

**Cover Page****EDUCATIONAL TECHNOLOGY PLAN – July 1, 2006-June 30, 2009**

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Date Submitted to Board of Education:		
Date Approved by Board of Education:		

**For RESC/SDE Use Only:**

RESC Regional Reviewer:		Date:
RESC Recommendation for Approval:	Yes / No / Conditional	Date:
SDE Authorization:		Date:

## Technology Plan Preparation Check-Off Page

The submitted plan has the following:

- Cover Page
- Technology Plan Preparation Check-Off Page
- LEA Federal Grant Program Compliance Form
- LEA Profile
- Technology Planning Committee
- Vision Statement
- Needs Assessment
- Goal 1
- Goal 2
- Goal 3
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- Goal 6
- Goal 7
- Technology Funding Sources and Costs
- CIPA Certification

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Signature of Authorized LEA Agent

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Date



## LEA Profile

The North Haven School District enrolls approximately 4000 students, grades PreK-12 in six schools: four elementary, one middle school and one high school. The mission of the school district is to enable all students to realize their full potential as lifelong learners and responsible students. Curriculum and instruction are designed to provide challenging, and motivating educational experiences that address the individual and diverse academic, social, and emotional needs of all students.

There is a wide area network connected to the Internet via point-to-point T1 lines. The district employs one IT coordinator, a technology consultant, and a part-time technician. All budgeting, personnel, accounts payable, and payroll functions are completed via technology. The district migrated from *MacSchool* to *PowerSchool* in July 2006. The district is still in the process of making that transition. The district has a web site with links to the school web pages – [www.north-haven.k12.ct.us](http://www.north-haven.k12.ct.us).

There are four elementary schools – Clintonville, Green Acres, Montowese and Ridge Road - that contain grades Pre-K to 5. In addition to the contemporary program, two of the elementary schools, Green Acres and Ridge Road, provide an instructional alternative program for students entitled The Integrated Day that is a multi-disciplinary and highly personalized program. Each elementary school has a Macintosh computer lab staffed by a computer lab aide. The four schools have at least one computer in each classroom connected to the local area network and the Internet. All staff members have access to a computer and all teachers maintain an *eBoard* web page, communicate via email, and do their attendance and grade reporting via technology. The computer lab aides serve as the network administrators for their building. There are clusters of computers in the library media centers and at least one LCD projector and two to three digital cameras and scanners in each school.

The North Haven Middle School includes grades 6-8 and is organized into interdisciplinary teams that include language arts, mathematics, science, social studies and world languages. All middle school staff members have access to a computer and all teachers maintain an *eBoard*, communicate via email, and do their attendance and grade reporting via technology. The middle school computer lab aide serves as the network administrator for the building. There are clusters of computers in the library media center and LCD projectors, digital cameras, and scanners available in the lab and for teacher use in the classroom.

North Haven High School is a comprehensive state-of-the art high school that spans grades 9-12 and is accredited by the *New England Association of Schools and Colleges*. The high school teachers have laptop computers and most of the high school provides wireless access to the network and to the Internet. All teachers also maintain an *eBoard*. There are *Walk-and-Talk Interactive Whiteboards* by *Polyvision*, a state-of-the art world languages lab, computer labs in business education, technology education, mathematics, and within the library media center area. The library media center also has clusters of computers. The schools' television station is located at the high school and broadcasts high school and district programs and activities on the school district's cable access station.

LEA NAME: North Haven Public Schools

If CMT and CAPT are administered on-line at some point in the future, certain testing conditions would be desirable at every school. Ideally these include the following:

- All of the students in each grade level have access to the state assessment at the same time;
- Students are grouped in clusters of no more than thirty and all have access to the assessment at the same time (*classrooms with only one or two computers would not be appropriate for testing*);
- Students remain in their own school; and
- The computers have high-speed internet access.

Your completion of the chart below will help the CSDE to better understand the state's technical readiness for on-line testing.

Maximum number of grade 4 students who could be accommodated under the above conditions	100
Percentage of grade 4 students who could be accommodated under the above conditions (number accommodated/total number of grade 4 students)	30%
Maximum number of grade 6 students who could be accommodated under the above conditions	25
Percentage of grade 6 students who could be accommodated under the above conditions (number accommodated/total number of grade 6 students)	8%
Maximum number of grade 8 students who could be accommodated under these conditions	25

Percentage of grade 8 students who could be accommodated under the above conditions (number accommodated/total number of grade 8 students)	7%
Maximum number of grade 10 students who could be accommodated under the above conditions	125
Percentage of grade 10 students who could be accommodated under the above conditions (number accommodated/total number of grade 10 students)	43%

