

Technology Plan Summary Sheet

Plan Date: July 1, 2011

New State Review: June 2014

North Dickinson County School

North Dickinson County School
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Member of the Dickinson-Iron
ISD

<http://www.go-nordics.com/techplan.pdf>

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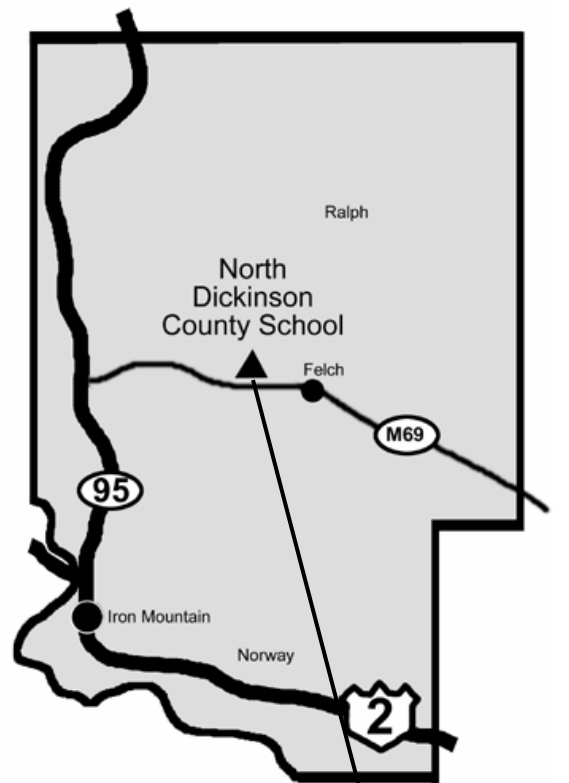
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North Dickinson County School



North Dickinson County School services a highly remote and rural community. It encompasses 500 square miles serving 317 students.

The district is made up of one school building with twenty-three teachers serving K-12 students. The school is quite distant from higher education institutions and even somewhat distant from its neighboring K-12 schools. The demographics indicate a per capita income level is below the average for the region and far below that of the state and nation. To improve the lifestyle of the area, intensive education is necessary. Due to our isolation it is critical that we have adequate technology for the students and staff.



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North Dickinson County School as a reflection of a caring, unique community located in a natural setting will empower and challenge all students to achieve their fullest intellectual potential, character, and attitudes to create better lives for themselves and the larger community.

Mission Statement of
North Dickinson County School District

Technology Plan Introduction Date 1 May 2011

Background of the Planning Process

North Dickinson County School defines technology integration as the process of teachers and students routinely and seamlessly using technology resources and technology-based practices to enhance learning. North Dickinson County Schools has a long history with the use of technology for instructors, student services and office personnel. When state and federal authorities began calling for written technology plans, North Dickinson County School began to formalize our planning and committing it to writing. From the beginning, our staff and our community have had a vital interest in the school's technology. Because of the rural nature of our community our students have the most to gain from the changes that technology offers. The voters of North Dickinson County Schools have twice supported bonds for the purchases of technology. The latest bond was passed in August, 2010 for four years and will fund over \$200,000 in new and innovative technologies.

From the beginning, technology planning in our school district has been a community process. That process continues today as can be seen from the composition of our technology planning team which is composed of a representative of our Board of Education, instructional staff, student, parents and the school administration.

This plan will be reviewed by the instructional staff for comments and suggestions, and then presented to the technology committee. After revisions it will be presented to the Board of Education for approval. The plan will then be forwarded on to the DIISD for final review and submission to the MDE.

Vision and Goals of this Technology Plan

The future success of each and every youth of North Dickinson County School District is tightly linked to the access of information. We believe that technology opens opportunities for our students to have access to a curriculum as rich and as broad as any student in the world. Therefore, North Dickinson County School District is committed to doing everything possible to provide our students with these powerful tools.

Technology Vision Statement of
North Dickinson County School District

Ties to the School Improvement Plan

The School Improvement Plan of 2011-2014 for our district defines our primary school improvement goals to be “to expand the curriculum offerings at NDCS through on-line coursework from Michigan’s Virtual High School, other web-based coursework, and ITV to support academic instruction through the use of technology.”

Given the rapid inroads that technology is making into every niche and corner of our society, it is natural that our school improvement plan will reflect greater use of technology for instruction.

Major Technology Goals

- To continue to provide support to teachers and students in the effort to reach mastery of the Michigan Merit Curriculum for every student.
- To maintain and upgrade a technology infrastructure that provides instructional staff and students with the tools that they need to realize our vision for technology as an integral part of instruction in our school district.
- To update our curriculum annually to reflect changes in technology across the world.
- To offer Video Conferencing for collaborative instruction with other districts, as well as having the ability to remotely provide and or attend conferences and professional development.

Strategies for Reaching our Major Technology Goals

Our district's technology plan is designed to support our school improvement plan. The plan includes strategies to meet our student achievement goals that utilize technology to support teachers and students in reaching mastery of the Michigan Merit Curriculum.

Our technology committee will meet at least annually to maintain technology planning as an on-going process. This will make it possible for us to constantly evaluate our need for infrastructure and software that will support our staff and students. To accomplish this NDCS will continue to write competitive grants in pursuit of money to support our technology. (NDCS is not eligible for significant e-rate funds for infrastructure.) We will also seek corporate support at every opportunity. This source of funding has been very productive for us in the past. We believe that it will continue to be in the future. Our district sought and the voters approved a four year bond referendum as a source of funding for technology purchases. We also participated in evaluating collaborative opportunities. As a result it was cost effective to participate in an ISD wide copier and printer bid process.

This technology plan will be a living document. Consequently, the "Curriculum Integration" section of this plan will have to be updated at least annually in order to keep our technology curriculum current. Change in technology is certain. Our technology curriculum must keep pace.

As a cooperative effort with other districts in our ISD we started this school offering Spanish instruction to another district using Video Conferencing. We are looking at ways to expand our instruction to other schools. We are looking for ways to use video conferencing to enhance our curriculum instruction in each of the four core subject areas.

