software is utilized in the central office in Horton, PowerSchool software by Pearson is used in all school buildings. Attendance and grades are managed electronically and parents have 24/7 access to their student’s grades through PowerSchool Parent/Student Portal system.
- An internet website has been developed and maintained at <http://www.hanoverhorton.org>.
- Increasingly, the use of technology is being integrated into the curriculum and classroom, through the use of word processing, spreadsheet analysis, graphic calculators, electronic presentation, internet research, or electronic communication.

The 2009 – 2012 revision of the technology plan will focus on the continued support of the technical systems that have been put into place and on the further integration of the benefits of technology into the classroom and curriculum.

District technology vision/mission statement:

It is the mission of all levels of our school community to provide and maintain a standard of technology throughout our school district that will:

- Enrich the academic curriculum, assist and encourage students in their educational endeavors.
- Improve student academic performance through new educational opportunities and services.
- Prepare technologically literate graduates who look to technology for knowledge, communication, and career development.
- Educate students and staff to be ethically aware of their use of information acquired or communicated through technology.
- Provide continuing life learning opportunities to members of our community.
- Provide efficiency in district operations.
- Provide a more efficient system/method of assessing our progress in integrating technology into the educational structure of the district.

Technology will become a natural part of the process, a “tool” by which students in the Hanover-Horton School system are educated to become productive citizens, confident in their own abilities, technically literate, and prepared to succeed.

How the technology plan ties in with the district mission and school improvement plan:

1. The school improvement plan refers to “adult roles” which include effective communicator, problem solver, technically literate, responsible citizen, healthy and fit person.
2. Our technology department chair is a member of the school improvement team.
3. Areas of the school improvement plan which utilize or are dependent on technical resources include :
 - a. Acquisition, data warehousing, and data manipulation
 - b. Professional development activities are offered.
 - c. Community/Parental communication including PowerSchool Parent/Student, E-mail and website.
 - d. Career education including EDP and Career Cruising.
 - e. Student Academic uses include research, testing, writing, remedial work, portfolio development and presenting.

Major Goals of the technology Plan:

1. Improve student learning through the use of technology.
2. Improve staff efficiency in the use of technology.
3. Maintain a technology infrastructure that is appropriate for expected use.
4. Improve interactive Technology in every classroom.

GUIDING DOCUMENTS

1. Required elements of a technology plan <http://techplan.org>
2. State of Michigan Five Year Technology plan <http://www.mde.state.mi.us/tplan/final.shtml>
3. National Educational Technology Standards Project <http://cnets.iste.org/>
4. Michigan Curriculum Framework <http://www.mde.state.mi.us/reports/>
5. Technology content standards and benchmarks
<http://cdp.mde.state.mi.us/MCF/ContentStandards/Technology/default.html>
6. NSSE Indicators for Quality for information systems in K-12 schools (National Study of School Evaluation). Library of Congress Catalog No. 9571988.1996
7. Guiding Questions for Technology Planning: North Central Regional Technology Education Consortium (<http://www.ncrel.org>)

CONSORTIUM ACKNOWLEDGMENT

Hanover-Horton School District is part of a consortium with Jackson County Intermediate School District.

The Jackson Intermediate School District and Jackson County School Districts work together to provide Internet access, content filtering, online classroom to all of the school districts in Jackson County. They also provide technical services, including network and workstation management, hardware and software support, helpdesk and e-mail.

Adult Literacy Service

Hanover-Horton School District does not have an adult education, GED certification or English as a Second Language program.

TECHNOLOGY PLANNING TEAM

Name	Position
Linda Brian	Superintendent

David Arrington	System Support
Cindy Casad	Elementary School Principal
Denise Dennison	Middle School Principal
Glen R Hardy	High School Principal
Karen Brockie	Elementary School Instructor
Tracy Stierle	Elementary School Instructor
Shelley Snell	Middle School Instructor
Rhonda Herwat	Middle School Instructor
Robin Ellison	High School Instructor/Technology Chair
Dan Draper	High School Instructor
Joe Childs	School Board Member/Technology Comm.
Jane Halstead	Technology Committee/Parent
Mike Tucker	Technology Committee/Parent

INFRASTRUCTURE

Hanover-Horton School District currently has a district-wide fiber optic network that connects all three buildings. In the secondary complex, there is fiber running the main server room to each closet in that building.

