

# **NORTH STAR ACADEMY DISTRICT TECHNOLOGY PLAN**

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DISTRICT CODE: 52901**

**7/1/2011 – 6/30/2014**

(created 10/13/2010)

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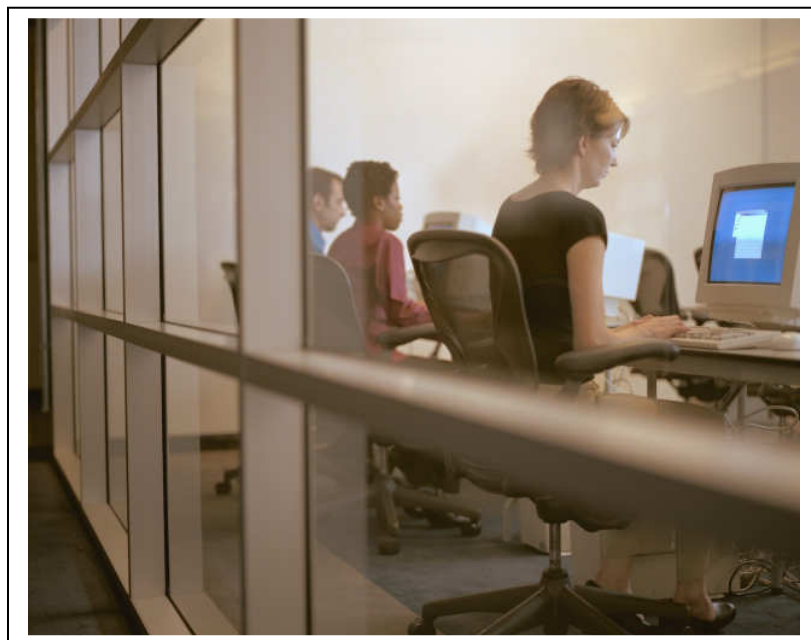
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**ISD: Marquette-Alger Regional Service Agency**

**URL of Technology Plan: [www.nsacd.com](http://www.nsacd.com)**



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## **District Mission Statement – Section Two**

North Star Academy – A competitive K-12 small learning community focusing on hands-on academics, integrating our global environment and the arts and technology to successfully prepare our graduates to be contributing members of society.

### **Belief Statements**

- Education is about the students.
- Every student is a gift.
- Learning is a collaborative effort.
- Communication is key.
- Academic success is attainable.
- We can all be safe, respectful, and responsible.

## **District Introduction – Section Two**

### **I. Introduction**

***Description of District:*** North Star Academy provides an education choice to any grade K-12 student in the Marquette County area of Michigan's Upper Peninsula. Any eligible student able to access transportation to and from NSA within the appropriate daily time period, qualifies to enroll at NSA. Other than students who are under mandatory expulsion as per Michigan law, expelled or suspended students may also apply for enrollment. Currently, students travel up to approximately 25 miles to attend NSA. Grades K-5 were added in 2009-2010; an elementary wing added in 2010-11, increasing enrollment to approximately 230 students. The facilities are modern and provide a safe environment in which students can learn and achieve their greatest potential. The staff at North Star Academy are highly-trained and caring professionals. District enrollment is expected to be at the maximum authorized by the Board of Directors for the 2011-12 school year—approximately 245 students.

The district employs approximately 32 personnel. All teachers are highly qualified to teach in their assigned areas.

Just over 60% of North Star Students qualify for free or reduced meals. Approximately 30% of students qualify for Special Education services.

Board members are appointed through a process that includes the local Board, an application and interview process, and final approval by Northern Michigan University Board of Trustees. The District's Charter requires parent, business and education representatives on the Board of Directors. The district has a 7-member Board of Directors which holds monthly public meetings. All meeting minutes, budget documents and reports provided at all Board meetings, except legally closed meetings, are available to the public.

***Description of Community:*** The North Star Academy School lies within Marquette Township, just outside the Marquette City limits. The community is vital and exciting place in which to live, learn, and work. Major employers within the area are: Northern Michigan University, Marquette General Hospital, Cleveland Cliffs Iron Company, and a variety of hospitality and tourist related businesses and services. The geographic location and proximity to the shores of Lake Superior provide residents with four spectacular seasons of beauty and activity. Marquette City is home to approximately 20,000 residents, while Marquette County has a population of nearly 60,000 people. North Star Academy students reside in 5 townships in 2 counties.

### **NSA District Technology Vision Statement-Section Three**

North Star Academy believes that technology is a tool to enhance the whole curriculum. Various technologies will be used to allow students to further their educational, career and personal goals. Access to and the ability to adapt to new technologies will help students become more successful and contribute to the changing world.

Specifically technology will be used to:

- Assist all students in understanding the curriculum
- Connect students to the world
- Increase knowledge
- Increase communication between staff, parents, students, and the community
- Enhance technology skills
- Promote higher order thinking skills

### **Technology Goals:**

#### **Education**

- Continue to offer professional develop to educate staff on using technology as an instructional tool
- Continue to provide a technology-rich environment for students that enhances the state's content and grade level expectations
- Provide students with technology and software that require the use of higher order thinking skills
- Continue to utilize technology to promote student understanding for various multiple intelligences

#### **Communication**

- Continue to use technology to improve communication between staff, parents, and students
- Improve the school's website content and layout so NSA information can be assessed by all interested parties

- Maintain and increase the use of the school's online student database system

### **Technology Service**

- Improve the maintenance system
- Track maintenance requests
- Inform staff of technology grant opportunities
- Recreate technology inventory system

### **Hardware**

- Plan for replacement and growth of equipment systematically
- Upgrade and maintain current infrastructure and network

## **Curriculum Integration – Section Four**

North Star Academy uses many types of technology to enhance the curriculum, in order to promote student understanding and skills. The biggest example of this is the district's laptop initiative that provides laptop access to all k-12 students. This program provides an equal learning opportunity to all students regardless of socioeconomic background. The laptops are used in all classrooms for word processing, accessing the Internet on the wireless network, storing data and using a number of other applications.