Useful Technologies

The telecommunications and information technologies that NDCS sees as most useful to our district are the Internet, Michigan Virtual High School, Interactive White Boards, Video Conferencing, as well as other online coursework. As our student population falls, online course work becomes increasingly important in order to maintain a full, rich curriculum for our students. As the amount of data in our modern world increases exponentially, the Internet is the only "library" capable of holding and/or organizing this gargantuan collection. For our rural students, video conferencing integrated with interactive white boards, allows our students to interactively participate in educational opportunities around the world. Telecommunications and information technologies are making isolation no longer a limiting factor for student intellectual growth.

Vision and Goal Development

This technology plan is a living document. That is, it will truly guide the direction of our expansion and use of technology. When the plan no longer serves our needs, it will be updated to reflect the changes in our needs and the changes in available technology. Consequently, our technology vision and goals will be established and modified annually as a normal function of our technology planning team.

Promoting Parental Involvement

NDCS wants the parents of our students to be actively engaged in the planning and use of our technology. We want parents to become close partners in our effort to capitalize on the promise of technology. We have two parents on our technology planning team, and we have seen that the Power School grading program has been effective in getting parents more involved.

Our school's web site provides important information to parents, such as our school improvement plan, technology plan, Bylaws and Policies, the school calendar, District Budget, and our "Annual School Report." We intend to continue the expansion of our on-line information, with the implementation of Cloud based applications and data storage. This will allow parents who have an internet connection to access to their child's work at any time.

Goals for Teachers and Students

- Instructional staff of the North Dickinson County School will utilize technology in their teaching for the purpose of preparing student to use technology in the real world and for the purpose of strengthening the effectiveness of their own instruction in all curriculum areas.
- Instructional staff of our schools will have implemented the use of technology into all areas of the curriculum.
- Students of North Dickinson County School will graduate from high school with enough experience and training in the use of technology to be well prepared for vocational or college training or to begin employment.
- Students of North Dickinson County School will have online access to as rich a curriculum as any student in the state.

Evaluation

The "Major Technology Goals" and the "Technology Goals for Teachers and Students" will constitute the target areas of our evaluation process. That is, our evaluation process will attempt to determine how we are doing in reaching the goals that we have set for ourselves. To accomplish this end, the Technology Committee will meet each year and review recent progress toward meeting specific goals of this plan. Evaluation of our infrastructure will be based upon common knowledge of the current state of our electronic equipment and connectivity. Evaluation of the instructional value of our infrastructure will include discussion among staff which will explore the degree to which we are meeting our technology goals for teachers and students. This review will carefully evaluate our progress in making our technology infrastructure serve our school improvement goals. These yearly review meetings will result in a technology action plan for the following year.

Acknowledgement of Consortiums

- ❖ Dickinson-Iron Intermediate School District
- ❖ Upper Peninsula Center for Education Development
- ❖ Upper Great Lakes Educational Technologies Inc
- ❖ Dickinson/Iron/Menominee Math Science Center
- ❖ Ameritech Technology Academy
- ❖ Merit
- ❖ Link Michigan
- ❖ Northern Michigan University
- ❖ RSVP Program (Retired Senior Volunteer Program)

Technology Planning Team

Claude Siders, Superintendent

Paul Schuiteman, Board of Education Representative

Darrell Oman, Director of Support Services

Brian Olson, Technology Coordinator

Instructional Staff

Vicki Lindholm, Amy Hord, Michelle Mattson

Parents & Community Members

Dan Steinbrecher, Tom Roell, Maureen Charlevoix, Marsha Wanio

Students

Jacob Nurmi, Erica Van Slooten

Infrastructure

What Infrastructure do we have today?

North Dickinson County School offers the use of laptop labs to our teachers and students. Each of these labs contains twenty-five laptops which are connected to both the Internet and the school network through a series of wireless access points which support the entire building. The laptops are not well received by the teaching staff because they are inefficient. They take too long to boot up. They have a low battery life. The newer updated software and anti-virus use all of the computers resources so they tend to be slow. In addition to these laptop labs, we also have two stationary labs with twenty-five desktops in each. One located in the elementary school, and the other in the high school. Both labs are at the end of the life cycles and need to be replaced. Approximately one hundred fifty computers are available for student use. In addition to this, each teacher has a computer for use in the classrooms. The school libraries use computers to check books in and out. The high school library also houses about ten computers for online courses. Their software is also web-enabled, allowing students and staff to search the library collection online. We have recently replaced our file server and Network Operating System. We also replaced our network backup hardware. We have updated our internet connection with a 10Mbps fiber optic connection. We share an e-mail server with the ISD. We will be moving to a web based e-mail provider over the next year. We have updated our content filter and

firewall. We have installed an ITV room, as well as five SMART interactive whiteboards.

Infrastructure to be acquired

- ❖ Continue to subscribe to United Streaming for classroom use.
- ❖ Continue the subscription provided by the Michigan Virtual High School and other online courses.
- ❖ Continue to upgrade OS and application software on desktops and servers as needed.
- ❖ Upgrade the school's server hardware as needed.
- ❖ Expand the availability of emerging technologies such as iPods, Digital Video Equipment, and Multi-media presentation equipment.
- ❖ Continue to upgrade computers as they become obsolete.
- ❖ Complete the expansion of the wireless system to accommodate the use of wireless computing.

Continuous

- ❖ Our technology team will meet annually to continuously evaluate our current need for telecommunication services, hardware, software and other services for improving instruction.

Curriculum Integration

Broad Goals

North Dickinson County Schools has identified three important uses of instructional technology: 1) to teach students to use technology, 2) to use technology to teach students the core curriculum, and 3) to expand our curriculum through online coursework for our students. All are important.

For many years our vocational technology classes have taught our students to use technology as they might use it when they enter the world of work. We are proud of what we have been able to do in this area. However to continue to provide our students with such up-to-date learning experiences, we must try our best to keep up with the changes in industry. We are committed to maintaining our technology at a level which will continue to support training our students in up-to-date vocational skills.

Technology brings new power to our teachers in their effort to help students master the Michigan learning standards. Dynamic interactive software captures the attention of students and presents information in ways that have not been possible for educators in the past. Online material puts content into our schools as never before. Our technology must be adequate to support this effort.