## TECHNOLOGY PLANNING COMMITTEE

<b>Member</b>	<b>Title</b>	<b>Constituency Represented</b>
Carol Ardito	Teacher – H/S	District
Martha Butterworth	Computer Lab Aide	Parent, District
Anne Cuyler	Teacher	District
Russell Dallai	Assistant Principal- High School	District
Marie E. Diamond	Director of Curriculum & Instruction	District
Natasha Domina	Teacher - Elem	District
Mark Fagan	Teacher – H/S	District
Carole Franceschet	Teacher - Elem	District
Daria Gambardella	Computer Lab Aide	District
Maria Gilchrist	IT Consultant	District
Claudia Grantham	Principal - Elem	District
Ed Handi	Principal – Elem	District
Thomas Herrscher	Vice Principal - Middle School	District
Rosina Hurley	Teacher – Elem	District
Jo-Ann Idone	Teacher – H/S	District, Community
Linda Kovach	Computer Lab Aide	District, Community
Rosalie Laczak	Computer Lab Aide	District, Community
Thomas Marak	Teacher – H/S	District
Anthony Marena	Student - H/S	District
Terrence Norko	IT Coordinator	District
Mary Quinn-Devine	Teacher – M/S	District, Community
Elsa Ruoff	K-12 Library- Media Coordinator	District
Cheryl Thompson	Computer Lab Aide	Parent, District
Pamela Trepanier	Computer Lab Aide	District, Community
Lydia Westerberg	Library-Media Specialist - Elem	District
Sue Ann Zoppi	Teacher - Elem	District

## **Technology Planning Committee – Description:**

Two committees helped develop the 2006-2009 technology plan during the 2005-2006 school year. The district's computer lab aides and district technology consultant were the initial members of the committee as they were able to identify areas of success and areas of need since they work with students and staff in all buildings in the use of technology on a daily basis. Many of the lab aides are also parents of children in our schools and were able to obtain information from a student's viewpoint on the value of technology in our schools. The district's IT Coordinator and other key staff also shared data as the plan was developed.

The other committee members that worked on the technology plan were members of the district professional development committee because they represent the various groups and levels of teaching staff in the schools and are the folks who survey staff in terms of their professional development needs in the areas of technology.

In 2006-2007, a standing technology committee, which will include membership from all levels and all constituencies, will be formed. The committee will meet on a monthly basis and will oversee the implementation of the new technology plan.

# **North Haven Public Schools**

**North Haven, Connecticut**

## **Technology Plan**

**July 1, 2006 - June 30, 2009**

### **Vision Statement**

North Haven students are engaged in meaningful, real world tasks. They have the technological knowledge, skill, and resources to make educated decisions using the most effective vehicle to access knowledge, apply it to original situations, use it to solve problems, and then communicate that knowledge to a variety of audiences. When interacting with content and/or completing real world tasks, students are continuously guided by ethical behavior.

#### **To realize the vision, the following tasks need to be accomplished:**

1. Increase professional development opportunities for teachers in using technology to improve or enhance teaching and learning.
2. Advocate and work to increase technology funding to support student learning.
3. Increase the use of digital content as a curriculum resource.
4. Provide the training and resources for administrators and teachers to access student performance information to inform instruction.
5. Increase available technical support.
6. Provide additional information for both students and parents on-line.

## **I. Evaluation of Technology Efficacy**

The evaluation of the success of technology supporting teaching, learning, communication, and data management in North Haven is an ongoing process that involves soliciting information from all constituencies, either formally or informally.

**Technology needs are categorized in the following areas:**

- Curriculum Integration
- Professional Development
- Equitable Use of Technology
- Infrastructure and Telecommunications Services
- Administrative Needs

**Data is obtained from the following sources: (Most of these sources were utilized for the 2006-2009 plan)**

- District and school committees – Staff Development Council/Lab Aides’ Committee
- District and School Improvement Plans
- District IT Coordinator
- Workshop reaction forms
- Informal feedback from teachers and students
- On-line staff surveys
- Inventory and budget preparation and results
- North Haven Technology Plan 2003-2006
- District and school administrators and program coordinators

**In addition to utilizing the data listed above, committee members reviewed both current trends and predictions for the future in terms of what schools will look like in the next 20 years.**

## **Technology Trends in United States Schools and Predictions for the Next 20 Years**

The technology trends and predictions are based on current research. They are included as the district attempts to determine the direction that it should be taking in terms of how technology can promote teaching and learning.

### **An interactive teaching and learning environment consists of the following:**

- √ **a digital whiteboard**
- √ **a document camera**
- √ **personal student input devices**
- √ **wireless keyboard/mouse**
- √ **on demand on-line resources**

### **How the transparent infusion of technology throughout the curriculum is becoming a reality:**

- Students and teachers are beginning to have access to wireless networked computers.
- Digital curriculum is here to stay.
- Chalkboards are disappearing and are replaced by whiteboards, screens and *Smart-type* boards.
- Mobile labs are replacing stationary computer labs.
- Video cams, video conferencing, and streaming video are available in many schools.
- Announcements are made over video devices, screen, or monitors.
- Lessons and assignments can be submitted on-line.
- Students communicate with "virtual pen pals" in real time.
- Students are using animation and simulation software to think creatively.
- The web is becoming the platform itself for content creation, distribution, and access.
- Teachers and students are using blogs.
- Teachers should receive ongoing training in the use of technology as a tool for teaching and learning.
- Assistive technology devices are becoming smaller and more available.
- Virtual field trips and visits to libraries, museums, and other countries are enhanced by the sights and sounds of the location one is visiting.