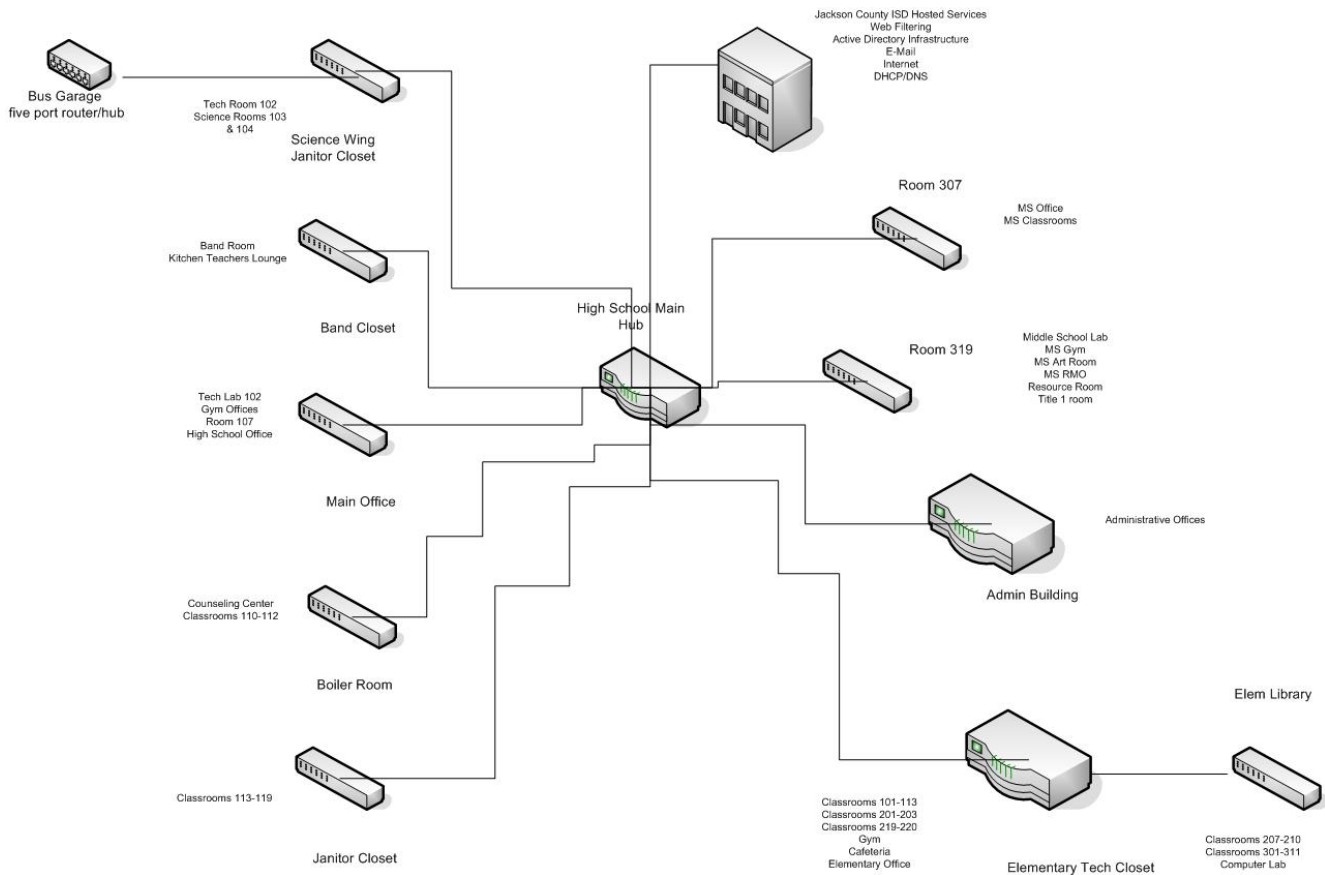
The other buildings have Fiber running from the main server rooms to wiring closets. Cat 5 cable runs from all wiring closets to classrooms for a 100/1000TX connection to the desktop computers. All classrooms are connected to the district network.

The network infrastructure consists of a 1000 Ethernet backbone between all buildings and extends into each building wiring closet. High speed Internet access is provided via fiber-optic cable using a Gigabit Ethernet link to the Jackson County Intermediate School District.

With the Internet connection, students and staff have access to a large variety of on-line classes from Michigan Virtual University and Michigan Virtual High School to other colleges and Universities in the State of Michigan or other states in the United States.

Hanover-Horton School District has adopted several technology standards to maintain the quality network and computer systems district wide. These standards include but are not limited to the following:

- Common student management software district wide.
- Total cost of ownership program designed to keep our hardware and software current
- High Speed Internet access on the district network
- Content filter in use on the internet access
- Computer system replacement minimum, every six years.
- Network storage space provided for every student grades 6-12
- E-mail accounts for all school employees and classroom level e-mail accounts where curriculum requires



CURRICULUM INTEGRATION

Grades K - 2 – Technology Standards and Expectations – (by the end of grade 2)

Source: Educational Technology Standards and Benchmarks

1) Basic Operations and Concepts-		Grades
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, telephones, televisions) and can identify them. 2. Students recognize, name, label, and	1. Grades K-2 2. Grades K-2 3. Grades 1-2