In the past the size of our school district has severely limited the breadth of the course work that we could offer to our students. However, modern online courses now make it possible to dramatically extend those course offerings. For the past few years, the Michigan Virtual High School and other online schools have made it possible for our students to have access to as rich a curriculum as that of other students in Michigan and any other state. Our teachers also have access to United Streaming online videos to use as a resource in their classrooms.

Specific Objectives

Specifically, we propose the following goals for the integration of technology into our curriculum:

Goal 1: To teach students to use technology

Prior to completion of grade 2 students will:

- Objective 1: Use input devices and output devices to successfully operate computers, VCRs, audiotapes, and other technologies. (National Educational Technology Standards -- NETSS)
- Objective 2: Use a variety of media and technology resources for directed and independent learning activities. (NETSS)
- Objective 3: Communicate about technology using developmentally appropriate and accurate terminology. (NETSS)
- Objective 4: Use developmentally appropriate multimedia resources to support learning. (NETSS)
- Objective: 5 Work cooperatively and collaboratively with peers, family members, and others when using technology in the classroom. (NETSS)

- Objective 6: Demonstrate positive social and ethical behaviors when using technology. (NETSS)
- Objective 7: Practice responsible use of technology systems and software. (NETSS)
- Objective 8: Create developmentally appropriate multimedia products with support from teachers, family members, or student partners. (NETSS)
- Objective 9: Use technology resources for problem solving, communication, and illustration of thoughts, ideas, and stories. (NETSS)
- Objective 10: Gather information and communicate with others using telecommunications, with support from teachers, family members, or student partners. (NETSS)

Prior to completion of grade 5 students will:

- Objective 1: Use keyboards and other common input and output devices (including adaptive devices when necessary) efficiently and effectively. (NETSS)
- Objective 2: Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide. (NETSS)
- Objective 3: Discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use. (NETSS)
- Objective 4: Use general purpose productivity tools and peripherals to support personal productivity, remediate skill deficits, and facilitate learning throughout the curriculum. (NETSS)
- Objective 5: Use technology tools for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences inside and outside the classroom. (NETSS)
- Objective 6: Use telecommunications efficiently and effectively to access remote information, communicate with others in support of direct and independent learning, and pursue personal interests. (NETSS)
- Objective 7: Use telecommunications and online resources to participate in collaborative problem-solving activities for the purpose of developing solutions or products for audiences inside and outside the classroom. (NETSS)
- Objective 8: Use technology resources for problem solving, self-directed learning, and extended learning activities. (NETSS)
- Objective 9: Determine when technology is useful and select the appropriate tool(s) and technology resources to address a variety of tasks and problems. (NETSS)
- Objective 10: Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources. (NETSS)

Prior to completion of grade 8 students will:

- Objective 1: Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use. (NETSS)

- Objective 2: Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society. (NETSS)
- Objective 3: Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse. (NETSS)
- Objective 4: Use content-specific tools, software, and simulations to support learning and research. (NETSS)
- Objective 5: Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum. (NETSS)
- Objective 6: Design, develop, publish, and present products using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom. (NETSS)
- Objective 7: Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and information, and to develop solutions or products for audiences inside and outside the classroom. (NETSS)
- Objective 8: Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems. (NETSS)
- Objective 9: Demonstrate an understanding of concepts underlying hardware, software, and connectivity and of practical applications to learning and problem solving. (NETSS)
- Objective 10: Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems. (NETSS)

Prior to completion of grade 12 students will:

- Objective 1: Identify capabilities and limitations of contemporary and emerging technology resources and assess the potential of these systems and services to address personal, lifelong learning, and workplace needs. (NETSS)
- Objective 2: Make informed choices among technology systems, resources, and services. (NETSS)
- Objective 3: Analyze advantages and disadvantages of widespread use and reliance on technology in the workplace and in society as a whole. (NETSS)
- Objective 4: Demonstrate and advocate for legal and ethical behaviors among peers, family, and community regarding the use of technology and information. (NETSS)
- Objective 5: Use technology tools and resources for managing and communicating personal/professional information. (NETSS)
- Objective 6: Evaluate technology-based options, including distance and distributed education, for lifelong learning. (NETSS)
- Objective 7: Routinely and efficiently use online information resources to meet needs for collaboration, research, publication, communication, and productivity. (NETSS)
- Objective 8: Select and apply technology tools for research, information analysis, problem solving, and decision making in content learning. (NETSS)

- Objective 9: Investigate and apply expert systems, intelligent agents, and simulations in real-world situations. (NETSS)
- Objective 10: Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works. (NETSS)

Goal 2: To use technology to teach students the core curriculum

- Objective 1: Teachers demonstrate a sound understanding of technology operations and concepts (National Education Technology Standards -- NETST).
- Objective 2: Teachers plan and design effective learning environments and experiences supported by technology (NETST).
- Objective 3: Teachers implement curriculum plans, that include methods and strategies for applying technology to maximize student learning (NETST).
- Objective 4: Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies (NETST).
- Objective 5: Teachers use technology to enhance their productivity and professional practice (NETST).
- Objective 6: Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and apply those principles in practice. (NETST).

Goal 3: To expand our curriculum through online course work

- Objective 1: All middle school students will “Analyze current and emerging issues related to technology.”
- Objective 2: Selected tenth grade students will have the opportunity to take online or interactive video courses that cannot be offered locally.
- Objective 3: All eleventh and twelfth grade students will have the opportunity to expand their curriculum choices beyond local classes through the use of online training course work.

Revising and Updating Goals

Each year the North Dickinson County School District Technology Committee will review the current curriculum goals and objectives for the use of technology in the school. Each year the goals and objectives will be updated to reflect local, state and national changes. Each year the plan for technology expenditures will be driven by these goals and objectives.

Serving Special Needs Students

North Dickinson County School will continue to always work hand-in-hand with the Dickinson Iron Intermediate School District to search out and take full advantage of any assistive technology techniques that will improve our ability to provide an appropriate education for those students with special needs.

Collaboration

No community or school district stands alone without connection to different communities, schools, government agencies, businesses and other important entities. Nearly every activity that a school is involved in requires these essential partnerships with others. However, there is probably no other area of cooperation that requires closer relationships than the sharing of technologies, and there is probably no other area of cooperation that holds greater potential for improvement of instruction than that of technology. Consequently, North Dickinson County School is dedicated to fostering and maintaining these collaborative relationships.