### **NEEDS ASSESSMENT**

Members of the technology planning committee assisted in compiling the data for the needs assessment.

## **1. CURRICULUM INTEGRATION**

### **BELIEF STATEMENT:**

*Technology is a tool to be used to improve and expand the educational process in all curriculum areas in all levels.*

### **STATUS IN NORTH HAVEN:**

- The district has developed technology skills for students by grade level. These skills are outlined in the “Experiences and Expectations” brochures. (samples included in the appendix)
- High school students must demonstrate technology competency via a computer competency test as one of the high school’s graduation requirements.
- As curriculum is revised to meet new state frameworks, strategies for infusing technology to enhance teaching and learning are included in the revision/s.
- Teachers and students at the high school are using *the Walk-and-Talk Interactive Whiteboards* by *Polyvision*
- Teachers at all levels and in all subjects are infusing technology into their lessons. The availability of equipment often determines the degree to which technology can be incorporated into instruction.
- Students use technology to access information and communicate their learning both at home and at school. As we adopt new programs, we are including the technology components.
- All teachers have a web page (*eBoard*) to share course requirements, expectations, and curriculum content with students and parents.
- All students district-wide have access to on-line computer labs and computer clusters in the library media centers in their school.
- Software that is directly tied to district curriculum goals and objectives is available at all levels.
- At the elementary level, students have access to the *Harcourt* learning website. The *Harcourt* series remains the heart of our language arts program.
- The use of *Microsoft Office* programs by staff and students to complete curriculum tasks is on the increase.
- Staff members have access to a file server in each building for data storage.
- On-line circulation systems are in place in all library media centers for student and teacher access.
- There is an on-line test of student library media skills at the elementary level. The test results are emailed back to the library media specialist after the student takes the test.

- Web site evaluation forms and a brochure that assists students in citing research sources are provided for students.
- The summer reading lists are included on the district website.
- Teachers have taken advantage of grant opportunities (ex. mini-sabbaticals, North Haven Education Foundation grants) to infuse technology into teaching and learning.
- Teachers at the elementary level are beginning to use video cams for conferencing with sister schools as a result of a grant from ACES.

## **NEEDS:**

- Vehicle for teachers to share lessons that infuse technology into the teaching-learning process
- Additional hardware at the elementary and middle school levels to allow teachers to incorporate more technology into instruction (ex. additional LCD projectors and the introduction of whiteboards)
- More on-line information available to teachers relative to student performance to inform instruction
- Teacher use of technology to differentiate instruction
- The inclusion of curriculum on-line
- Need for additional PCs since the elementary schools use Macintosh computers for the most part and video cams require a PC
- Need to develop more web-based activities
- The addition of student logons
- Need for a digital drop-box

## **2. PROFESSIONAL DEVELOPMENT**

### **BELIEF STATEMENT:**

*All staff should have the opportunity to acquire the necessary skills to use technology as a tool to strengthen productivity and enhance student learning.*

### **STATUS IN NORTH HAVEN:**

- Technology professional development activities are currently offered via professional development day programs and faculty study courses.
- Teachers are asked to assess professional development programs via on-line and paper surveys.
- The district has a process for teachers to demonstrate technological competence in lieu of the 15-hour CEU requirement.
- Teachers have been trained to use the *Protraxx* system to secure information relative to CEUs acquired, certification, and opportunities for professional development activities.
- Teachers at various levels received training in *eBoard* development, on-line report cards, *PowerSchool* attendance, whiteboard walk and talk, *Microsoft Word*, *Excel* and *PowerPoint*, *Inspiration*, *Kidspiration*, *WebQuest*, Internet research, etc.
- All schools have school improvement plans that include a technology component.

### **NEEDS:**

- Additional training for teachers to use *PowerSchool*
- Training in the use of technology to differentiate instruction and to promote problem solving.
- Mentors/computer facilitators to support teachers as they implement new technology skills gained in the classroom
- Training in the use of technology for assessment
- Time for teachers for practice and experimentation of technology tools to improve or enhance student learning
- Additional training in the use of *ProTraxx*
- Training for non-certified staff in the use of *Microsoft Word* and *Excel*, *ProTraxx*, and *PowerSchool*
- Time for teachers to explore digital content available on-line
- Additional training for special education staff in the use of assistive technology

### **3. EQUITABLE USE OF TECHNOLOGY**

#### **BELIEF STATEMENT:**

*Students and staff throughout the district will have equitable access to technology.*

#### **STATUS IN NORTH HAVEN:**

- Computer labs, which are staffed by computer lab aides, are available in all schools. There is also at least one networked computer in each classroom. Each teacher at the high school has a laptop computer.
- There are clusters of networked computers in all library media centers.
- Staff throughout the district have access to a computer for productivity, communication, and/or instruction.
- Administrators and teachers at some levels use *PowerSchool* for student demographic information, attendance, grade reporting, and/or announcements. They will soon use it for scheduling and the analysis of test data.
- Students in grades 3-5 have equitable access to the *Type to Learn* keyboarding program to use correct keystroking and proper techniques on electronic equipment.
- Teachers K-12 are beginning to use technology for grade reporting.
- The district is beginning to replace video players with DVD players.
- Special needs students and special education staff members utilize assistive technology software such as *Write-Outloud*, *Clicker*, and *Boardmaker*. *AlphaSmart* boards are also provided for some special needs students.
- Special education teachers conduct ongoing reviews of individual student IEPs to ensure the technology required is available.