	<p>identify the functions of major hardware components in a computer system (e.g. computer, monitor, keyboard, mouse, and printer)</p> <p>3. Students will begin to proofread and edit their writing skills using appropriate resources.</p> <p>4. Students should be able to use basic functions of word processing software. (e.g. font face, font size, bold, alignment, color)</p>	4. Grade 2 (limited)
b) Students are proficient in the use of technology.	<p>1. Students use various age-appropriate technologies for gathering information (e.g. dictionaries, encyclopedias, audio/video players, phones, web resources)</p> <p>2. Students use a variety of age-appropriate technologies for sharing information (e.g. drawing a picture, writing a story)</p> <p>3. Students recognize the functions of basic file menu commands (e.g. new, open, close, save, print)</p>	<p>1. Grades 1-2</p> <p>2. Grades 1-2</p> <p>3. Grades 1-2</p>
2) Social, Ethical, and Human Issues.		
a) Students understand the ethical, cultural, and societal issues related to technology	<p>1. Students identify common uses of information and communication technologies.</p> <p>2. Students discuss advantages and disadvantages of using technology.</p>	<p>1. Grades K-2</p> <p>2. Grades 1-2</p>
b) Students practice responsible use of technology systems, information, and software	<p>1. Students recognize that using a password helps protect the privacy of information.</p> <p>2. Students discuss scenarios describing acceptable and unacceptable uses of age-appropriate technology (e.g. computers, telephones, 911, internet, email) at home or at school.</p> <p>3. Students discuss the consequences of irresponsible uses of technology resources at home or at school.</p>	<p>1. Grade 2</p> <p>2. Grades K-2</p> <p>3. Grades K-2</p>
c) Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.	<p>1. Students understand that technology is a tool to help them complete a task.</p> <p>2. Students understand that technology is a source of information, learning, and entertainment.</p> <p>3. Students can identify places in the community where one can access technology.</p>	<p>1. Grades 1-2</p> <p>2. Grades K-2</p> <p>3. Grades 1-2</p>
3) Technology Productivity Tools		
a) Student use technology tools to enhance learning, increase productivity, and promote creativity.	1. Students know how to use a variety of age-appropriate software to convey ideas and illustrate concepts.	Grade 2
4) Technology Communications Tools		
a) Students use	1. Students will identify procedures for	Grades K-2

telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.	safely using basic telecommunication tools (e.g. email, telephones) 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. word processing) 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.	1. Grade 2 2. Grades 2-5
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 information.	Grades 1-2
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) with assistance from teachers, parents or student partners.	Grade 1-2
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.	Grade 2-5
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)	Grade 1-5

Grades 3 - 5 – Technology Standards and Expectations–(by the end of Grade 5)

Source: Educational Technology Standards and Benchmarks

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 keep the system functioning properly.	1. Grades 3-5 2. Grades 3-5 3. Grade 3 (discussion)
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)	1. Grades 4-5 2. Grades 1-3

	<p>2. Students begin learning the proper keyboarding positions and touch-typing techniques</p> <p>3. Students manage and maintain files on a hard drive or the network.</p> <p>4. Students demonstrate proper care in the use of hardware, software, peripherals, and storage media.</p> <p>5. Students know how to exchange files with other students using technology (e.g. email attachments, network file sharing, diskettes, flash drives)</p> <p>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.</p> <p>7. Students identify search strategies for locating needed information on the Internet.</p> <p>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.</p>	<p>3. Grades 3-5</p> <p>4. Future goal</p> <p>5. Future goal</p> <p>6. Grades 3-5</p> <p>7. Grades 3-5</p> <p>8. Grades 3-5</p>
2) Social, Ethical, and Human Issues		
<p>a) Students understand the ethical, cultural, and societal issues related to technology.</p>	<p>1. Students identify cultural and societal issues relating to technology.</p> <p>2. Students discuss how information and communication technology supports collaboration, productivity, and lifelong learning.</p> <p>3. Students discuss how various technologies can benefit individuals with disabilities.</p> <p>4. Students discuss the accuracy, relevance, appropriateness, and bias of electronic information sources.</p>	<p>1. Grades 1-5</p> <p>2. Grades 2-5</p> <p>3. Grades 4-5 (Kids on Block)</p> <p>4. Grade 5- (discuss)</p>
<p>b) Students practice responsible use of technology systems, information and software.</p>	<p>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.</p> <p>2. Students discuss basic issues regarding appropriate and inappropriate uses of technology (e.g. copyright, privacy, file sharing, spam, viruses, and plagiarism) and related laws.</p> <p>3. Students use age-appropriate citing of sources for electronic reports.</p> <p>4. Students identify appropriate kinds of information that should be shared in public chat rooms.</p> <p>5. Students identify safety precautions that</p>	<p>1. Grades 3-5 (tech contract)</p> <p>2. Grades 3-5</p> <p>3. Grades 3-5</p> <p>4. Grade 5 (discuss)</p> <p>5. Grade 5 (discuss)</p>