Since the mid-sixties the Dickinson-Iron Intermediate School District has been the first and primary forum for local collaborations and consortiums. When technology began to emerge in instruction these early efforts in cooperation led naturally to cooperative projects in technology. We have worked with the DIISD for a number of years on such consortiums. We will continue to enthusiastically support such efforts. We believe that our first and primary level for joint technology projects is through the DIISD.

In the state of Michigan, Merit has become one of the major statewide partners for K-12 schools. We shall continue to seek ways to work closely with Merit. Until the Upper Peninsula of Michigan has established its own, viable cooperative body, we will continue to look to Merit as our second level of cooperation in technology.

NDCS has been active in following the development of "Link-Michigan Project." Through Upper Great Lakes Educational Technologies Inc. we are working to support this project locally since we see great promise for our students in its implementation. However, of equal importance to our students is the "content" side of the equation. Therefore, we have already begun to take advantage of the online course work provided by the Michigan Virtual High School. We believe that these services are inseparable. One is nothing without the other. A broadband width backbone is of no value to our school and our students without content to move over that high speed highway. As technology plunges forward the delivery of dynamic, cutting-edge content will require ever-greater speeds of transfer. Such extraordinary content will be of no use if a means of delivering it efficiently to remote areas such as ours is not in place. We will support the growth of these projects and try our best to take advantage of each state of their growth.

North Dickinson County School has also used Northern Michigan University to aid in coursework for teachers. Northern Michigan will also be used as a resource for ITV and online learning.

Local businesses have provided generous support in the past. There have been numerous occasions in which we have received private donations. These areas of community support have always resulted in important collaborations over the years and we have every hope that they will continue well into the future.

Professional Development

Origin of our Professional Development Goals and Objectives

Every element of our professional development plan has been designed to prepare our instructional staff to assume their role in reaching the specific objectives of our curriculum plan and in fostering authentic instruction and assessment as those terms are defined in the “Michigan Curriculum Framework.” Of course, our Board of Education and our Administrative staff believe that we can be most effective in achieving our purpose if our teachers know, understand, and integrate those best practices that have been identified by reasearch. Therefore, best practices in technology will also be addressed in this professional development plan.

Professional Development Goals and Objectives

Goal 1: Provide all staff with experience using the computer as a tool

Action Required	Timeline
Provide technical training in using new or updated software	Yearly
Provide staff with instruction in various types of projection equipment	On-going
Provide administrative staff with community training to update skills	On-going

Goal 2: Integrate the use of Internet as an information resource

Action Required	Timeline
Share websites and articles with lesson plan examples and activities	On-going
Provide staff with instruction in using various types of equipment to better deliver curriculum	On-going
Provide training to make better use of communication tools	On-going

Goal 3: Promote ethical and responsible use of technology

Action Required	Timeline
Review district technology policies and expectations with all staff at the start of each school year	Yearly
Increase awareness of concepts in district’s Acceptable Use Policy	On-going
Provide training regarding appropriate use of technology	On-going

Goal 4: Provide in-service and visitation opportunities for new technologies

Action Required	Timeline
Offer training on specific skills and curriculum integration	On-going
Provide opporutuities for staff to attend conferences on emerging technology	On-going
Provide staff with notifications of grant opportunities	On-going
Actively pursue new professional development funding from other resources	On-going

Management of our Professional Development Training

We have a technology director on staff and a technology coordinator to manage our technology training programs. They, along with, the superintendent, principal and office staff are all part in planning and organizing our training programs.

Our school district is small, therefore, we will also look toward a possible partnership with the Dickinson-Iron Intermediate School District for collaboration and delivery of this training along with other small schools in our area.

Source of our Professional Development Training

As is the case with many school districts, we have staff who are very knowledgeable about certain areas of technology. Thus, we actually have people in our school who are completely capable of providing some of the training that we need to meet the goals and objectives of our professional development plan. Unfortunately, all of these people are already busy with their own responsibilities. However, to the extent that it is possible we plan to foster the spread of their expertise. We will make a special effort to promote the one-on-one mentoring of less knowledgeable staff by those who have the necessary skills. That is, we will try to organize our school so that the “expert down the hall” can actually become an important trainer in our district.

Beyond this, we will work to join with our intermediate school district in an effort to form a coalition of schools that will cooperate in developing strategies to serve the training needs of the school district. Online training is also becoming a more viable source for professional development and training that our teachers need.

Technical Support

North Dickinson County School understands that technology needs constant and consistent maintenance. Without that, investments in hardware, software and teacher training will be of no value. Technology that does not work consistently is worse than no technology at all, because it results in teacher frustration that hinders their use of technology. Consequently, we believe that technical assistance shares equal importance with hardware, software and teacher training.

NDCS will continue to provide teachers support to solve problems that get in the way of their use of the school’s technology. This is currently provided by a combination of outside contractors and school technology staff.

We use e-mail as a means for teachers and students to request assistance. The technology director responds to requests either in person or with a reply to the e-mail or forwards the support request to the appropriate person. E-mail provides for paperwork reduction, and better tracking of support requests. The technology coordinator and the technology director work together, to review new technology. New software and hardware implementations need the approval of the Technology Director and Technology Coordinator to ensure both hardware, and software compatibility with existing systems and to avoid duplication or overlap of services. They will suggest upgrades if a need arises.

Supporting Resources

The acquisition of “Supporting Resources” in our school district will be checked against the school improvement plan as well as this Technology Plan prior to purchase/implementation.

Software—North Dickinson County School will maintain current licenses for the following types of software to support our goals and objectives:

- Elementary Computer graphics (i.e. KidPix)
- Learning Games (i.e. Jump Start)
- Drill and Practice Software (i.e. TurboMath)
- Keyboard Training (i.e. Mavis Beacon)
- Word Processing (i.e. Microsoft Word)
- Web Browser (i.e. Internet Explorer)
- Presentation Software (i.e. PowerPoint)
- Spread Sheet (i.e. Excel)
- Data Base (i.e. Access)
- DeskTop Publishing (i.e. Publisher)
- Vocational Training Software (i.e. Auto Cad)
- MOIS or other career exploration software
- United Streaming
- Lexus
- MVHS
- Anti-Virus

Internet—We use the Internet as a tool to access our resources, reference information, content and instructional activities. We believe that this will be the strongest supporting technology resource that our students and teachers have available to them. We take full advantage of the services of online course providers.