#### **NEEDS:**

- Replacement of the computers in the labs in the four elementary schools and at the middle school
- An additional on-line computer lab at the middle school
- Additional LCD projectors at each elementary school for classroom use
- Additional networked printers for staff and student use at the elementary schools and the middle school
- Development of an ongoing plan for replacement of old hardware
- Increased hardware in the library-media centers
- Need to upgrade the version of the circulation system in the library media centers
- The addition of wireless mobile labs
- Utilization of the video capabilities in all schools

### **4. INFRASTRUCTURE AND TELECOMMUNICATIONS SERVICES**

## **BELIEF STATEMENT:**

*The infrastructure and telecommunication services in all buildings throughout the district should have access to local resources as well as state and national resources.*

## **STATUS IN NORTH HAVEN:**

- All buildings in the district are wired with voice, video and data capability.
- All buildings have Internet access via the Connecticut Education Network.
- The E-Rate has allowed the district to improve Internet access
- The new North Haven High School has state of the art telecommunications availability including sections of the building that have wireless capabilities
- Teachers and administrators communicate with parents via email and parents have access to voicemail to leave messages for teachers.
- North Haven Public Schools has a district website and each individual school has its own school site.
- The district website includes a school calendar and posts employment opportunities, SSP reports, CAPT and CMT reports, and weather related delays and closings
- At this time, there is minimal use of cable television capabilities.
- The district has virus protection, a filtering system, and a SPAM blocker for the network.

## **NEEDS:**

- Need to replace “end-of-life” routers with layer 3 switches
- Replacement of hubs with layer 2 switches
- Replacement of all T1 lines with Dark fiber (WAN links between buildings)
- Additional technical support to maintain the district infrastructure and telecommunication services
- Need for personnel to keep district and building websites up-to-date
- Wireless capabilities in all buildings
- Installation of redundant WAN links
- Creation of student and staff VLANS at all schools to secure data
- Installation of a redundant *PowerSchool* server

- Upgrade and replace all “end-of life” equipment in all server, MDF, and IDF closets
  - Installation of a second firewall to secure and control wireless usage across the district
  - Upgrade of all “end-of-life” computers at all schools
- reation of a student-run help desk

## **5. ADMINISTRATIVE NEEDS**

### **BELIEF STATEMENT:**

*All administrative staff in the district use technology to access information for decision making, record keeping, student information, and communication.*

### **STATUS IN NORTH HAVEN:**

- Administrative staff has access to *PowerSchool*, the web based student information system which enhances data-driven decision-making by providing real-time information.
- Software tools are used for personnel, budgeting and accounts payable (MUNIS), payroll, (ADP) and communication including email, voicemail, and fax.
- State test data is recorded and maintained electronically for use by administrators
- The *Protraxx* system is used for managing CEU credits and for informing staff of professional development activities.
- All administrators use email, fax, and web pages for communication with all constituencies, including parents and the community-at-large

### **NEEDS:**

- Time and training for administrators to utilize all components and capabilities of *PowerSchool*
- Need to allow administrative staff to complete purchase orders electronically
- Need to provide training for administrative staff in the use of *Excel* and *PowerPoint*
- Training for administrators to create a culture of self-reflection and inquiry at the school by using technology to gain student performance data, analyze that data, and assist teachers in using that data to improve instruction

## PLAN IMPLEMENTATION

### LEA Technology Goals and Strategies

The goals listed below are the State Goals as identified in the State Technology Plan (*draft of new plan is expected to be available by September 2005*). The LEA technology plan should be aligned to the State Plan and include the State Goals. The LEA may include any additional goals that apply to their technology plan.

**Goal 1:** Improve student academic achievement through the use of technology in elementary and secondary schools with a target of fully integrating technology into the academic curriculum by December 2006.

**Goal 2:** Ensure that all educators are proficient in the use and integration of technology and ongoing professional development activities are provided.

**Goal 3:** Ensure that all K-12 educational institutions have the capacity, infrastructure, staffing, and equipment to meet academic and business needs for effective and efficient operations.

**Goal 4:** Ensure that K-12 resources are available for all students, regardless of race, ethnicity, income, geographical location, or disability, so they can become technologically literate by the end of eighth grade and achieve their academic potential.

**Goal 5:** Develop a continuous process of evaluation and accountability for the use of educational technology as: a teaching and learning tool, a measurement and analysis tool for student achievement, and a fiscal management tool.

**Goal 6:** Develop a schema of current and future financing requirements to support the LEA's Technology Plan.

**Goal 7:** Develop a telecommunications services plan that will support both instructional needs and administrative requirements.

