

North Haven Community School

MSAD #7

North Haven, Maine

District Technology Plan

September 2005-September 2008

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Technology Committee Members

Thomas Marx, Superintendent of Schools

Barney Hallowell, Principal

Nancy Davisson, School Board Chairperson

Kathy Macy, School Board Member

Louis Carrier, Technology Coordinator/Teacher

Bonnie Waterman, Elementary Teacher

Carloyn Taylor, Middle School Teacher

Ted Sage, High School Teacher

Silvia Carrier, Adult Education Director

Kate Quinn, School & Town Librarian

Jon Emerson, Parent

Jeff Crawford, Community Member

1. Community and Parental Involvement:

Involve a broad representation of the school community in the planning process. Include a description of how the technology will be used effectively to promote community and parental involvement and increase communication with parents, including a description of how parents will be informed about the technology and its proper use.

In order to foster a plan that meets the diverse needs of North Haven, the technology committee is comprised of school administrators, teachers, parents and community members. The plan will continue to change as the needs of the community change and as technological changes bring forward new opportunities.

Communication of technology issues is conveyed through the district's web site. The district web site is used to post teacher profiles, student handbook, as well as school contact information. Use of e-mail as a communication tools is encouraged.

2. Vision:

Establish a vision statement linking the tools of technology with areas such as curriculum content, instructional practices, professional development strategies, and enhanced services.

North Haven Community School is committed to providing a learning environment for students where technology is an integral tool in order to “educate, empower and challenge students to realize their full potential, as individuals and as citizens of the world, and to develop a lifelong thirst for knowledge.”

3. Goals:

Articulate specific goals, aligned with the Maine Learning Results, for using advanced technology to improve student academic achievement.

To achieve a learning environment where technology is an integral tool, that tool must be accessible. It is the district's goal that students k-6 have continuous access to technology tools within the regular classroom. Students in grades 7-12 should have access to technology tools at all times, be it at school or at home.

Teachers should be skilled in the use of the technology in order to foster its effective use in the curriculum in support of the *Maine Learning Results* established goals that students be:

1. Clear and effective communicators
2. Self-directed and lifelong learners

3. Creative and practical problem solvers

4. Responsible and involved citizens

4. Identify Necessary Technology:

Include a technology assessment. Gather information about technology currently in use so that what will be needed to meet new goals can be determined. Include a list of the equipment and telecommunication services that are necessary to reach the goals.

Our current inventory includes:

Equipment Type	Quantity
Apple Imac Desktop Units	17
Apple G4 Desktop Units	2
Apple G5 Desktop Units	1
Apple MLTI ibooks	16
Apple ibooks	52
Apple G3 Powerbook	1
Apple G4 Powerbook	1
Apple G5 Xserve	1
Acer Pentium 4	1
Pentium 4 (Vocational Units)	3
Laser Printers	9
Color Ink Jet Printers	2
Video Projectors	4
Smart Boards	1
Digital Video Cameras	2
Digital Cameras	10
Digital Scanners	2

Our software inventory includes:

Software Title	Apple OS 9	Apple OS X
Adobe Acrobat 6.0 Professional		√
Adobe Indesign		√
Adobe Golive		√
Adobe Photoshop		√
Celestia		√
Chess		√
Filemaker Pro 6		√
Final Cut Express		√
imovie	√	√
iphoto	√	√
itunes	√	√
Keynote		√
Macromedia Freehand		√
Perfect Score 1.2.3		√
Quicken	√	√
Strata 3d pro 3.8		√
Timbuktu Pro	√	√
Toast		√
Tri-Backup		√
Vectorworks 10		√
Virtual PC		√
Site Sucker		√

Software Title	Apple OS 9	Apple OS X
Claris CAD	√	
Claris Home Page 3.0	√	
ExamView Pro	√	
Microsoft Office 98	√	
Microsoft Office X		√
NeoOffice J		√
ArcView GIS (PC)		
ADS Profund (PC)		
Apple Remote Desktop 2.0		√
Alge-Blaster	√	
Coloring Book	√	
Decimal & Fraction Maze	√	
Dots 3	√	
Eternity Inn	√	
Franklin Learns Math	√	
Freggie Heads	√	
Geo Bee	√	
Kids Works 2	√	
MacSokoban	√	
Math Blaster	√	
Mission T.H.I.N.K.	√	
Number Munchers	√	
Number Maze	√	
Reader Rabbit 2	√	