	should be taken while on-line.	
c) Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.	<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 1. Grade 5 (careers) 2. Grades 1-5
3) Technology Productivity Tools		
a) Students use technology tools to enhance learning, increase productivity, and promote creativity.	<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 1. Grades 3-5 2. Grades 4-5 3. Grades 4-5 4. Grades 4-5
b) Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications and produce other creative works.	<ol style="list-style-type: none"> 1. Students collaborate with classmates using a variety of technology tools to plan, organize, and create a group project. 	<ol style="list-style-type: none"> 1. Grades 3-5
4) Technology Communications Tools		
a) Students understand telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.	<ol style="list-style-type: none"> 1. Students understand the use of basic telecommunication tools (e.g. web quests, IM, web conferencing) for collaborative projects with other students. 	<ol style="list-style-type: none"> 1. Grade 5
b) Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences	<ol style="list-style-type: none"> 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) 	<ol style="list-style-type: none"> 1. Grades 4-5 2. Grades 3-5
5) Technology Research Tools		
a) Students use technology to locate, evaluate and collect information from a variety of sources.	<ol style="list-style-type: none"> 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). 	<ol style="list-style-type: none"> 1. Grades 3-5 2. Future Goal
b) Students use technology tools	<ol style="list-style-type: none"> 1. Students know how to independently use 	<ol style="list-style-type: none"> 1. Grades 3-5

to process data and report results.	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.	2. Grades 3-5
c) 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 processing, database and spreadsheet for gathering data, processing data, performing calculations, and reporting results.	1. Future Goal 2. Future Goal
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)	1. Grade 5
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)	1. Grades 4-5

Grades 6 - 8 – Technology Standards and Expectations – (by the end of grade 8)

Source: Educational Technology Standards and Benchmarks

1) Basic Operations and Concepts		
a) Students demonstrate a sound understanding of 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.	Grades 6-8
b) Students are proficient in the	1. Students use proper keyboarding	

<p>use of technology.</p>	<p>posture, finger positions, and touch-typing techniques to improve accuracy, speed, and general efficiency in operating a computer.</p> <ol style="list-style-type: none"> 2. Students use accurate 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, and writing references) and grade level appropriate checklists both individually and in groups. 	<p>Grades 6-8</p>
<p>2) Social, Ethical, and Human Issues</p>		
<p>a) Students understand the ethical, cultural, and societal issues related to technology.</p>	<ol style="list-style-type: none"> 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. 	<p>Grades 6-8</p>
<p>b) Students practice responsible use of technology systems, information, and software.</p>	<ol style="list-style-type: none"> 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) 	<p>Grades 6-8</p>
<p>c) Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.</p>	<ol style="list-style-type: none"> 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. 	<p>Grades 6-8</p>

3) Technology Productivity Tools.		
a) Students use technology tools to enhance learning, increase productivity, and promote creativity.	<ol style="list-style-type: none"> 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. 	Grades 6-8
b) Students use productivity tools to collaborate in constructing technology –enhanced models, prepare publications, and produce other creative works.	<ol style="list-style-type: none"> 1. Students use collaborative tools to design, develop, and enhance materials, publications, or presentations. 	Grades 6-8
3) Technology Communications Tools		
a) Students understand telecommunications to collaborate, publish and interact with peers, experts, and other audiences.	<ol style="list-style-type: none"> 1. Students understand the appropriate use of a variety of telecommunication tools (e.g. email, discussion groups, IM, chat rooms, blogs, video-conferences, web conferences) or other online resources to collaborate interactively to other audiences. 	Grades 6-8
b) Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.	<ol style="list-style-type: none"> 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. 	Grades 6-8
4) Technology Research Tools		
a) Students use technology to locate, evaluate and collect information from a variety of sources.	<ol style="list-style-type: none"> 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) 	Grades 6-8
b) Students use technology tools to process data and report results.	<ol style="list-style-type: none"> 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. 	Grades 6-8
c) Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.	<ol style="list-style-type: none"> 1. Students evaluate new technology tools and resources and determine the most appropriate tool to use for accomplishing a specific task. 	Grades 6-8
5) Technology Problem-Solving and Decision-Making Tools		
a) Students use technology resources for solving problems	<ol style="list-style-type: none"> 1. Students use database or spreadsheet information to make predictions, develop 	Grades 6-8

and making informed decisions.	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 6-8

Grades 9-12 – Technology Standards and expectations – (by the end of grade 12)