Local Technical Support—Often a source of software application support for teachers is the expert-down-the hall. While our staff cannot possibly provide all the technical support needed, they have become a very important dimension of our overall effort to support teachers use of technology. We have a technology director on staff. The technology coordinator also provides ongoing support for software that is in-use and has been implemented.

Area Technical Support—There are three small, remote, rural schools in Dickinson and Iron County. We are all faced with the problem of providing affordable support to teachers in the

use of technology. A cooperative effort through the Dickinson-Iron Intermediate School District provides extra services at a manageable cost.

Public Domain Software—For more than ten years a great quantity of instructional materials have been developed by projects funded by state and federal tax money. While these materials do not rival Disney productions, they are available and they are in the public domain. The Great Lakes Collaborative, the Upper Great Lakes Educational Technologies Inc., Macomb ISD, Wayne RESA, Genesee ISD, West Iron County Public Schools, Rapid River Public Schools and many others have developed such materials. We evaluate these resources and use them in our school district when applicable.

Maintenance and Repairs—For technology to serve our students and teachers it must work, and it must be dependable. However, our school district must be very judicious in how we provide this support. We have constructed an effective cost conservative three tier approach.

1. Our technology director troubleshoots and repairs smaller problems or makes referrals to outside contractor for maintenance service.
2. Contracts with a vendor to do complex repairs and diagnostics.
3. A system to support teachers in the use of the technology which is in place. Evaluates use and projects future equipment, software and infrastructure needs.

Implementation Timeline

2011-2012

- State and federal grants are written to help support this plan.
- Software to be purchased is evaluated by staff to identify how it will support the core curriculum.
- Adequacy of technology plan is reviewed and expanded as needed.
- High School students continue taking coursework from online vendors.
- Replace all Staff computers update Operating system and application software.
- Replace student computers in the High School computer lab.
- Replace computes in the high school library.
- Install Integrated Whiteboards, with document cameras.
-

2012-2013

- State and federal grants are written to help support this plan.
- Representation of the technology planning committee will be on the District's Professional Development Committee.
- Expand functionality of the Powerschool program for parents and students to view student information via the Internet.
- High School students continue taking coursework from the Michigan Virtual High School and other online vendors.
- Pilot a mobile handheld device and curriculum.
- Assessment of print needs.

2013-2014

- State and federal grants are written to help support this plan.
- Representation of the technology planning committee will be on the District's Professional Development Committee.
- Review and upgrade software as needed.
- Technology plan will be rewritten.

Projected Costs

Education Technology Plan Budget				
Function Titles	2010-2011	2011-2012	2012-2013	2013-2014
Personnel	13707	6224	6224	6224
Software	7973	6362	5400	5400
Networking Services	6178	6500	6500	6500
Phone/Voice Mail	1818	1850	1850	1850
Infrastructure	0	14600	3000	3000
Supplies	9500	13000	1000	5000
New/Replacement Hardware	100884	3600	1000	60000
Professional Development	2000	2500	2500	2500
Contracted Technical Services	22862	13605	14000	14000
Other	100	100	100	100
Total	\$165022	\$68341	\$41574	\$104574

Coordination of Resources

North Dickinson County School operates with a small positive fund balance of less than three percent of our operating funds. Consequently NDCS must make every penny of local tax money and every penny of state foundation money stretch to the absolute limits. Beyond that NDCS must look to every possible outside source to help fund this technology plan—state and federal competitive grants, corporate partnerships, the restructuring of the use of state and federal moneys and so on.

Local money and state foundation moneys at our school cannot be expected to do more than cover the costs of maintaining the technology that we have. Because of the nature of our free and reduced lunch count, we cannot look to e-rate money for significant help for infrastructure. External sources of money are the only possible way that we can hope to grow our technology over the next five to ten years.

The change in federal funding for technology that is distributed by the Michigan Department of Education is currently somewhat unclear. New laws and appropriations have not yet been clarified at the local level. However, we do know that some of this money will come to us as formula grants and some will be available through competitive grants. These moneys will open up possibilities for enhancement of the technology that we have today. Our priorities for this growth can be found in the Infrastructure section of this plan.

In the past NDCS has received considerable help with technology from various corporate partners. We intend to continue to pursue this avenue of support in the future. It has opened up wonderful opportunities in the past, and we are confident that it will again. We have constantly looked for possible groups of collaborators to leverage our “buying power.” So far that has not produced great dividends for us. However, we believe that with the “Link Michigan” initiative, there will be a rapid increase in collaborative partnerships which tremendously expand the instructional value of our technology without significant increases in cost.

As the state and federal plans for technology use begin to be implemented we believe that the amount of online K-12 content will expand dramatically. These extremely valuable resources will make it ever more attractive for our school to align our budget with new priorities.

At NDCS we believe that this is the New World of educational content and instruction will tremendously benefit small rural schools such as ours by bringing a broad, rich curriculum to our students.

NDCS will continue to cultivate cooperation with other agencies in our community that provide adult literacy services. We will use strategies for this effort that our school district has developed and cultivated over the years.

Since the inception of the Dickinson-Iron Intermediate School District, the schools in our area have looked to this intermediate school district to provide leadership in education. Today, this is especially true as we seek partnerships that help us to leverage the expertise of the ISD, other schools in our neighborhood and our own resources to bring best practice in education and technology into our classrooms.

Evaluation

The North Dickinson County School has set the following goal for supporting our staff and students through the use of technology:

Technology Goal: *It is the long term goal of the North Dickinson County School to prepare our students to use technology effectively in whatever avenues that they pursue after graduation, to use technology to bring students to mastery of the learning standards of the Michigan Framework, and to expand our course offerings through online course work.*

North Dickinson County School will review the number of students taking online courses and their grades on a yearly basis. We will also analyze curriculum and state assessments annually to ensure that the use of technology is increasing our student performance. North Dickinson teachers will annually assess each student on their individual attainment of the National Education Technology Standards.

The technology committee will annually review District compliance with the technology plan timelines. To obtain a consumer perspective of the District's performance in meeting the objectives, the District will hold an annual meeting, surveys and discussions will appraise the school's success in reaching these technology objectives. This procedure will evaluate our success in carrying out the District's technology plan.