**Goal 1: Improve student academic achievement through the use of technology in elementary and secondary schools with a target of fully integrating technology into the academic curriculum by December 2006.**

<b><u>Objective</u></b>	<b><u>Strategy</u></b>	<b><u>Accountability Measure</u></b>	<b><u>Timeline</u></b>
To determine how technology can assist in areas of reading, writing and math	<ul style="list-style-type: none"> <li>•Review 2006 CMT and CAPT results and determine technology tools that can help students achieve success.</li> <li>•Provide closer links between text-based and electronic resources for students</li> </ul>	Review results of district assessments in 2006-2007 and the 2007 CMT and CAPT results	2006-2008 via vertical team meetings and curriculum review
To ensure that all students meet computer technology competency standards	<ul style="list-style-type: none"> <li>•Review/revise current student computer competencies</li> <li>•Develop technology skill exit exam for grades 5 and 8</li> </ul>	Analysis of pass/fail rate on skill exams in 2007 and 2008	2006-2009
To provide resources that focus on student achievement in all academic areas	As district vertical teams work on K-12 curriculum maps and curriculum development/revision, they will focus on technological resources and practices based on research in the field	Reports from district vertical teams relative to resources and best practices utilized and effect on student performance	2006-2008
To create multimedia/technology settings in each classroom to promote a student-centered learning environment to promote problem solving, higher level thinking, increased rigor, and the differentiation of instruction	<ul style="list-style-type: none"> <li>•Acquire and utilize technological tools that allow teachers proven strategies of research-based successful practices</li> <li>•Embed the K-12 student technology competencies into the curriculum</li> </ul>	Data on student performance and administrative observations	2006-2009
To support the K-12 curriculum in the library-media centers in all schools with additional electronic resources	To upgrade equipment and circulation system in the library-media centers at the elementary level	Teacher and student feedback on suitability and effectiveness of the resources in supporting the teaching-learning process	2008
To provide options for students in terms of available courses via on-line learning	Investigate and implement <i>Virtual High School</i>	Data on student enrollment in <i>Virtual High School</i> courses and performance rates	2007-2008
To Identify "pioneer teachers" who can assist others in using technology to support student learning in collaboration with the computer lab aides	Develop a plan for creating technology mentors in each building	Creation of the position of "pioneer teacher" and funding for a stipend for the teachers	2008

**Goal 2:** Ensure that all educators are proficient in the use and integration of technology and ongoing professional development activities are provided.

<b><u>Objective</u></b>	<b><u>Strategy</u></b>	<b><u>Accountability Measure</u></b>	<b><u>Timeline</u></b>
To increase teacher use of <i>PowerSchool</i> for student information, communication with parents, and for the use of data to inform instruction	Provide school-based training in the multiple uses of <i>PowerSchool</i>	<ul style="list-style-type: none"> <li>•Staff use of paper for the acquisition of data and for communication will decrease and the use of technology for these tasks will increase</li> <li>•Parent feedback and communication will increase</li> </ul>	2006-2008
To increase teacher use of technology for the delivery of the curriculum, including the use of digital content and differentiation of instruction	<ul style="list-style-type: none"> <li>•Provide in-district training and also take advantage of on-line tutorials and training.</li> <li>•Designate and compensate one "pioneer teacher" at each school to function as the school instructional technologist to mentor, assist, and coach teachers in the use of technology in the classroom.</li> <li>•Provide all teachers with a laptop computer and the training to use it</li> </ul>	<ul style="list-style-type: none"> <li>•Principal and supervisor observation of instruction</li> <li>•Funding to give all teachers a laptop computer</li> <li>•Creation of the position of "pioneer teacher" and funding for a stipend for the teacher</li> </ul>	2006-2009
To identify staff need for training to increase teacher and support staff use of technology for productivity and instruction	Offer ongoing training in <i>Microsoft Word, Excel, PowerPoint, ProTraxx, and PowerSchool, etc.</i>	<ul style="list-style-type: none"> <li>•Monitor staff use of technology for productivity</li> <li>•Track workshop enrollment via <i>ProTraxx</i></li> </ul>	2006-2009
To encourage teachers to review the research related to best practice and the use of technology and student achievement	Offer after-school and on-line professional development in how technology can increase student achievement	Records and surveys from training provided	2007-2008
To train special education teachers in use of assistive technology	Offer ongoing training for special education teachers	Records and surveys from training provided	2007-2008

**Goal 3: Ensure that K-12 educational institutions have the capacity, infrastructure, staffing and equipment to meet academic and business needs for effective and efficient operations.**