Source: Educational Technology Standards and Benchmarks

1) Basic Operations and Concepts		
a) Students demonstrate a sound understanding of nature and operation of technology systems.	<ol style="list-style-type: none"> 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, businesses and careers.) 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. 	Grades 9-12
b) Students are proficient in the use of technology.	<ol style="list-style-type: none"> 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 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 	Grades 9-12

	appropriate resources (e.g. dictionary, spell check, grammar check, grammar references, and 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.	<ol style="list-style-type: none"> 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. 	Grades 9-12
b) Students practice responsible use of technology systems, information, and software.	<ol style="list-style-type: none"> 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) 	Grades 9-12
c) Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.	<ol style="list-style-type: none"> 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. 	Grades 9-12
3) Technology Productivity Tools.		
a) Students use technology tools to enhance learning, increase productivity, and promote creativity.	<ol style="list-style-type: none"> 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. 	Grades 9-12
b) Students use productivity tools to collaborate in constructing technology –enhanced models, prepare publications, and produce other creative works.	<ol style="list-style-type: none"> 1. Students use collaborative tools to design, develop, and enhance materials, publications, or presentations. 	Grades 9-12
4) Technology Communications Tools		
a) Students understand telecommunications to collaborate, publish and interact with peers, experts,	<ol style="list-style-type: none"> 1. Students understand the appropriate use of a variety of telecommunication tools (e.g. email, discussion groups, IM, chat rooms, blogs, video-conferences, web conferences) 	Grades 9-12

and other audiences.	or other online resources to collaborate interactively to 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.	Grades 9-12
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)	Grades 9-12
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.	Grades 9-12
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.	Grades 9-12
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.	Grades 9-12
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 9-12

Strategies to support goals include:

- Students analyze sources of information via technology and use technology to communicate throughout various curricular areas, including Math, Language Arts, Social Studies and Science.
- Students will use technology resources to explore career paths and evaluate various job opportunities, including those in technology fields.
- Students will demonstrate proper care of technological systems and components.
- Students will input and retrieve information from technology sources; interpret and analyze the information and apply it to problem solving techniques and situations.
- Students will critically evaluate information gathered through technology sources.
- Students will use a variety of technologies to express ideas (voice, data, video, graphics, etc).
- Students will use technologies to communicate for a variety of purposes.
- Students will use technology to organize thoughts in a logical process.

Identifying and promoting curricula and teaching strategies

The teachers of the district will provide and will continue to seek out professional development that integrates technology into the curriculum and instruction. Examples include PowerTeacher, attendance, Microsoft office, Examview, Moodle, interactive white boards, and video streaming.

Student Achievement

The elementary school focuses on curriculum integration. Using products such as Jump Start Kindergarten, Dr. Seuss Kindergarten, Mathosaurus 1, ABC World, and Kid Keys are used by K-1st grade. Mathosaurus II, Chuck Wagon Bills Language Skills, Fractions with Professor Von Strudel, Wild West Math and Mavis Beacon in Grades 2-5. Accelerated Reader, Accelerated Math, STAR Reading, STAR Math, Success Maker, Kidspiration 2, and Inspiration are used throughout the elementary level.

5th Grade students have used PowerPoint extensively to create presentations about their birthdays, integrating internet research to find items related to the birthday. 4th & 5th grade has also used PowerPoint to create a presentation based on research of careers using Career Cruising online.

Students in the elementary are using publishing software to create travel brochures and their own newsletter.

The high and middle school also use Accelerated Reader, Accelerated Math, STAR Reading and STAR Math. Career Pathways exploration is done using an on-line forum, Career Cruising. The internet is used district wide as a tool for teaching and learning. All classes use word processing and PowerPoint to enhance learning through reports, stories, essays, and presentations.

The high school students will meet the Michigan online experience through a Moodle classroom in the Applied Business Systems course.

Parent Communications and Community Relations

Our technology plan is available to the community via the district website. The community will be informed of the distribution process via the school newsletter in the fall of 2009.

Currently, all teachers in the district have their own email account and many maintain their own webpage. The teacher webpage contains information specific to their classroom such as classroom rules, homework assignments, specific learning objectives and course syllabus.

The district also has a web portal, PowerSchool, for parents to access their student's information such as current grades in each class, attendance and messaging from instructors.

Global Connect is an automated phone messaging service. Used for various occasions for contacting parents/guardians of the student body.

Connect Edu- Connect Edu is an all-in-one web solution for managing education and career transitions.

Current Technology Use

All schools are connected to the district network. All teachers, building administrators and clerical support staff use computers in support of instruction and building operations. All use district email system to communicate with colleagues and parents as needed.

All building classrooms have one computer available for staff use only and at least one computer designated for student use. The student computer has software available that is age appropriate. All teachers are using electronic attendance and have electronic grade book available for their use. This grade book is tied directly to the report cards and parent portal PowerSchool Parent/Student.

The elementary has one 30-station computer lab. The library also has 6 computers available for students. There is a 6 station mini lab in the Title I room.

The secondary complex has one computer lab dedicated to computer classes for the middle school (31 computers). The high school has three computer labs. It has one 30 station computer lab dedicated to business and senior transition classes. A second 26-station computer lab is dedicated for Computer Aided Design. 16 laptops for use in Project Lead the Way. The third is dedicated to English.

The middle and high school share one 30-station computer lab used for special projects.

Computer courses are delivered in an online structure. Moodle Classroom is available to instructors to use for online format. Michigan Virtual High School is available for students for online courses not currently offered in the district.

Professional Development

Professional development is scheduled during the school year and delivered in a series of full day in-service activities. The use of technology in the curriculum is planned as part of these professional development activities.