Strategies for addressing unmet goals will be developed on an individual basis and will be the combined responsibility of the school improvement and technology committees.

Student Network and Internet Acceptable Use and Safety

Students are encouraged to use the Board's computers/network and Internet connection for educational purposes. Use of such resources is a privilege, not a right. Students must conduct themselves in a responsible, efficient, ethical, and legal manner. Unauthorized or inappropriate use, including any violation of these guidelines, may result in cancellation of the privilege, disciplinary action consistent with the Student Handbook, and/or civil or criminal liability. Prior to accessing the Internet at school, students must sign the Student Network and Internet Acceptable Use and Safety Agreement. Parent permission is required for minors.

Smooth operation of the Board's Network relies upon users adhering to the following guidelines. The guidelines outlined below are provided so that users are aware of their responsibilities

- A. Students are responsible for their behavior and communication on the Internet.
- B. Students may only access the Internet by using their assigned Internet/E-mail account. Use of another person's account/address/password is prohibited. Students may not allow other users to utilize their passwords.
- C. Students may not intentionally seek information on, obtain copies of, or modify files, data or passwords belonging to other users, or misrepresent other users on the network.
- D. Students may not use the Internet to engage in "hacking" or other unlawful activities.
- E. Transmission of any material in violation of any State or Federal law or regulation, or Board policy is prohibited.
- F. Any use of the Internet for commercial purposes, advertising, or political lobbying is prohibited.
- G. Students are expected to abide by the following generally-accepted rules of network etiquette.
 - 1. Be polite, courteous, and respectful in your messages to others. Use language appropriate to school situations in any communications made through the Board's computers/network. Do not use obscene, profane, vulgar, sexually explicit, defamatory or abusive language in your message.
 - 2. Never reveal names, addresses, phone numbers, or passwords of yourself or other students, family members, teachers, administrators, or other staff members while communicating on the Internet.

3. Do not transmit pictures or other information that could be used to establish your identity without prior approval.
 4. Never agree to get together with someone you “meet” on-line without prior parent approval.
 5. Diligently delete old mail on a regular basis from the personal mail directory to avoid excessive use of the electronic mail disk space.
- H. Use of Internet to access, process, distribute, display, or print child pornography and other material that are obscene, objectionable, inappropriate and/or harmful to minors is prohibited. As such the following material is prohibited: material that appeals to prurient interests in nudity, sex and excretion; material that depicts, describes or represents in a patently offensive way with respect to what is suitable for minors an actual or simulated sexual act or sexual contact, actual or simulated normal or perverted sexual acts, or a lewd exhibition of the genitals; and material that lacks serious literary, artistic, political or scientific value as to minors. Offensive messages and pictures, inappropriate text, or files, or files dangerous to the integrity of the Board’s computers/network (e.g. viruses) are also prohibited.
- I. Malicious use of the Board’s computer/network to develop programs that harass other users or infiltrate a computer or computer system and/or damage the software components of a computer or computer system is prohibited. Students may not use the Board’s computers/network in such a way that would disrupt their use by others. Students must avoid intentionally wasting limited resources.
- J. All communications and information accessible via the Internet should be assumed to be private property (i.e. copyrighted and/or trademarked). All copyright issues regarding software, information, and attributions of authorship must be respected.
- K. Downloading of information onto the Board’s hard drives is prohibited. If a student transfers files from information services and electronic bulletin board services, a teacher must check the file with a virus-detection program before opening the file for use. Only public domain software may be downloaded. If a student transfers a file or software program that infects the Network with a virus and causes damage, the student will be liable for any and all repair costs to make the Network once again operational.
- L. Students must secure prior approval from a teacher or the technology coordinator before joining a listserv (electronic mailing lists) and should not post personal messages on bulletin boards or “listservs.”
- M. Students are prohibited from accessing or participating in online “chat rooms” or other forms of direct electronic communication (other than e-mail) without prior approval from a teacher or the technology coordinator. All such authorized communications must comply with these guidelines.

- N. Privacy in communication over the Internet and the Network is not guaranteed. To ensure compliance with these guidelines, the Board reserves the right to monitor, review, and inspect any directories, files and/or messages residing on or sent using the Board's computers/network. Messages relating to or in support of illegal activities will be reported to the appropriate authorities.
- O. Use of the Internet and any information procured from the Internet is the student's own risk. The Board is not responsible for any damage a user suffers, including loss of data resulting from delays, non-deliveries, mis-deliveries, or service interruptions. The Board is not responsible for the accuracy or quality of information obtained through its services.
- P. Disclosure, use and/or dissemination of personal identification information of minors via the Internet is prohibited, except as expressly authorized by the minor student's parent/guardian on the "Student Network and Internet Acceptable Use and Safety Agreement Form."
- Q. Proprietary rights in the design of web sites hosted on the Board's servers remains at all times with the Board.

STUDENT NETWORK AND INTERNET ACCEPTABLE USE & SAFETY AGREEMENT

Grades K – 5

To access e-mail and/or the Internet at school, students under the age of eighteen (18) must obtain parent permission and must sign and return this form. Students eighteen (18) and over may sign their own forms.

Use of the Internet is a privilege, not a right. The Board’s Internet connection is provided for educational purposes only. Unauthorized and inappropriate use will result in a cancellation of this privilege.

The Board has implemented technology protection measures which attempt to block/filter Internet access to visual displays that are obscene, child pornography or harmful to minors. The Board also monitors online activity of students in an effort to restrict access to child pornography and other material that is obscene, objectionable, inappropriate and/or harmful to minors. Nevertheless, parents/guardians are advised that determined users may be able to gain access to information, communication and/or services on the Internet which the Board of Education has not authorized for educational purposes and/or which they and/or their parents/guardians may find inappropriate, offensive, objectionable or controversial. Parents/Guardians assume this risk by consenting to allow their students to participate in the use of the Internet. Student’s accessing the Internet through the school’s computers assumes personal responsibility and liability, both civil and criminal, for unauthorized or inappropriate use of the Internet.

The Board has the right to monitor, review and inspect any directories, files and/or messages residing on or sent using the Board’s computers/networks. Messages relating to or in support of illegal activities will be reported to the appropriate authorities.