Software Title	Apple OS 9	Apple OS X
Reading Maze	√	
Sound Match	√	
The Lost City	√	
Arthur's Sand Castle	√	
Sponge Bob Typing Tutor		√
Mavis Beacom Teaches Typing	√	
Code Warrior		√
IBM Via Voice		√
Rosetta Stone (French)		√
Morph	√	
Ancient Lands	√	
SPQR	√	
Digital Chisel	√	
Choices	√	√
Hyper Studio	√	
Frogger	√	
Bailey's Book House	√	
Spell Bound	√	
Geometers Sketchpad	√	
Real Basics	√	√
True Basics	√	
Math Type	√	
KSEG		√
Freemind		√

Software Title	Apple OS 9	Apple OS X
Lexia Primary Reading		√
Carmen Sandiego	√	
Starwars Math	√	
Buzz Light Year 2nd Grade	√	
Zoombinis Mountain Rescue	√	
Cowriter	√	
Math Quest	√	
Math Rock	√	
Stickey Bear Math 1	√	
Math Advantage Pre algebra-Calculus	√	
Busy Town	√	
Sammy's Science House	√	
Arthur's Reading Race	√	
Berenstain Bears Get In a Fight	√	
Berenstain Bears In the Dark	√	
Sesame Street Let Make a Word	√	
Millie's Math House	√	
A.D.A.M. Inside Story	√	
Jump Start 4th Grade	√	
Type to Learn	√	
School House Rock	√	
Alexandria Library Management	√	√
Bienvenue foreign language pack		√

The district currently enjoys a 1:1 ratio of computers to students in grades 7-12 and a 1:1.5 in grades K-6. Continuing access to computers at current levels is now the challenge for the future. As the equipment grows old and advances are made in technology, the district will need to routinely replace the equipment. The ebooks, which are assigned to the students and staff, are expected to have a useable life of approximately 5 years.

5. Collaboration with Adult Literacy Service Providers:

Describe how the program will be developed, where applicable, in collaboration with adult literacy service providers.

No such program exists.

6. Strategies for Improving Academic Achievement and Teacher Effectiveness:

Describe how funds, specifically Ed Tech funds where applicable, will be used to improve academic achievement, including the technology literacy of all students attending schools served by the district; and describe how funds expended will improve the capacity of all teachers in schools served by the district to integrate technology effectively into curricula and instruction.

North Haven Community School encourages and provides all teachers with the opportunity to attend workshops and seminars. Continuing education courses are also paid for by the district in support of developing technology literacy. Each year, several staff members attend the Maine Technology Education Conference and participate in the varied seminar sections.

North Haven Community School's adult education program periodically offers further technology training such as basic web design, financial management using Quicken, and internet exploration.

The technology coordinator is available to assist teachers in their efforts to plan, develop and implement technology into their classrooms.

7. Integration of Technology with Curricula, Instruction, and Assessment:

Describe how technology (including software and electronically delivered learning materials) will be integrated into curricula, instruction, and assessment and include a timeline for this integration.

To fully integrate technology into the curriculum, students, teachers, all support staff and administration need constant and reliable access to a variety of sources of

information. Through wireless access points, all classroom and support spaces within the school are fully connected to the internet and the school's file server. Efforts are being continuously made through the K-12 level to document learning through presentations and portfolios that are becoming more dependent on efficient use of technology. One such example is a presentation given each year after the high school fall study trip. The fall study trip incorporates a selected theme and then integrates it throughout the curriculum while also taking the students into an environment that is viewed as physically and mentally challenging. Students then document their learning through an interactive multimedia presentation before the public of North Haven.

8. Technology Type & Costs, and Coordination with Funding Resources:

Develop a step-by-step action plan, with timeline, that includes goals, activities, required hardware and software, costs, and funding sources. Describe the type and costs of technology to be acquired and how it fits within the current structure (use the list developed in the technology assessment in # 4, above.). Designate sources of funding, specifically Ed Tech funds, E-Rate funds, and funds from other Federal programs, and state and local sources that support technology acquisition and integration.

Providing 1 to 1 access to students in grades 7-12 grade is the reality that the district is committed to maintaining. All students are given the privilege and encouraged to take the laptops home as an additional learning tool to complete their homework. The funds used to provide this level of accessibility are provided mostly through two sources: local funds and REAP (Rural Education Assistance Program) Grants. These two sources are expected to continue and will be used as needed to support technology acquisition and integration.

9. Supporting Resources:

Describe the supporting resources such as services, software, other electronically delivered learning materials, and print resources that will be acquired to ensure successful and effective uses of technology.