LCD projectors are located in all classrooms targeting instruction for visual learners. A codec is located in the library and is portable to enhance all grade levels and curricular areas by allowing teachers to provide virtual video trips and offer interaction with off-site presenters. Digital cameras, video cameras, graphing calculators, probes, CPS, video streaming, interactive whiteboards and software applications are available to all grade levels.

NSA is underwnt a curriculum review and update with the assistance of the Marquette-Alger Regional Service Agency, to ensure all curricular areas were aligned with the new state content standards and grade level expectations, including the METS. With the completion of the documentation, school curriculum personnel identified specific technology projects / expectations per course. At the end of each school year, district administrators work with the staff to identify learning outcomes achieved and areas that need improvement. This is an annual ongoing process that will be revisited at the end of each school year. Overall technology content knowledge and applications per grade levels / content area are as follows:

<b>Grade Level</b>	<b>Content Area</b>	<b>MET</b>	<b>Application</b>
k-2 <sup>nd</sup>	English Language Arts	PK_2.CI, PK_2.CC	Students will be able to individually and in groups use digital tools such as a word processor

			and slide show applications to convey an original idea by the end of grade 2.
k-2 <sup>nd</sup>	Mathematics	PK_2C.T., PK_2.RI	Students will be able to use digital resources such as online encyclopedias, search engines and websites to solve problems (flash cards, Envision online math) and research topics, with assistance from an adult.
k-2 <sup>nd</sup>	Physical Education	PK_2.CI	Students will learn physical education activities via online interactive exercise class
k-2 <sup>nd</sup>	Sciences	PK_2C.T., PK_2.RI	Students will be able to use digital resources such as online encyclopedias, search engines and websites to solve problems and research topics, with assistance from an adult.
k-2 <sup>nd</sup>	Social Studies	PK_2C.T., PK_2.RI	Students will be able to use digital resources such as online encyclopedias, search engines and websites to solve problems and research topics, with assistance from an adult.
k-2 <sup>nd</sup>	Homeroom	PK_2 TC PK_2 DC	Students will learn how to care for technology (computers, DVDs, etc.), recognize the names of major computer components and be able to perform basic computer operations (print, save, open close),  Students will learn the Michigan Cyber Ed

			Safety 3 Rules, not to share personal information online and to inform a trusted adult if they receive or view online communication that makes them feel uncomfortable
<b>Grade Level</b>	<b>Content Area</b>	<b>MET</b>	<b>Application</b>
3 <sup>rd</sup> - 6 <sup>th</sup>	English Language Arts	3_5.C.1.	Student will create media rich projects aligned with GLCEs using interactive white boards, slide show software, movie equipment, and word processing applications
3 <sup>rd</sup> - 6 <sup>th</sup>	Mathematics	3_5.CT.	Students will use information and communication technology tools to assist in problem solving (mathematical online resources and calculators)
3 <sup>rd</sup> - 6 <sup>th</sup>	Physical Education	3_5.CC.	Students will learn physical education activities via online interactive exercise class
3 <sup>rd</sup> - 6 <sup>th</sup>	Science	3_5.CT.	Students will use digital resources such as the Internet, Video Streaming or the codec to identify and investigate a local, state, national or global issue Students will use technology tools such as probes and educational software to collect, organize and analyze information to assist in problems
3 <sup>rd</sup> - 6 <sup>th</sup>	Social Studies	3_5.C.1.	Student will create media rich projects

			aligned with GLCEs using interactive white boards, slide show software, movie equipment, and word processing applications
3 <sup>rd</sup> – 6 <sup>th</sup>	Homeroom	3_5.D.C.  3_5.T.C.	Students will learn and discuss acceptable and unacceptable uses of technology – plagiarism, cyber bullying, social networking, file sharing and text messaging Students will be able to discuss the impact of technology on our lives, both pros and cons.
<b>Grade Level</b>	<b>Content Area</b>	<b>ISTE</b>	<b>Application</b>
7 <sup>th</sup> – 8 <sup>th</sup>	English Language Arts	#2 – Communication and Collaboration  #3 Research and Information Fluency  #5 Digital Citizenship	Students will use computer software / online resources to create and communicate information to various audiences. Items created will include word processing documents and slide shows.  Students will learn and demonstrate how to gather information and synthesize. Students will learn how to evaluate the legitimacy of information, as well as plagiarism laws.
7 <sup>th</sup> – 8 <sup>th</sup>	Mathematics – Pre-Algebra and Algebra	#4 – Critical Thinking, Problem Solving, and Decision Making	Students will use the online resources associated with the textbooks, during and after school hours, to solve mathematical problems.
	Science – Science	#4 – Critical Thinking,	Students will understand