Please complete the following information:

Student User’s Full Name (please print): _____

School: _____ Grade: _____

Parent/Guardian’s Name: _____

Parent/Guardian

As the parent/guardian of this student, I have read the Student Network and Internet Acceptable Use and Safety Policy and Guidelines, and have discussed them with my child. I understand that student access to the Internet is designed for educational purposes and that the Board has taken available precautions to restrict and/or control student access to material on the Internet that is: obscene, objectionable, inappropriate and/or harmful to minors. However, I recognize that it is impossible for the Board to restrict access to all objectionable and/or controversial materials that

may be found on the Internet. I will not hold the Board (or any of its employees, administrators or offices) responsible for materials my child may acquire or come in contact with while on the Internet. Additionally, I accept responsibility for communicating to my child guidance concerning his/her acceptable use of the Internet – i.e., setting and conveying standards for my daughter/son to follow when selecting, sharing and exploring information and resources on the Internet. I further understand that individuals and families may be liable for violations. To the extent that proprietary rights in the design of a web site hosted on the Board’s servers would vest in my child upon creation, I agree to assign those rights to the Board.

Please check each that applies:

- I give permission for my child to use and access the Internet at school and for the Board to issue an Internet/e-mail account to my child.
- I give permission for my child’s image (photograph) to be published online, provided only his/her first name is used.
- I give permission for the Board to transmit “live” images of my child (as part of a group) over the Internet via a web cam.
- I authorize and license the Board to post my child’s class work on the Internet without infringing upon any copyright my child may own with respect to such class work. I understand only my child’s first name will accompany such class work.

Parent/Guardian Signature: _____ Date: _____

Student

I have read and agree to abide by the Student Network and Internet Acceptable Use and Safety Policy and Guidelines. I understand that any violation of the terms and conditions set forth in the Policy and Guidelines is inappropriate and may constitute a criminal offense. As a user of the Board’s computers/network and the Internet, I agree to communicate over the Internet and the Network in an appropriate manner, honoring all relevant laws, restrictions and guidelines.

Student’s Signature: _____ Date: _____

Teachers and building principals are responsible for determining what is unauthorized or inappropriate use. The principal may deny, revoke or suspend access to the Network/Internet to individuals who violate the Board’s Student Network and Internet Acceptable Use and Safety Policy and related Guidelines, and take such other disciplinary action as appropriate pursuant to the Student Code of Conduct.

STUDENT NETWORK AND INTERNET ACCEPTABLE USE & SAFETY AGREEMENT

Grades 6 – 8

To access e-mail and/or the Internet at school, students under the age of eighteen (18) must obtain parent permission and must sign and return this form. Students eighteen (18) and over may sign their own forms.

Use of the Internet is a privilege, not a right. The Board’s Internet connection is provided for educational purposes only. Unauthorized and inappropriate use will result in a cancellation of this privilege.

The Board has implemented technology protection measures which attempt to block/filter Internet access to visual displays that are obscene, child pornography or harmful to minors. The Board also monitors online activity of students in an effort to restrict access to child pornography and other material that is obscene, objectionable, inappropriate and/or harmful to minors. Nevertheless, parents/guardians are advised that determined users may be able to gain access to information, communication and/or services on the Internet which the Board of Education has not authorized for educational purposes and/or which they and/or their parents/guardians may find inappropriate, offensive, objectionable or controversial. Parents/Guardians assume this risk by consenting to allow their students to participate in the use of the Internet. Student’s accessing the Internet through the school’s computers assumes personal responsibility and liability, both civil and criminal, for unauthorized or inappropriate use of the Internet.

The Board has the right to monitor, review and inspect any directories, files and/or messages residing on or sent using the Board’s computers/networks. Messages relating to or in support of illegal activities will be reported to the appropriate authorities.

Please complete the following information:

Student User’s Full Name (please print): _____

School: _____ Grade: _____

Parent/Guardian’s Name: _____

Parent/Guardian

As the parent/guardian of this student, I have read the Student Network and Internet Acceptable Use and Safety Policy and Guidelines, and have discussed them with my child. I understand that student access to the Internet is designed for educational purposes and that the Board has taken available precautions to restrict and/or control student access to material on the Internet that is : obscene, objectionable, inappropriate and/or harmful to minors. However, I recognize that it is impossible for the Board to restrict access to all objectionable and/or controversial materials that

may be found on the Internet. I will not hold the Board (or any of its employees, administrators or offices) responsible for materials my child may acquire or come in contact with while on the Internet. Additionally, I accept responsibility for communicating to my child guidance concerning his/her acceptable use of the Internet – i.e., setting and conveying standards for my daughter/son to follow when selecting, sharing and exploring information and resources on the Internet. I further understand that individuals and families may be liable for violations. To the extent that proprietary rights in the design of a web site hosted on the Board’s servers would vest in my child upon creation, I agree to assign those rights to the Board.

Please check each that applies:

- I give permission for my child to use and access the Internet at school and for the Board to issue an Internet/e-mail account to my child.
- I give permission for my child’s image (photograph) to be published online, provided only his/her first name is used.
- I give permission for the Board to transmit “live” images of my child (as part of a group) over the Internet via a web cam.
- I authorize and license the Board to post my child’s class work on the Internet without infringing upon any copyright my child may own with respect to such class work. I understand only my child’s first name will accompany such class work.

Parent/Guardian Signature: _____ Date: _____

Student

I have read and agree to abide by the Student Network and Internet Acceptable Use and Safety Policy and Guidelines. I understand that any violation of the terms and conditions set forth in the Policy and Guidelines is inappropriate and may constitute a criminal offense. As a user of the Board’s computers/network and the Internet, I agree to communicate over the Internet and the Network in an appropriate manner, honoring all relevant laws, restrictions and guidelines.

Student’s Signature: _____ Date: _____

Teachers and building principals are responsible for determining what is unauthorized or inappropriate use. The principal may deny, revoke or suspend access to the Network/Internet to individuals who violate the Board’s Student Network and Internet Acceptable Use and Safety Policy and related Guidelines, and take such other disciplinary action as appropriate pursuant to the Student Code of Conduct.