<b><u>Objective</u></b>	<b><u>Strategy</u></b>	<b><u>Accountability Measure</u></b>	<b><u>Timeline</u></b>
To maintain a stable WAN and Internet connection	<ul style="list-style-type: none"> <li>•Increase the broadband bandwidth by replacing T1 lines with dark fiber</li> <li>•Install redundant WAN links</li> </ul>	<ul style="list-style-type: none"> <li>•Increased speed and use of WAN and Internet by administrators, teachers, staff and students</li> <li>•Less downtime and fewer bottlenecks</li> </ul>	2006-2007
To upgrade wiring closets at elementary schools and middle school	<ul style="list-style-type: none"> <li>•Continue transition to switches to replace hubs and “end-of-life” equipment at elementary schools and middle school</li> <li>•Upgrade and replace all “end-of-life” equipment in all server, MDF, and IDF closets</li> </ul>	Completed upgrade of all wiring closets at the elementary schools and at the middle school	2007-2008
To provide ongoing support and maintenance of infrastructure and hardware	<ul style="list-style-type: none"> <li>•Include funding in the 2006-2007 budget</li> <li>•Hire an additional technician</li> <li>•Develop a hardware replacement plan</li> </ul>	Budget that allows funding for equipment replacement and hiring an additional technician	2007-2008
To ensure the interoperability of the district’s technologies by using standard systems	<ul style="list-style-type: none"> <li>•As the district purchases new equipment or replaces outdated equipment, the district will take into account global considerations and collaborative capacity-building</li> <li>•Develop a plan for replacing “end-of life” computers and related technologies at all schools</li> </ul>	Implementation and funding for the replacement plan	2007-2009
To secure all data	<ul style="list-style-type: none"> <li>•Install redundant <i>PowerSchool</i> server</li> <li>•Create student and staff VLANs at all schools</li> </ul>	Funding to install server and create the VLANs	2007
To provide equity of wireless capabilities	To install wireless capability in all buildings	Completion of installation of wireless capabilities	2008
To provide a student-run help desk	To investigate how students can assist the ongoing maintenance of technology for education	Implementation of a student-run help desk	2009

**Goal 4: Ensure that K-12 resources are available for all students, regardless of race, ethnicity, income, geographical location or disability, so they can become technologically literate by the end of eighth grade and achieve their academic potential.**

<b><u>Objective</u></b>	<b><u>Strategy</u></b>	<b><u>Accountability Measure</u></b>	<b><u>Timeline</u></b>
To ensure that special needs students have appropriate technology to promote their learning by training special education teachers to identify the most appropriate technology for their special needs students	Based on IEPs, provide the most appropriate use of assistive technology	Increased student achievement as evidenced by grade reporting and test scores	ongoing
To ensure equal access to all students, teachers, staff, and administrators	<ul style="list-style-type: none"> <li>•Replace equipment in elementary and middle school computer labs and provide a second lab at the middle school</li> <li>•Provide more LCD projectors and add smart boards at the elementary and middle school levels (with teacher support for their use)</li> </ul>	<ul style="list-style-type: none"> <li>•Upgraded/additional labs</li> <li>•Purchase of LCD projectors and the installation of smart boards</li> <li>•Increased use of additional technologies at the elementary and middle school levels for instruction</li> </ul>	2008-2009
To support all students with the technology that will transform their learning experiences and make learning more student centered	<ul style="list-style-type: none"> <li>•Provide at least one wireless mobile lab at each school and areas of wireless access to the Internet</li> <li>•Support teachers in the use of wireless mobile labs</li> </ul>	Review of student artifacts by principals and supervisors	2007-2009
To assess student ability to use technology that promotes their ability to access, problem solve and communicate their learning	Develop an interdisciplinary performance assessment task at the conclusion of grade 8	Actual administration of the eighth grade performance assessment task and review of the results over a two-year period (2007-2008)	June 2008
To update the high school computer competency graduation requirement	Review and revise the requirements for the high school computer competency graduation requirement	Implementation of the revised graduation requirement	2008

**Goal 5: Develop a continuous process of evaluation and accountability for the use of educational technology as: a teaching and learning tool, a measurement and analysis tool for student achievement, and a fiscal management tool.**

<b><u>Objective</u></b>	<b><u>Strategy</u></b>	<b><u>Accountability Measure</u></b>	<b><u>Timeline</u></b>
To review and update the technology plan on a yearly basis	Expand the district committee to ensure that it is composed of all constituents to oversee implementation and review of the technology plan on a quarterly basis	Yearly report to the board of education on the progress made for each goal and objective included in the plan	2006-2009
To provide access for all students to take on-line tests	Based on state requirements, increase hardware needed and develop a plan and schedule for students to participate in on-line testing	Availability of equipment for student to take on-line tests	2009
To utilize the full potential of <i>PowerSchool</i>	Provide ongoing training for administrators to use <i>PowerSchool</i> for their administrative needs	Survey administrators on a yearly basis relative to their needs to use technology to use data to make curricular decisions and inform instruction	2007-2009
To provide digital resources for students at all levels	To add digital libraries and electronic databases	Purchase of electronic resources	2008
To offer additional courses for high school students via technology	Provide <i>Virtual High School</i> courses	<ul style="list-style-type: none"> <li>•Increase in number of students taking AP courses, innovative programs</li> <li>•Increase in student success rate on district and state assessments</li> </ul>	2007-2008
To continue to support <i>MUNIS</i> , <i>ProTraxx</i> , <i>PowerSchool</i> , to investigate a new personnel system, and to complete purchase orders electronically	Move to harness technology to improve productivity	Funding to complete necessary administrative tasks via technological tools	2008
To implement technology initiatives to improve or enhance student learning.	Conduct ongoing research regarding technology initiatives, share with staff, provide resources, training and support	Ongoing review of student work and test results	2006-2009