7 <sup>th</sup> – 8 <sup>th</sup>	Processes, Physical, Life and Earth	Problem Solving, and Decision Making  #2 – Communication and Collaboration	the various sciences through video streaming , codec, and labs that use probes and other technologies that measure the environment. Their understanding will be demonstrated through multimedia reports, spreadsheets and databases.
7 <sup>th</sup> – 8 <sup>th</sup>	Social Studies – Eastern Hemisphere, Integrated U.S. History	#1 Creativity and Innovation  #2 – Communication and Collaboration	For researching topics, students will use the Internet and streaming video. Students will use various online and software applications to create electronic databases containing historical data, spreadsheets to graph and compare statistics and word processing applications to create publications.
7 <sup>th</sup> – 8 <sup>th</sup>	Health / PE	#2 – Communication and Collaboration  #3 Research and Information Fluency	Students will use the Internet to research health related issues and participate in web quests. Students will also use spreadsheets to track and graph their progress in various physical education activities.
<b>Grade Level</b>	<b>Content Area</b>	<b>ISTE</b>	<b>Application</b>
9 <sup>th</sup> – 12 <sup>th</sup>	Literacy I, II, III, and IV	#2 – Communication and Collaboration	Students will use computer software / online resources to create and communicate information to various audiences. Items created will include word

		<p>#3 Research and Information Fluency</p> <p>#5 Digital Citizenship</p>	<p>processing documents, web pages, movie clips, and slide shows.</p> <p>Students will learn and demonstrate how to gather information and synthesize. Students will learn how to evaluate the legitimacy of information, as well as plagiarism laws.</p>
9 <sup>th</sup> – 12 <sup>th</sup>	Mathematics – Algebra, Geometry, Algebra II	#4 – Critical Thinking, Problem Solving, and Decision Making	<p>Students will use computer software / online resources and graphing calculators to solve the following types of problems: Probability and relative frequency, square roots, factoring, graphing quadratics and exponentials, graphing linear functions, square roots, overall graphing, etc..</p> <p>CPS will be used to provide quick assessments of student understanding.</p>
9 <sup>th</sup> – 12 <sup>th</sup>	Science – Biology, Chemistry, Physics, Physical, and Environmental	<p>#4 – Critical Thinking, Problem Solving, and Decision Making</p> <p>#2 – Communication and Collaboration</p>	<p>Students will learn through virtual labs and field trips, web-based research, collecting information using technology tools such as probes. Using technology, they will then present data that they have collected and analyzed</p>
9 <sup>th</sup> – 12 <sup>th</sup>	Social Studies – Civics, Economics, U.S. History /	#2 – Communication and Collaboration	<p>Students will use technology to investigate and report historical,</p>

	Geography, World History / Geography	#3 Research and Information Fluency  #5 Digital Citizenship	political, and economical issues and how they relate to the world today.  Resources to be used include streaming videos, interactive white boards, Internet and the codec.
9 <sup>th</sup> – 12 <sup>th</sup>	Art	#1 Creativity and Innovation	Art classes will use digital photography, online websites such as Sketch It to create original works of arts. Other forms of technology to be used include: interactive white boards and codec.
9 <sup>th</sup> – 12 <sup>th</sup>	Senior Exploratory	#1 Creativity and Innovation #2 – Communication and Collaboration #3 Research and Information Fluency #4 – Critical Thinking, Problem Solving, and Decision Making #5 Digital Citizenship #6 – Technology operations and concepts	Students will create multimedia presentations for an audience, other than their classroom. The multimedia presentations will focus on a current social issue. Multimedia to be used may include blogs, web page, social networking, etc...

What works now though, may be obsolete by 2014. Therefore, the goal of the district is for teachers to focus on the process of integration rather than the end result of integration. As stated in the National Educational Technology Standards for Students, from the International Society for Technology in Education, "Effective integration of technology is achieved when students are able to select technology tools to help them obtain information in a timely manner, analyze and synthesize the information, and present it professionally. The technology should become an integral part of how the classroom functions—as accessible as all other classroom tools."

## **Curriculum - Student Achievement – Section Five**

### **Classroom Laptops**

North Star Academy high school and middle school students and teachers have their own laptop computers. The laptops have the ability to connect wirelessly to the Internet and school's network (directory accounts). These laptops are used for independent lessons, enrichment activities, re-teaching and support of classroom instruction. North Star Elementary teachers also have their own laptop computers, while the elementary students share a portable laptop cart.

Students and staff of all levels also have access to the following equipment / materials: LCD projectors, video streaming, Exam View, digital cameras, video cameras, online school database, video codec, CPS, interactive white boards and various software programs.

### **Art**

Technology will be incorporated into North Star Academy art classes. Specifically students will use digital cameras and editing software. Instruction will also include virtual field trips to art museums and architecture located around the world.

### **Health**

The NSAHS health class will be organized to meet the state's online experience requirement. Students enrolled in this class will solve web quests, use videocasts, communicate via email, do online research, and participate in online simulation or field trip.

In some cases, NSAHS will offer the health class as an online course through an approved MMC vendor.

### **Language Arts**

All students in language arts classes will rely heavily on publishing software to produce grammatically correct publications (digital story telling). Students will also use the internet to research and determine accurate information. Students will organize their pre-writing thoughts by creating concept maps using Inspiration.

Technology instruction will consist of using United Streaming, video codec and lcls.. Instruction may include virtual field trips, videos (authors' biographies, Globe theatre, movie clips, etc..) and demonstrations.

### **Mathematics**

North Star Academy mathematics students will use online mathematical resources (Pearson and Envision) to allow student access to help 24 hours a day. In additions, students will use graphing calculators and spreadsheets applications to solve mathematical problems.