The Jackson Intermediate School District offers an array of technology classes which are taught at the JCISD site. Teachers and support staff can take these classes for college credit toward their certification.

The goals of a professional development plan include:

- improving student achievement
- improving staff and student competence with technology
- implementing technology tools into new and existing curriculum and instruction
- improving technology planning within schools
- creating pilots and model projects for utilization of technology in learning
- creating a learning community with respect to technology and education
- enabling students to become quality users of technology
- Interactive white boards and multi-media technology

Technical Assistance and Support

Hanover-Horton hosts a website with a technical support component:

<http://www.hanoverhorton.org>

This site is available 24 hours a day seven days a week to assist our staff.

Technical Support Staffing for Hanover-Horton School District currently provides support for staff through contracted technical support through the Jackson County Intermediate School District. Those contracts include complete Information Technology Services.

In addition to labor, there are many procedures in place to help maintain the technology in the district:

- Computer equipment is scheduled for replacement every 6 years.
- Computer equipment is cleaned annually and inspected for updates.
- An anti-virus program is in place to intercept viruses before they become problems.
- A managed desktop environment which limits students from modifying the computer settings is in place.
- Computer labs and other selected areas are alarmed.
- Video cameras are in place in all hallways in both complexes

Supporting Resources and Funding

Hanover-Horton School District currently provides annual funding to acquire and support district technology, including software. This funding is secured through capitol outlay budget.

Desktop computer equipment is obtained using a lease/purchase program where 60 computers are replaced annually. Computer software licenses are purchased concurrently to maintain compliance with established copyright laws.

The Jackson County Intermediate School District is contracted to support the network hardware, computer systems and printers. Additional network support is provided with some contracted services, not provided by the JCISD.

In addition, staff members annually seek a variety of local, state and federal grants to improve curricular areas at all grade levels. Because of the nature of grant funding, a decision was made not to rely on this type of funding to support operations. Grant funding is sought for special projects as needed.

Hanover-Horton School District applies for Universal Service Funding and generally receives funding for telephone service and internet access.

Professional development activities are funded from district budget and Title II funds.

TECHNOLOGY BUDGET – PROJECTED COST

Projected Cost 2009

Item	Local District
Technology Staff Support, Professional Development	\$77,800.00
Technology Capital Outlay	\$45,500.00
District Internet	\$6,050.00
Annual Licenses and Renewals	\$30,690.00
Technology Repair and Supplies	\$16,350.00
District Telephone Services	\$28,628.00
Total Operating	\$205,018.00

Projected Cost 2010

Item	Local District
Technology Staff Support, Professional Development	\$79,356.00
Technology Capital Outlay	\$46,410.00
District Internet	\$6,171.00
Annual Licenses and Renewals	\$31,304.00

Technology Repair and Supplies	\$16,677.00
District Telephone Services	\$29,201.00
Total Operating	\$209,118.00

Projected Cost 2011

Item	Local District
Technology Staff Support, Professional Development	\$80,943.00
Technology Capital Outlay	\$47,338.00
District Internet	\$6,294.00
Annual Licenses and Renewals	\$31,930.00
Technology Repair and Supplies	\$17,011.00
District Telephone Services	\$29,785.00
Total Operating	\$213,301.00

EVALUATION OF PROGRESS:

Hanover-Horton School District has a district technology committee that meets semi-annually. The meetings are in October and March each school calendar year. This committee has two objectives:

- The first is to assess the stated goals contained in the technology plan. The committee accomplishes this objective by regularly surveying the staff and testing students to assess the benchmarks defined in the technology plan.
- The second is to determine the best course of action to integrate technology into the curriculum for the maximum benefit of the students and staff.

This information is returned to the technology committee for evaluation for possible proposed changes to the technology plan. A memo will be sent to the Board of Education on the status of the goals and compliance of the technology plan.

EVALUATION PLAN

Evaluation Plan- Year 2007				
Required Components	Accomplishments	Progress toward Goals	Focus Areas for Improvement	Notes
Infrastructure	Complete	100%		
Curriculum Integration	Ongoing	100%		
Collaboration	Ongoing	50%	Seek companies to partner with	
Professional development	Ongoing			
Technical Support	Ongoing	100%		
Supporting Resources	Ongoing			
Cost/Funding	Identified	Complete		
Coordination of Funding Resources	Ongoing			
Acceptable Use Policy	Ongoing	100%	Review	
Communications	Ongoing	100%	Elementary Cable Feed	
Impact on Student Achievement	Ongoing			



Hanover-Horton School District

Technology Use and Internet Safety Policy

- I. Foreword
- II. User Privileges
- III. User Responsibilities
- IV. District Responsibilities
- V. Copyright
- VI. Discipline
- VII. Staff Contract
- VIII. Grades (6-12) Contract
- IX. Grades (K-5) Contract

I. Foreword

Use of technology at Hanover-Horton School District, hereinafter referred to as the District, is a privilege extended to students and staff to enhance learning and exchange information. Use must be consistent with the mission of the District, and where appropriate, must comply with the stated purposes and use policies of any other networks used. These rules have been published to enforce the rules of the Board of Education and other Federal agencies.