**Goal 6: Develop a schema of current and future financing requirements to support the LEA's Technology Plan.**

<b><u>Objective</u></b>	<b><u>Strategy</u></b>	<b><u>Accountability Measure</u></b>	<b><u>Timeline</u></b>
To support, guide and manage the implementation of the 2006-2009 technology plan	Increase funding in the 2007-2008 district budget, to seek available grants, to seek support from the North Haven Education Foundation, and to seek E-Rate funding	Review and evaluation of implementation of the technology plan	2006-2009 on an annual basis
To review and revise the district policies related to technology	District technology committee will review and make suggestions for revisions of all policies related to technology to the Board of Education's Curriculum, Instruction and Planning Committee	Board of Education approval of revised policies related to technology	2007
To leverage multiple funding sources to promote a unified vision of instruction	Appropriate planning to keep technology updated and an appropriate resource for instruction, communication, and administrative tasks	Review and evaluation of implementation of the technology plan	2006-2009 on an annual basis

**Goal 7: Develop a telecommunications services plan that will support both instructional needs and administrative requirements.**

<p><b>Objectives/Activities/Strategies</b></p> <ol style="list-style-type: none"> <li>1. Information technology to improve education/library services</li> <li>2. Professional development to ensure that staff can use new technologies to improve education/library services</li> <li>3. Ongoing assessment of telecommunications services, hardware and software</li> <li>4. Sufficient budget to acquire and support the plan</li> <li>5. Evaluation process to monitor progress toward plan</li> </ol>	<p><b>Monitoring and Evaluation Procedure</b></p> <p>The objectives, activities, and strategies will be monitored and evaluated quarterly by the district technology committee who will report to the Superintendent of Schools, Administrative Council, and the Board of Education.</p>
<p><b>Where we are now (2006-2007)</b></p> <ol style="list-style-type: none"> <li>1. Technology is available in all classrooms; however, some of it is in need of updating.</li> <li>2. The district does have a WAN and LANs but there are many needs in terms of replacing "end-of-life" routers, replacing hubs with switches, replacing T1 lines, etc.</li> <li>3. Teachers are using technology for teaching and learning but at varying degrees.</li> <li>4. Professional development in the use of technology is available.</li> <li>5. The district has migrated to <i>PowerSchool</i> for student information and data management to inform instruction.</li> <li>6. The development of this plan has provided the district the opportunity to determine needs.</li> </ol>	<p><b>Where we want to be (2007-2009):</b></p> <ol style="list-style-type: none"> <li>1. Our goal is to have equity in terms of hardware access for students and all staff. A major goal is to provide all teachers with a laptop computer.</li> <li>2. We need to upgrade all aspects of the infrastructure and WAN.</li> <li>3. We need to provide more training for all staff in <i>PowerSchool</i>, <i>ProTraxx</i>, <i>Microsoft Office</i> programs, etc., and we need to support teachers after the training in how to infuse technology into instruction to increase student learning.</li> <li>4. Our goal is to have wireless capabilities in all buildings.</li> <li>5. We need to increase our budget for technology and also seek other funding sources to meet all of our goals.</li> <li>6. We will monitor our progress via a more formal process.</li> </ol>

# Technology Funding Sources and Costs

ANNUAL BUDGET SUMMARY

YEAR 2006-2007

Acquired Technologies and Professional Development	Ed Tech Competitive/ Title II-D	Ed Tech Formula/ Title II-D	State Bond Funds	Capital	E-Rate	NCLB/other than Title II-D	Other (Specify)
Computer and infrastructure supplies, filtering and virus protection \$40,000	n/a	n/a	n/a	n/a	Telephone \$12,420	n/a	New lab at the middle school funded by the North Haven Education Foundation \$40,000
Computer repair \$8,500					Internet access \$10,800		
Computer maintenance \$56,280							
Professional development \$5,000							
<b>TOTALS:</b> \$109,780	\$0	\$0	\$0	\$0	\$23,220	\$0	\$40,000

# Technology Funding Sources and Costs

ANNUAL BUDGET SUMMARY

YEAR 2007-2008

Acquired Technologies and Professional Development	Ed Tech Competitive/ Title II-D	Ed Tech Formula/ Title II-D	State Bond Funds	Capital	E-Rate	NCLB/other than Title II-D	Other (Specify)
Computer supplies, filtering and virus protection \$40,000	Mobile labs \$50,000	n/a	n/a	n/a	Telephone \$19,200	n/a	Hardware for labs at the elementary schools by the North Haven Education Foundation \$40,000
Computer repair \$8,500					Internet access \$14,400		
Infrastructure/WAN updates \$50,000					WAN updates \$30,000		
Professional development \$5,000							
New equipment \$100,000							
<b>TOTALS:</b> \$203,500	\$50,000	\$0	\$0	\$0	\$63,600	\$0	\$40,000