Support services are provided by the Technology Coordinator in conjunction with other technically savvy teachers. This models has been adequate. Remote administration software is used to maintain computers that are not readily accessible. This same software is used to streamline the process of maintaining the computer's level of security against viruses and malware. Direct student/teacher support is also given through active remote manipulation.

The school district continuously purchases the software necessary to meet the needs of the students be it special needs, specific courses, or career exploration.

Several online resources are available such as Choices for career and college preparation. Marvel (Maine's Virtual Library) is a heavily used resource given the isolated reality of living 12 miles from the mainland. Hotmath.com is another valuable resource for 7-12 math students and teachers.

The school's library media center in collaboration with the Rockland Public Library is a valuable resource that is available to support the curricula goals through print, video and online resource acquisition. The Alexandria Library Management software makes it possible for all students to search the local collection from any web browser.

One resource that would be beneficial is the incorporation of video projectors in every classroom. Currently, the four video projectors are carried from room to room and are used extensively. If they were ever present in each classroom, more multimedia resources would likely be used to support varied learning styles.

10. Steps to Increase Accessibility:

Describe the steps being taken to ensure that all students and teachers have increased access to technology. The description must include how Ed Tech funds, if applicable, will be used to help students in high-poverty and high-needs schools, or in schools identified for improvement or corrective action under Section 1116 of Title I; and how the steps taken will ensure that teachers are prepared to integrate technology effectively into curricula and instruction.

North Haven Community School is in a unique position that it has already reached a maximum level of accessibility that is desired. One to one computing is restricted only to the 7-12 grade level as the district does not deem it practical to provide one to one computing to elementary students given the increased responsibility of care and maintenance. All teachers/staff have a laptop that is assigned to them for as long as they are employed by North Haven Community School.

The one area that could be improved is accessibility from home to electronic resources via the internet. Recently, broadband access has become available on-island. This broadband connection is very reliable and quick but is also comes with a high monthly charge. This expense makes it unavailable to some. Continued effort will be reviewed as to how to make broadband available to all members of the North

Haven School community.

11. Promotion of Various Curricula and Teacher Strategies that Integrate Technology:

Describe how various curricula and teaching strategies that integrate technology effectively into the general curriculum and instruction will be identified based on a review of relevant research and promoted to lead to improvements in student academic achievement.

The National Science Foundation has recently awarded a 1.2 million dollar iTest grant to the Island Institute and the 14 participating schools of which North Haven Community School is one, in an effort to integrate remote sensing technology and GIS (geographic information systems) into a place-based learning project. This three year project will involve the entire high school in an interdisciplinary project. For one week each summer, four teachers and 5 students will participate in a GIS workshop with the goal of not only giving the students technical skills in GIS but also to address real needs of the North Haven community.

12. Professional Development:

Describe how ongoing, sustained professional development for teachers, principals, administrators, and school library media personnel will be provided to further the effective use of technology in the classroom and library media center.

Professional development is strongly encouraged for all members of the school's teaching staff and administration. Currently, each staff member can take 3 college graduate courses paid for by the district. In the future, specific technology topic workshops (i.e. Using Keynote, imovie, web development etc.) are planned to be taught after school hours for teachers and staff depending upon their individual interest and needs. These workshops are to be peer taught by those members of the faculty who possess fluency with the varying technology topics.

13. Innovative Delivery Strategies:

Describe how the development and use of innovative strategies for the delivery of specialized or rigorous courses and curricula through the use of technology, including distance-learning technologies, will be encouraged, particularly in areas that would not otherwise have access to such courses or curricula due to geographical distances or insufficient resources.

Given North Haven's isolation, distance learning opportunities are essential to provide offerings that would otherwise not be possible to the school community. In the middle school, an online science project called Jason is used to provide a richer

science experience while offering access to scientific experts via online chats. ITV (Interactive Television) is also used extensively by teachers to help them maintain their certification requirements. It is also used to offer advance placement offering when appropriate. The development of online courses has also offered another avenue for individuals seeking alternative course offerings that are beyond the resources of the school district.

14. Accountability measures:

Describe the process and accountability measures which will be used to evaluate the extent to which the plan activities are effective in integrating technology into curriculum and instruction, increasing the ability of teachers to teach, and enabling students to reach Maine's Learning Results.

Presentation through use of electronic media is one technique that works well for North Haven. While students demonstrate the learning that they have acquired, support of the school's goals and objectives are enhanced by community attendance and participation in such presentations. Portfolios are used extensively to showcase the learning and often include print and multimedia data/presentations.