STUDENT NETWORK AND INTERNET ACCEPTABLE USE & SAFETY AGREEMENT

Grades 9 – 12

To access e-mail and/or the Internet at school, students under the age of eighteen (18) must obtain parent permission and must sign and return this form. Students eighteen (18) and over may sign their own forms.

Use of the Internet is a privilege, not a right. The Board’s Internet connection is provided for educational purposes only. Unauthorized and inappropriate use will result in a cancellation of this privilege.

The Board has implemented technology protection measures which attempt to block/filter Internet access to visual displays that are obscene, child pornography or harmful to minors. The Board also monitors online activity of students in an effort to restrict access to child pornography and other material that is obscene, objectionable, inappropriate and/or harmful to minors. Nevertheless, parents/guardians are advised that determined users may be able to gain access to information, communication and/or services on the Internet which the Board of Education has not authorized for educational purposes and/or which they and/or their parents/guardians may find inappropriate, offensive, objectionable or controversial. Parents/Guardians assume this risk by consenting to allow their students to participate in the use of the Internet. Student’s accessing the Internet through the school’s computers assumes personal responsibility and liability, both civil and criminal, for unauthorized or inappropriate use of the Internet.

The Board has the right to monitor, review and inspect any directories, files and/or messages residing on or sent using the Board’s computers/networks. Messages relating to or in support of illegal activities will be reported to the appropriate authorities.

Please complete the following information:

Student User’s Full Name (please print): _____

School: _____ Grade: _____

Parent/Guardian’s Name: _____

Parent/Guardian

As the parent/guardian of this student, I have read the Student Network and Internet Acceptable Use and Safety Policy and Guidelines, and have discussed them with my child. I understand that student access to the Internet is designed for educational purposes and that the Board has taken available precautions to restrict and/or control student access to material on the Internet that is: obscene, objectionable, inappropriate and/or harmful to minors. However, I recognize that it is impossible for the Board to restrict access to all objectionable and/or controversial materials that

may be found on the Internet. I will not hold the Board (or any of its employees, administrators or offices) responsible for materials my child may acquire or come in contact with while on the Internet. Additionally, I accept responsibility for communicating to my child guidance concerning his/her acceptable use of the Internet – i.e., setting and conveying standards for my daughter/son to follow when selecting, sharing and exploring information and resources on the Internet. I further understand that individuals and families may be liable for violations. To the extent that proprietary rights in the design of a web site hosted on the Board’s servers would vest in my child upon creation, I agree to assign those rights to the Board.

Please check each that applies:

- I give permission for my child to use and access the Internet at school and for the Board to issue an Internet/e-mail account to my child.
- I give permission for my child’s image (photograph) to be published online, provided only his/her first name is used.
- I give permission for the Board to transmit “live” images of my child (as part of a group) over the Internet via a web cam.
- I authorize and license the Board to post my child’s class work on the Internet without infringing upon any copyright my child may own with respect to such class work. I understand only my child’s first name will accompany such class work.

Parent/Guardian Signature: _____ Date: _____

Student

I have read and agree to abide by the Student Network and Internet Acceptable Use and Safety Policy and Guidelines. I understand that any violation of the terms and conditions set forth in the Policy and Guidelines is inappropriate and may constitute a criminal offense. As a user of the Board’s computers/network and the Internet, I agree to communicate over the Internet and the Network in an appropriate manner, honoring all relevant laws, restrictions and guidelines.

Student’s Signature: _____ Date: _____

Teachers and building principals are responsible for determining what is unauthorized or inappropriate use. The principal may deny, revoke or suspend access to the Network/Internet to individuals who violate the Board’s Student Network and Internet Acceptable Use and Safety Policy and related Guidelines, and take such other disciplinary action as appropriate pursuant to the Student Code of Conduct.

Computer Technology And Networks

The technology director shall be responsible for the management of the Board's technology system and for making the arrangements for any networks which may be used to enhance the educational program and/or operations of the District.

S/He shall be responsible for implementing the guidelines established for program development (AG 2210 through AG 2252), the selection of materials and equipment (AG 2521A), and the District's purchasing guidelines (AG 6320). In addition, the technology coordinator shall make sure the appropriate agreement Form 7540.04 F1 or Form 7540.03 F1 is complete for each staff member and student who will have access to Board technology and any networks.

All tentative agreements with networks or technology agencies are to be submitted to the Superintendent for review and approval.

It is essential that staff members and students be provided the following information concerning the use of the Internet. This can be done through written guidelines, professional development seminars, faculty and student meetings, and introductory remarks at the beginning of a course in which the Internet may be used.

- A. Use of the Internet is to be related to one or more courses of study and is not to be used by staff or students for discriminatory or unlawful purposes. All student use is to be supervised by a staff member or approved volunteer who has signed the Staff Network and Internet Acceptable Use and Safety Agreement Form 7540.04F1.
- B. Prior to disseminating information across the Internet about a student such as name, address, or other identifying data including pictures, signed parental permission forms must be on file.
- C. Because of the vast amount of information that can be retrieved from the World-wide network, teachers are responsible for training students to use proper research skills when retrieving information. It is inappropriate, costly, and a waste of valuable instructional time for staff and/or students to download large quantities of information that has not been checked ahead of time for accuracy, relevancy, and probable usage. It may be helpful, therefore, for teachers to conduct some controlled exercises with students on how to differentiate between web-sites that are "attractive but superficial or irrelevant" from those that are attractive, substantive, and relevant.
- D. No staff member or student will be allowed access to the Internet or other networks without first signing the Student or Staff Network and Internet Acceptable Use and Safety Agreement, Form 7540.03 F1 or Form 7540.04 F1. All student use of the Internet must be under supervision of a staff member or approved volunteer.

- E. Neither staff members nor students are to use the Internet for discriminatory or unlawful purposes but only for purposes related to the Board's educational program or to operational needs.
- F. Each staff member and student will be provided a password for use with Board technology with the provision that the password is not to be shared with others. The existence of a password does not guarantee confidentiality or privacy and the Board retains the right to use any person's password to monitor the type of use that is being made of the Board technology and does not involve the conduct of any discriminatory or unlawful business (including commercial purposes, advertising, and political lobbying).
- G. Students are allowed to send or receive personal e-mail messages with the consent of the instructor.
- H. Use of all other Board technology shall be in accord with AG 7530 – Personal Use of District Equipment and Facilities.