### **Science**

North Star Academy science students will use databases to organize data collected using probes and other instrumentation. A document camera will be used for instruction to display hard copy and small items, video streaming and the video codec will provide biological field trips and videos for all science areas. Students will use the internet for research and then use publication software to product reports.

### **Social Studies**

Multimedia projects (digital storytelling) will be created by all students in their history classes. These projects will require the use of the internet for research and media equipment (digital and video cameras, recorders, and editing software). Instruction will be delivered using video streaming and the video codec to explore museums, visit past civilizations, and view movie clips.

Economics and government classes will use spreadsheet applications to graph statistics.

All social studies areas will use Inspiration or other software programs for brainstorming and concept mapping.

Audio learners will learn about cultures / geography / languages by listening to satellite radio / cds

### **Special Education**

The special education department uses various technology equipment and software programs to assist students with disabilities. Audio recorders, Premiere software, and Reach software are currently being used. Technology will continued to be used as required by students' IEPs. Hardware and software are provided by the Assistive Technology office located at MARESA.

### **Physical Education**

Technology will be infused into k-6 physical education program. Students are provided a 30 minute daily workout via video streaming with a local gym.

### **Michigan Virtual High School (MVHS) / Other Online Courses**

Provides an opportunity for high school students to enroll in classes that otherwise they could not due to scheduling conflicts or the course not offered at our small district. In addition, all students use MVHS to create Educational Development Plans and access Michigan Merit Exam Review prep course, when offered.

## **Timeline for Technology Integration into Curricula and Instruction – Section Five**

### **2011 – 2012**

- Determine hardware and software needs for all subjects / grade levels
- Encourage teachers to use technology to enhance curriculum and increase efficiency
- Publish a district technology guide that includes equipment available, software applications, internet sources, procedures and district policies
- Purchase online classes as needed

- Update technology inventory system
- Create list of technology professional development opportunities for the upcoming school year
- Update district website
- Review technology plan with staff - fall and post on district website
- Apply for USF funding and any other available resources
- Collect data of technology use

#### **2012 – 2013**

- Implement administrative observations of technology use in the classrooms
- Determine hardware and software needs school wide
- Update district technology guide
- Purchase online classes as needed
- Create list of technology professional development opportunities for the upcoming school year
- Update district website
- Review technology plan - fall
- Apply for USF funding and any other available resources
- Collect data of technology use

#### **2013-2014**

- Update technology plan
- Continue administrator observations of technology use in the classrooms
- Update district technology guide
- Purchase online classes as needed
- Create a list of technology professional development opportunities for the upcoming school year
- Update district website
- Apply for USF funding and any other available resources
- Collect data of technology use
- Investigate options for online foreign language classes
- Overall analysis of district's 2011-2014 technology plan success and create new technology plan

## **Technology Delivery – Section Six**

Technology is applied in many forms at North Star Academy, due to the laptop initiative program.

### **Michigan Virtual High School / Cyber Ed**

At the High School Michigan Virtual classes and Cyber Ed online classes are offered. This resource allows students the opportunity to enroll in classes that we are not offering, or because of scheduling conflicts students cannot enroll in. The class is prepared and delivered by a certified instructor and managed in house also by a certified teacher or 'mentor' who oversees the student's progress.

### **Student and Staff Accounts**

The district has begun using Google for email and a variety of other services due to cost and the ability to access documents everywhere in the world online. The staff will continue to explore and use Google applications. In addition, assignments will be posted so students may access and post from anywhere, anytime.

### **Internet**

North Star Academy provides network and Internet access to all student and staff laptop computers. Any student with an account must have an AUP (acceptable use policy) signed by a parent and on file in the office before they are given Internet access. All student accounts are monitored by Internet filtration software.

### **Video Streaming**

North Star Academy has purchased a video streaming subscription to deliver instructionally appropriate videos. The service is used at all grade levels. Through professional development, teachers have been / will be taught how to use video streaming in the context of their lessons and with available technology applications.

### **Video Codec**

All classroom instructors will have access to a video codec. Teachers will be participating in professional development to learn how to access virtual field trips and other learning opportunities associated with this piece of equipment that will enhance their lessons. In addition this unit will be used to provide professional development to the staff.

### **MOIS – Michigan Occupational Information System**

MOIS is a career development program that assists K-12 students and other users plan a career path that's right for their interests. MOIS will be used at the Middle School level to help students develop and plan career interests.

### **Mydreamexplorer**

This application will be used by middle and high school students to create and update educational development plans, when offered by the State.

## **Parental Communications and Community Relations – Section Seven**

One of the most important pieces of information is the communication between school and home. Often this becomes too difficult because of conflicting time schedules or not being able to get to the person you need or want to talk to. With this in mind North Star Academy has tried to make some significant steps to putting information out that is easily obtainable. With the Internet being available to a growing majority of our constituents we have tried to put things in place that will provide the ease of availability.

### **District Web Page**

The district has a web page. This site is located at [www.nsacd.com](http://www.nsacd.com). The site is designed to include general district information as well as the technology plan. In the future NSA plans to post lunch menus, district newsletters and board minutes on the website. A link to the school's student data is already provided.

### **PowerSchool**

PowerSchool is a 'real time' student database that allows students, parents and staff to access their student's grades and attendance at any time. This is offered to all students grades k – 12<sup>th</sup>. Access is obtained by parents and students via secured usernames and passwords issued upon enrollment in the district. The program also provides staff contact information to parents.