These rules shall apply equally for the use of all the District's technology. Hereafter, technology refers to but is not limited to: telephones, cell phones, voice mail, computer hardware and software, handheld devices, calculators, science equipment, televisions, and any other electronic equipment not specifically stated.

Users are responsible for using technology only for facilitating learning and exchanging information consistent with the mission of the District. Users must not use District technology on behalf of outside organizations without administrative approval. District technology is a closed forum. Occasional authorized approval for non-school related purposes or on behalf of outside organizations does not give rise to a right to such use in the future and does not create a limited open forum.

Messages and documents are the property of the District, and the District has the right to supervise the use of such property. Users shall have no expectation of privacy when using District technology. The District also has the right to revoke the user's access privileges any time for any reason.

Unless otherwise specified, the following regulations shall apply equally to all students, employees, volunteers, and all other users of the District network. Employees, volunteers, and users outside the school community may have additional obligations or access privileges owing to the nature of their positions.

With the privileges of membership in the District technology community comes responsibility. Users need to familiarize themselves with these responsibilities. Failure to follow them will result in loss of network privileges and/or disciplinary action as outlined in the Code and respective Board of Education policies.

The District shall not be held responsible for any individual's inappropriate use of its technology in violation of the law.

Each user shall be held personally, civilly and criminally responsible for any violations of the law. Each user of technology shall read and sign the Statement of Understanding or the Staff Summary, before using District technology. Use of District technology shall constitute agreement and consent to abide by the terms set forth in the Technology Use and Internet Safety Policy.

A violation of the Technology Use and Internet Safety Policy will be documented in a District Incident Report, and processed according to District procedures.

II. User Privileges

Users have the privilege to use all District Technology for which they are authorized and have received training. Users have conditional privilege to use electronic mail. Staff may send e-mail to any member on the Network or the Internet; prior approval is not required. Use of District technology shall constitute agreement and consent to abide by the terms set forth in the Technology Use and Internet Safety Policy.

- a. Users may expect to use the technology free of either physical or electronics harassment.
- b. Staff members have the privilege to use technology resources consistent with professional development needs.
- c. Students are not provided e-mail accounts.

III. User Responsibilities

1. Users are responsible for using technology only for facilitating learning and exchanging information consistent with the mission of the District.
2. Users are responsible for properly using and caring for the technology. Users are to seek assistance if necessary.
3. Users must not use any technology on behalf of outside organizations without administrative approval.
4. Users must not use any technology for illegal activity, including creating, finding or searching obscene or pornographic material, inappropriate text files, educationally unsuitable files, or files dangerous to the integrity of the network.
5. Any relocation, removal or modification of the technology equipment must have permission of the technology coordinator or authorized designee.
6. Users must use only their account ID or one designated by a supervisor. Use of an account by someone other than the registered account holder is forbidden. Users are responsible for the use of those accounts and access privileges. They are not to share accounts or leave accounts unattended. They are not to publish, share, or discuss passwords.
7. Users must not disrupt the operation of individuals or the technology through altering or abusing the technology.
8. Users will not divulge personal data to which they have access without authorization to do so.
9. Users will not abuse the rights and property of others by intentionally seeking information on, obtaining copies of (misappropriating), or modifying the files of data belonging to other users; nor will users place unauthorized information, computer programs, viruses or harmful programs in either the public or private files of others on the Network.
10. Use of the Network and e-mail is for school purposes only. Personal use should be avoided. Personal records and personal business should be kept at home. The District will not be responsible for personal information lost on District computers.

11. Users must not use the network or e-mail for personal correspondence or non-business communications including but not limited to: sexual harassment, personal or political gain, hate mail, profanity, vulgar statements, discriminatory remarks, defamatory statements, or other remarks that would constitute non-compliance with the District's policies dealing with sexual, racial, or other types of harassment.
12. Users experiencing harassment must report the problem immediately to their supervisor, teacher or technology coordinator.
13. The user is responsible for the use of her/his account and/or access privilege. Any problems that arise from the use of that account are the responsibility of the account holder.
14. Student users must use technology under the supervision of a staff member or his/her authorized representative. The student user may only log on and use the network under the immediate supervision of a staff member or authorized representative and only with an appropriate account.
15. Users identifying a security breach or violation of the Technology Use and Safety Policy must notify the technology facilitator or staff in charge. The problem is to remain confidential and is not to be shown or discussed with anyone outside of those authorized.
16. Users must follow all copyright guidelines as stated in Section V. (This includes illegally installed copyrighted software, or the transferring of files, shareware, or software from information services without permission of the facilitator.)
17. Users are responsible for any costs or fees or repair costs for damages to the technology.
18. Users are responsible for managing files and deleting old files in a timely manner.
19. Any misuse or violation of this policy or other related policies will result in disciplinary action up to and including expulsion or discharge and may also result in legal action if appropriate.