# Technology Funding Sources and Costs

ANNUAL BUDGET SUMMARY

YEAR 2008-2009

Acquired Technologies and Professional Development	Ed Tech Competitive/ Title II-D	Ed Tech Formula/ Title II-D	State Bond Funds	Capital	E-Rate	NCLB/other than Title II-D	Other (Specify)
Computer supplies, filtering and virus protection \$40,000	Mobile labs 50,000	n/a	n/a	n/a	Telephone \$19,200	n/a	Hardware for labs at the elementary schools by the North Haven Education Foundation \$35,000
Computer repair \$8,500					Internet access \$14,400		
Infrastructure updates \$50,000							
Professional development \$5,000							
Replacement hardware \$100,000							
<b>TOTALS: \$303,500</b>	\$50,000	\$0	\$0	\$0	\$33,600	\$0	\$35,000

## CHILDREN'S INTERNET PROTECTION ACT (CIPA) CERTIFICATION

Schools and libraries that plan on receiving E-Rate discounts on Internet access and/or internal connection services after July 1, 2002, need to be in compliance with the CIPA. CIPA compliance means that schools and libraries are filtering their Internet services and have implemented formal Internet safety policies (also frequently known as Acceptable Use Policies). Information on the CIPA requirements is located at [http://E-Ratecentral.com/CIPA/cipa\\_policy\\_primer.pdf](http://E-Ratecentral.com/CIPA/cipa_policy_primer.pdf).

I, Sara Jane R. Querfeld, certify that one of the following conditions (as indicated below) exists in

Name of Superintendent/Director

North Haven Public Schools

LEA

- My district/agency is E-Rate compliant; or  
 My district/agency is not E-Rate compliant. (Check one additional box below):

	Every "applicable school*" has complied with the CIPA requirements in subpart 4 of Part D of Title II of the ESEA**.
	Not all "applicable schools*" have yet complied with the requirements in subpart 4 of Part D of Title II of the ESEA**. However, the LEA has received a one-year waiver from the U.S. Secretary of Education under section 2441(b)(2)(C) of the ESEA for those applicable schools not yet in compliance.
	The CIPA requirements in the ESEA do not apply because no funds made available under the program are being used to purchase computers to access the Internet, or to pay for direct costs associated with accessing the Internet, for elementary and secondary schools that do not receive E-Rate services under the Communications Act of 1934, as amended.

\*An applicable school is an elementary or secondary school that does *not* receive E-Rate discounts and for which Ed Tech funds are used to purchase computers used to access the Internet, or to pay the direct costs associated with accessing the Internet.

\*\*<http://www.ed.gov/legislation/ESEA02/pg37.html>

\_\_\_\_\_  
Signature of Superintendent/Director

\_\_\_\_\_  
Date

# APPENDIX A

## North Haven Public Schools North Haven, Connecticut

### Excerpts from Grade 3, 4 and 5 Experiences and Expectations Brochures for North Haven Students

#### **Grade 3 - Technology Skills**

Expectations for students follow:

##### **Terminology**

- Students will identify, locate and/or use Internet, cable, file server, search engine, World Wide Web, email

##### **Computer Literacy**

- Use and maintain disk to save files
- Use print options
- Boot the computer

##### **Keyboarding**

- Use a software typing program to develop keyboarding skills

##### **Word Processing**

- Begin to use spell check
- Begin to use copy, cut, and paste

##### **Graphics**

- Import graphics and use them in a word processing document

##### **Telecommunications**

- Understand the concept of electronic mail and use the Internet

##### **Ethics**

- Treat equipment with care and respect

##### **Curriculum**

- Use technology to accomplish grade level curriculum integration

## **Grade 4 - Technology Skills**

**Expectations for students follow:**

### **Terminology**

- Students will identify and use the terms spreadsheet, graph, chart, and database

### **Grade 4 - Technology Skills (continued)**

#### **Computer Literacy, Word Processing, Graphics**

- Save files in different locations
- Use and manipulate a spreadsheet
- Review, practice, and reinforce their keyboarding skills
- Use electronic spell checker and thesaurus
- Set margins and text alignment functions
- Put graphics into a word processing document
- Insert a video into a document
- Prepare a simple *PowerPoint* presentation

#### **Telecommunications**

- Communicate via electronic mail
- Access information from the Internet

#### **Ethics**

- Understand copyright, file security, and the sharing of resources

#### **Curriculum**

- Use technology to accomplish grade level curriculum integration

## **Grade 5 - Technology Skills**

**Expectations for students follow:**

### **Terminology**

- Use multimedia terminology

### **Computer Literacy, Word Processing, Graphics**

- Perform editing shortcuts
- Review, practice, and improve keyboarding skills
- Use an electronic spell checker and thesaurus
- Set margins and text alignment functions
- Put graphics into a word processing document
- Insert video into a document
- Prepare a short *PowerPoint* presentation

### **Telecommunications**

- Communicate via electronic mail
- Access information from the Internet

### **Ethics**

- Understand copyright, file security, and sharing of resources

### **Curriculum**

- Use technology to accomplish grade level curriculum integration