### **PTO**

A strong collaboration is beginning between the newly formed Parent/Teacher Organization and the school system. The organization is helping both financially and personally in the expanding of resources and programs within the school.

### **Phone System**

A district wide phone system has been purchased. This system is located throughout the building including the central office, classrooms, and kitchen. It provides us with voice mailboxes, intercom services, and other features.

### **Parent Teacher Conferences**

Student-led parent teacher conferences are held twice a year. Emphasis is made on contact between parents and teachers to relay and communicate news and updates about student progress and concerns.

### **Newsletter**

The majority of our parents have Internet access but we still have some families who do not have this availability. For these families and for the rest of the community we also produce hardcopy Newsletter' every month. This is sent home with the students (also will be available online) to inform the parents of the next months activities and curriculum information.

## **Curriculum Collaboration – Section Eight**

The district does not currently offer adult high school or GED completion programs. However it does assist students in locating agencies that assist adult learners. Representatives from these service providers will continue to contribute to the implementation and assessment of the district technology plan.

### **Michigan Virtual High School**

Michigan Virtual High School provides an alternative to classes that are not offered by our high school. This distance-learning option allows students to have an expanded selection of courses they would otherwise not be able to take or enroll in classes they could not take because of a scheduling conflict.

### **Marquette Alger Regional Educational Service Agency (MARESA)**

MARESA offers a number of services to teachers and administrators.

MARESA also plays a vital role in our professional development, providing in-services and offering additional training for staff.

### **Michigan eLibrary**

The Michigan eLibrary is a project of the Library of Michigan, giving access to several databases to the citizens of Michigan through their libraries. Home access is available for some of these databases. These databases include: OCLS FirstSearch; Galegroup Infotrac; SIRS Discoverer Deluxe; Electric Library Elementary.

## **Professional Development – Section Nine**

For the district's vision to become reality it must provide opportunities for staff to become proficient in strategies and techniques for the implementation of educational technology. The professional development offered by the district must be more than how to use an application / device. It must include how the technology can be used to enhance understanding and promote higher order thinking skills. In addition, the district must inform staff of additional educational technology trainings available to them.

Current resources available to the staff for professional development in technology include:

- District's technology director can provide training or schedule other trainers
- Various staff members are skilled in certain applications / tools
- Online resources such as Michigan Virtual University, LearnPort and Connected University
- Northern Michigan University Audio / Visual Department – virtual field trips
- Marquette-Alger Regional Service Education Agency's technology consultant

Professional Development technology agendas will be created using information obtained from a variety of sources:

- School Improvement Plan
- Curriculum Team
- Annual needs assessments
- Parent / Student Input
- Board of Directors Input
- Teaching Staff Input

Common goals of NSA's staff professional development technology goals align with ISTE NETS for administrators and teachers. Goals specifically targeted include:

1. Administrator ISTE NET I. Administrators will use data in making leadership decisions, advocate for funding that supports implementation of the district

- technology plan and facilitate the vision for technology use and widely communicate that vision.
2. Administrator ISTE NET. II Administrators will identify, use, evaluate, and promote appropriate technologies to enhance and support instruction and standards-based curriculum leading to high levels of student achievement.
  3. Administrator ISTE NET V. Administrators will use multiple methods to assess and evaluate appropriate uses of technology resources for learning, communicating, and productivity. Technology will be used to collect and analyze data, interpret results, and communicate findings to improve instructional practices and student learning.
  4. Teacher ISTE NET I. Teachers demonstrate a sound understanding of technology operations and concepts. This includes operation of the school’s network, internet, and software applications.
  5. Teacher ISTE NET II. Teachers design, plan and manage learning environments and experiences for students.
  6. Teacher ISTE NET III. Teachers will use technology resources to analyze data, interpret results and communicate findings to improve instructional practice and maximize student learning.
  7. Teacher ISTE NET V. Teachers use technology to enhance their productivity and professional practices by applying technology to increase productivity and use technology to communicate and collaborate with parents, students and peers

<b>Professional Development Timeline 2011-2012</b>
<ul style="list-style-type: none"> <li>• Create the district technology guide – Summer 2011 Purpose is to inform entire staff of available technologies and how to use</li> </ul>
<ul style="list-style-type: none"> <li>• Conduct Training Assessments Needs – Summer 2011 via email</li> </ul>
<ul style="list-style-type: none"> <li>• Aug/Sept 2011 Staff Professional Development – PowerSchool Training – Teachers, Hardware Training, Tech Plan Implementation Planning</li> </ul>
<ul style="list-style-type: none"> <li>• Aug / Sept 2011 Staff Professional Development – Online Pathogen Training</li> </ul>
<ul style="list-style-type: none"> <li>• Encourage staff to participate in additional professional development opportunities</li> </ul>
<ul style="list-style-type: none"> <li>• Attend MACUL if funding available</li> </ul>
<b>Professional Development Timeline 2012-2013</b>
<ul style="list-style-type: none"> <li>• Update district technology guide</li> </ul>
<ul style="list-style-type: none"> <li>• Conduct yearly needs assessment</li> </ul>
<ul style="list-style-type: none"> <li>• Evaluate effectiveness of professional development</li> </ul>