IV. District Responsibilities

1. The primary purpose of the District technology shall be to support academic programs and shall take precedence over professional support and general usage.
2. The District does not warrant that the functions of the system will meet any specific requirements the user may have, or that it will be error-free, or that its operation will not be interrupted. The District will not be liable for any direct or indirect, incidental, or consequential damages (including lost data, information, or use time) sustained or incurred in connection with the use, operation, or inability to use the hardware.
3. The District operates a Technology Protection Measure that blocks or filters Internet access to pictures and content that :
 - a. Are Obscene
 - b. Contain child pornography
 - c. Are harmful to minors
 - d. The District determines is "Inappropriate for Minors"
4. The District blocks minor's access to e-mail, chat rooms, and other forms of direct electronic communications (e.g. Instant Message Services).
5. The District does not warrant any system to be absolutely secure.
6. The District prohibits unauthorized disclosure, use and dissemination of personal identification information regarding minors using District technology.
7. The District prohibits computer hacking and other unlawful activities by minors using District technology.
8. The District employs measures (such as supervision and monitoring) to restrict minor's access to material harmful to minors.

9. The District reserves all rights to material stored in files on the e-mail or voice mail systems or on the Network that are generally accessible to others and will remove any material that the District, at its sole discretion, believes may be unlawful, obscene, pornographic, abusive, or otherwise objectionable educationally unsuitable or materially and substantially disruptive.
10. The Superintendent or his/her designee will periodically make determinations on whether specific uses of the hardware are consistent with this policy. The District reserves the right to monitor use. Therefore, the District reserves the right to limit or deny access any time, for any reason.
11. District staff will demonstrate good faith efforts to supervise use of technology under their charge.

V. Copyright

A. User responsibilities

1. The use of copyrighted software without authorization is prohibited. Users are further prohibited from installing any copyrighted software or materials on the District's hardware without proper authorization.
2. Users are prohibited from copying copyrighted materials from software, networks or other electronically accessible sites, without proper authorization.
3. Users must follow these copyright guidelines in the use of hardware and software, and in the transmission or copying of any text or files. Plagiarism rules apply to electronic medium and to print materials.
4. Users must assume that NOTHING ON THE INTERNET IS IN THE PUBLIC DOMAIN unless the author specifically puts notice there, or if the information is used after the expiration of the copyright. If any use is found to be illegal, the user is responsible.

B. District Responsibility

1. The Superintendent or his/her designee will decide whether specific uses of the technology are consistent with respect to copyright law. The District reserves the right to monitor use. The District reserves the right to limit or deny access at any time, for any reason.
2. The Superintendent or his/her designee reserves the right to review materials stored in files on the Network that are generally accessible to others and will remove any material that the District, at its sole discretion, believes to be in violation of copyright.
3. The District reserves the right to remove a user account to prevent any further unauthorized activity.
4. The Superintendent or his/her designee will make reasonable steps to inform all staff and students of the District's adherence to copyright policy and procedure.

VI. Discipline

Users violating the privileges outlined in the District Technology Use and Internet Safety Policy will be subject to disciplinary action. Violations include but are not limited to:

1. Intentionally seeking information on, obtaining copies of (misappropriating), or modifying files, other data, or passwords belonging to other users.
2. Misrepresenting others on the Network, or representing others without being explicitly authorized to do so.
3. Disrupting the operation of the Network through alteration or abuse of the hardware or software.
4. Malicious use of the Network through hate mail, profanity, vulgar statements, discriminatory remarks or other noncompliance with the Districts' policies dealing with sexual, racial, or other types of harassment.

5. The placing of unauthorized information, computer viruses, or harmful programs on or through the computer system in either public or private files or messages, or otherwise interfering with others' use of the Network.
6. Illegal installation of copyrighted software.
7. Unauthorized downloading, copying (transmission), or use of licensed or copyrighted software.
8. Transferring files, shareware, or software from information services and electronic bulletin boards without permission.
9. Using a computer I.D. or account, other than his/her own.
10. Allowing anyone to use another's account.
11. Access to the Network and Internet without permission.

Student users violating any of the above regulations will be subject to the following disciplinary action:

Students will be subject to a range of consequences for violating this policy including, but not limited to losing computer privileges, suspensions from school, or expulsion, depending on the severity of the infraction. All offenses will be recorded in the student's permanent file.

Additional Action:

All users violating the above code may face additional disciplinary action deemed appropriate in keeping with the disciplinary policies and guidelines of the school.

Cases that involve violations of state, local or federal laws could result in criminal prosecution and/or requirement of financial restitution.

Communications / Public Relations:

Hanover-Horton School District will publish the technology plan through the school website: <http://www.hanoverhorton.org>. The link will be under other resources.

The district publishes a newsletter that is mailed to the community quarterly.