<ul style="list-style-type: none"> <li>• Attend MACUL if funding available</li> </ul>
<b>Professional Development Timeline 2013-2014</b>
<ul style="list-style-type: none"> <li>• Update district technology guide</li> </ul>
<ul style="list-style-type: none"> <li>• Conduct yearly needs assessment</li> </ul>
<ul style="list-style-type: none"> <li>• Aug 2013 Staff Professional Development – “Technology Skills” Class</li> </ul>
Technology implementation
All staff school database training
<ul style="list-style-type: none"> <li>• Evaluate effectiveness of professional development</li> </ul>
<ul style="list-style-type: none"> <li>• Fall 2013 Create New Technology Plan</li> </ul>
<ul style="list-style-type: none"> <li>• Attend MACUL if funding available</li> </ul>

### **Professional Development-Supporting Services – Section Ten**

- **ITRC Monthly Meetings**  
Monthly meetings facilitated by the Marquette-Alger Regional Educational Service Agency. These meetings are attended by Technology Coordinators and school administrators to discuss technology funding, services and curriculum integration.
- **District Technology Policies (see appendix) include:**  
Neola Policy 7530 – Lending of District Owned Equipment  
Neola Policy 7540 – Computer Technology and Networks  
Neola Policy 7540.1 – Technology Privacy  
Neola Policy 7540.2 – District Web Page  
Neola Policy 7540/03 – Student Network and Internet Acceptable Use and Safety  
Neola Policy 7540.04 – Staff Network and Internet Acceptable Use and Safety
- **REMC access**—The REMC lending library also provides access to videos, videodiscs, multimedia kits, and computer software; items can be found and ordered through a catalog.
- **School Web site**—The North Star Academy website ([www.nscad.com](http://www.nscad.com)) will be updated, but will continue to provide information for use by students, their families, and the community. Each building has its own pages linked to the district home page.
- **Instructional / training software**—The following resources are available to teachers who wish to further their technology skills.

*The Michigan Virtual University* provides online training in a multitude of subjects, ranging from basic use of an application such as Microsoft Word to technical training in Microsoft Server and Unix operating systems.

*Connected Tech's Connected University's* provides online software tutorials, how-to tips, and dozens of guides and self-paced courses.

- **ISD Support**—MARESA provide assistance with technology through its Instructional Technology Team (ITT). The ITT makes teachers and administrators aware of available technology and software and offers classes on computer operating systems, the Internet, productivity software (word processing, spreadsheet, database), and software appropriate for the classroom. The team also helps with planning for the effective use of technology within the classroom. The District relies on MARESA for most of its technology integration training.
- **Professional Journals / Memberships**—Teachers and administrators are encouraged to subscribe to professional journals and organizations that promote technology integration (in particular – *Edutopia* and *MACUL*).
- **Northern Michigan University**- NMU provides assistance with technology and integration into the classroom. In particular, NMU assists with the district's video codec and online field trips.

## **Infrastructure, Hardware, Technical Support, and Software – Infrastructure Needs/Technical Specifications, and Design – Section Eleven**

### **Current Infrastructure – Computer Technology:**

The district has a wireless network throughout the building that provides network and internet access to all areas. Two Pro-Curve 420 wireless access points and 3 Ruckus wireless access points ensure the entire district has wireless service. Internet is provided by Charter Communications (speed – 10/1). The district uses a Netware server (P3 450 Processor) running Novell 5.0., which is located in the technology room. A second server (Compaq nc6120), also in the technology room, is used to house the online student database accessed by staff, students and parents. The system is protected by a Pro 1260 Sonic Firewall that meets CIPA requirements.

Additional hardware includes, wireless network printers in all classrooms, digital video cameras, video codec, two CPS systems, and digital cameras. The school has two servers. One server is used to manage all students / staff storage accounts. The other server houses the school's online database.

### **Current Infrastructure – Computer Software:**

All NSA computers are equipped with Microsoft Office. Other student applications include: Paint, Windows Movie Maker, PowerSchool, Dreamweaver, Inspiration and numerous other titles

In addition to the above, software applications purchased for teachers include: Examview, video streaming, and PowerSchool.

**Current Infrastructure – Telecommunications:**

A district telephone system was installed during the summer of 2007. NSA purchased the Ayaya partner messaging system. This system offers the following features:

- Staff voice mailboxes
- Staff extension
- Caller ID
- Group call distribution

Telephones are located in all staff offices, classrooms, technology room and kitchen

**Hardware / Software Needed to Acquired to Improve Instruction**

Objective	Rationale	Timeline
Increase # of Applications being used by students – Internet based	<ol style="list-style-type: none"> <li>1. Increase students’ understanding and skills using Google application</li> <li>2. Many applications on the Internet are free and accessible to all with Internet access</li> </ol>	Ongoing
Become aware of / increase the use of assistive technology by special education students	Technology can improve student understanding and efficiency of those students who have special needs	Ongoing
Purchase up to 6 student laptops per year	To ensure quality laptop computers are provided to all students	Ongoing

**Current Infrastructure – Technical Support Available**

North Star Academy has an onsite full-time administrator who at one time served as the district’s part-time technology specialist (technology integration and technician). This person provides immediate assistance and also is involved in technology planning

North Star Academy also contracts with a local business for hardware repair and other services. NSA will continue to investigate opportunities of cost effective technical support.

## **Infrastructure, Hardware, Technical Support, and Software –Increased Access – Section Twelve**

North Star Academy has made laptops and Internet access available to every student in every classroom. Annually, with the exception of one school year, the district has applied for Universal Service Funds (USF) that helps offset some of the cost of telecommunications and operating expenses. North Star Academy plans on continuing to apply for USF, including internal connections (depending on the free and reduced percentage).

Special needs students have access to all the technology available to the general population. In addition the district works with and takes advantage of the services offered by the Assistive Technology Agency. However, this valuable resource has been used rarely. NSA’s special education coordinator needs to develop a closer, more beneficial relationship with this resource.

Over the years, NSA has added a significant amount of laptops and other technologies. This has put a tremendous amount of stress on the District’s network and network support. Three, problems currently facing the District are the aging network/laptops, technology support and the implementation of an inventory management system. The administration and Board of Directors are committed to providing the best possible access to technology and technology resources as is financially possible. It will do this by requiring an annual evaluation and updates to this technology plan.

## **Funding and Budget – Budget and Timetable – Section Thirteen**

<b>Technology Budget</b>	<b>2011-12</b>	<b>2012-2013</b>	<b>2013-2014</b>
<b>Contracted Service</b>	<b>47,000</b>	<b>48,000</b>	<b>49,000</b>
Equipment Servicing			
Internet Instruction			
Copier (Shared printer)Rent			
<b>Licenses / Permits</b>	<b>6,500</b>	<b>7,000</b>	<b>7,000</b>
United Streaming			
Sonic Wall Subscription			
Anti-Virus Subscription			
Ghost Licenses			
MIVHS			
CyberEd			
<b>Equipment</b>	<b>10,500</b>	<b>8,500</b>	<b>9,500</b>
Various Hardware Items			
Laptops			
Laptop carts			

<b>GIS</b>			
<b>Telecommunications</b>	<b>27,200</b>	<b>28,000</b>	<b>28,500</b>
Internet Access			
Phone Service			
<b>Supplies</b>	<b>800</b>	<b>800</b>	<b>800</b>
Toner Cartridges			
<b>Software</b>	<b>3,000</b>	<b>2,000</b>	<b>2,000</b>
New Software			
Upgrades			
<b>Repairs</b>	<b>1,500</b>	<b>1,500</b>	<b>1,500</b>
Laptops			
<b>Travel/Professional Development</b>	<b>2,500</b>	<b>2,600</b>	<b>2,700</b>
<b>Total</b>	<b>99,000</b>	<b>98,400</b>	<b>101,000</b>

**Funding and Budget – Coordination and Resources – Section Fourteen**

In the past, North Star Academy has depended on many financial resources to accomplish its technology goals. These resources have been:

- General Fund operating funds
- Curriculum funds
- Staff Development funds
- Universal Service Funds – E – Rate
- Curriculum grants
- Donations

The district will continue to investigate grants and other programs that are available.

**Monitoring and Evaluation – Section Fifteen**

**Evaluation Description**

The technology director in conjunction with the CEO will be responsible for monitoring and evaluating this technology plan. Data will be collected from teachers, students, parents, support staff and applications, throughout the school year. The technology director will provide a report to the CEO to be shared with the Board of Directors, at the end of each school year. The Michigan Educational Technology Plan Approval Checklist is the primary rubric that will be used to evaluate the district’s technology. Each year the CEO, technology director and board of directors will review the progress of the

district's technology and develop a plan for addressing unmet goals and objectives as well as revising the plan as needed.

## **Acceptable Use Policy – Section Sixteen**

### **North Star Academy District Acceptable Use Policy –**

To access e-mail and / or Internet at school, students under the age of eighteen 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 education purposes only. Unauthorized and inappropriate use will result in a cancellation for this privilege.

The Board has implemented technology protection measures which block / filter Internet access to visual displays that are obscene, child pornography, or harmful to minors (in compliance with CIPA). 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 Directors 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 and 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.

### **North Star Academy District Computer and Technology Network Policy**

Because any student may enhance his/her school career through participation in the school's computer network, s/he and his/her parents must sign an agreement which defines the conditions under which the student may participate. Failure to abide by all of the terms of the agreement will lead to termination of the student's computer activities and possible disciplinary action up to and including suspension from school or referral to law enforcement authorities. It is difficult to pass course work at NSA without computer use.

The use of the network is a privilege which may be revoked by the district at any time and for any reason. Appropriate reasons for revoking privileges include, but are not limited to, the altering of system software or the placing of unauthorized information,

computer viruses or harmful programs on or through the computer system in either public or private files or messages. The district reserves the right to remove files, limit or deny access, and refer the student for other disciplinary actions.

### Use of the Internet – Terms and Conditions

Acceptable Uses – The use of the Internet must be in support of education and research, and in accordance with the educational objectives of the NSA.

Unacceptable Uses – Includes, but is not limited to, the following:

- Users should not lend their Internet account and/or password to other users, or use another's account.
- Use for commercial purposes or political lobbying is prohibited
- Users shall not intentionally seek information on, obtain copies of, or modify files, other data, or passwords belonging to other users; or misrepresent other users on the network; nor should they upload, create, or introduce a virus.
- Transmission or reception of any material in violation of any U.S. or state regulation is sexist, pornographic, and obscene material; or information protected by trade secret.
- Abusive or otherwise objectionable language is forbidden.
- No use of the network shall server to disrupt the use of the network by others: hardware or software shall not be destroyed, modified, or abused in any way.

Students must have an Acceptable Use Policy (AUP) signed by parents on file at NSA in order to use the Internet. If you want your student to have this opportunity, please sign the form, have your son/daughter sign it, and return it. He/She will then be given permission to use the Internet at NSA.

Netiquette – Users are expected to abide by the generally accepted rules of etiquette. These include, but are not limited to, the following:

- Assume that E-mail is NOT secure or confidential. Never send anything that you would hesitate to have viewed by others.
- Use upper and lowercase letters (all caps is considered the equivalent of shouting) and be mindful of spelling.
- Keep paragraphs and messages short and to the point.
- Check E-mail regularly and delete unwanted messages as quickly as possible.
- Respect other people's privacy regarding mail or files.
- Log off quickly during peak hours.
- Only use your school address, phone number or E-mail in any communication.
- Avoid use of sarcasm in electronic communication.
- *The use of the Internet is a privilege, not a right*, and inappropriate use will result in a cancellation of these privileges. The system administrators will deem what is inappropriate and their decision is final. The administration and staff on NSA may request the system administrator to deny, revoke, or suspend specific user privileges. In addition, NSA will not be responsible for any damages you suffer. This includes loss of data resulting from delays, non-deliveries, mis-deliveries, or service interruption caused by its own

negligence or your errors or omissions. NSA denies any responsibility for the accuracy or quality of information obtained through the Internet.

Internet Use Agreement (Must be completed and signed on file)

I understand and will abide by the above NSA Internet Acceptable Use Policy. I further understand that if I commit any violation of these regulations, my access privileges may be revoked, school disciplinary action may be taken, and/or possible restitution be required. I hereby release NSA from any liability arising from my use of the network and/or telecommunications.

User – Print Name \_\_\_\_\_

User I.D.# \_\_\_\_\_ Grade \_\_\_\_\_

As a parent or guardian of this student, I give permission for his/her use of the Internet in accordance with this policy.

Parent Signature \_\_\_\_\_ Date \_\_\_\_\_

Phone Number \_\_\_\_\_

When this form is completed and turned in, permission will be given to use the Internet. Use of Technology will be limited until this time.

District Web Pages (Policy #7540.02)

The Board of Directors authorizes the creation of web sites by employees and students of the School District to be published on the World Wide Web. The creation of web sites by students must be done under the supervision of a professional staff member. These web sites must reflect the professional image of the District, its employees, and students. The content of all pages must be consistent with the School District's Mission Statement. The purpose of the web site is to educate, inform, and communicate. The following criteria should be used to guide the development of such web sites:

Educate - Content provided in the web site should be useable by students and teachers to support the curriculum and School District Objectives as listed in the District's Strategic Plan.

Inform – Content may inform the community about the school, teachers, students, or departments, including information about curriculum, events, class projects, student activities, and departmental policies.

Communicate – Content may provide an avenue to communicate with the community.

- The information contained on the web site should reflect and support the District's Mission Statement, Educational Philosophy, and the School Improvement Process.
- When the content includes a photograph or information relating to the student, the District will abide by the provisions of Policy 8330-Student Records. All links included on the pages must also meet the above criteria.

- Under no circumstances is a web site to be used for commercial purposes or to provide financial gains for any individual.
- Pages should reflect an understanding that both internal and external audiences will be viewing the information. School web sites must be located on District-affiliated servers
- The CEO shall prepare administrative guidelines defining the standards permissible for web-site use.

### **Internet, Online Course Work**

NSA has purchased access to courses or ‘seats’ offered in the MI Virtual High School (MIVHS) and other on-line course services. **Because the ‘seats’ are costly, we must insure that they are used by students who are motivated and can earn the credit on line.** Students will access courses through NSA’s membership in the Michigan Virtual High School. Students may also access coursework offered by trained NSA staff. In either case, students may choose from a multitude of core and non core content credit courses. A student may take up to 2 courses per trimester (12 weeks) and this avenue can provide new options under the right circumstances. *Offering a wide variety of coursework in a small high school is critical – students must be:*

1. Self-motivated and self-disciplined.
2. Committed to the course. Online courses are just as rigorous and as time-consuming as face-to-face courses.
3. Active communicators. Expect to log on daily for updates, messages and communication among participants.
4. Honest about their work style. If the student is a procrastinator, these courses are not for him/her.
5. Diligent about creating a private space where they can work for at least 30 minutes at a time.
6. Online at a computer for extended amounts of time. If Internet access is not available at home, this means going to a place where it is – a library, a coffee house, etc.
7. Vocal and take responsibility for their learning. They need to speak up immediately when having technical difficulties or problems.
8. Thoughtful. Practicing good “netiquette” often requires thinking before hitting “send”.
9. Active class participants. Engaging in classroom discussions involves extensive typing.
10. Able to read and follow written directions. At this time, reading is a critical skill in online learning.

### **ADDITIONALLY**

- Students must abide by all MIVHS and NSA technology policies, failure to do so will result in immediately dismissal from the program.
- Students must have access to the Internet either at home or be willing to go to a place where they can sign on daily.

- Students must follow the MIVHS course calendar
- Once enrolled students have a two-week window to drop an on-line course, without penalty.
- Students who voluntarily/involuntarily are removed from North Star Academy will immediately be dismissed from the program and not earn credit.
- Student work will be graded by MIVHS and a final grade will be issued by NSA, using the following scale:

100-92%	= A	77-72%	= C
91-90%	= A-	71-70%	= C-
89-88%	= B+	69-68%	= D+
87-82%	= B	67-62%	= D
81-80%	= B-	61-60%	= D-
79-78%	= C+	Below 60%	= No Credit
- Students must contact the on-site mentor regarding any technical or content questions. The on-site mentor will monitor student's on-line progress and log on attendance.
- Every student will be assigned an NSA Mentor and classroom teacher to assist in on line learning.