
Technology Plan

July 1, 2007- June 30, 2010

<http://www.triumphcharteracademy.org/Brix?pageID=401>

Triumph Academy

3000 Vivian Road

Monroe, MI 48162

734.240.2610

District Code: 58902

District: Monroe County

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Technology Plan 2007-2010

Triumph Academy

School Contact Information

Intermediate District Name:	Monroe County ISD
District Name:	National Heritage Academies
School Name:	Triumph Academy
Address:	3000 Vivian Road
City, State. Zip code:	Monroe, MI 48162
Phone Number:	734 240-2610
Fax Number:	734 240-2785
School Contact Name:	Timothy J. Lenahan
School Contact Email:	56.tlenahan@heritageacademies.com
School Technology Committee Members	Tim Lenahan, Principal Tiffany Nadeau, Teacher Christine Smith, Teacher Pat Libstorff, Parent Kim Huber, Parent Lori Walker, Library Technology Specialist
URL for technology plan on Web:	http://www.triumphcharteracademy.org/Brix?pageID=401
Years covered by plan:	2007-2010
Start date of plan:	July 1, 2007
End date of plan:	June 30, 2010

Introduction

About Triumph Academy

School Technology Purpose Statement

Working in partnership with parents and community, the Triumph Academy's mission to challenge each child to achieve. We expect our students to master basic skills and realize their full academic potential in preparation for higher education and adulthood.

Vision

All students will be computer literate by Eighth Grade.

School History & Demographics

Triumph Academy was founded in Monroe, Michigan by local board of directors. Subsequently, National Heritage Academies was hired to provide professional services to Triumph Academy. Since its opening, Triumph Academy has seen enrollment grow to 522 students.

The population of the school reflects that of the surrounding community and is broken out as detailed below:

School Demographics

	Female	Male	Total
American Indian/ Alaska Native	2	0	2
Asian American	2	3	5
Black/African American	17	17	34
Hispanic/Latino	10	10	20
Pacific Islander	1	1	2
White	213	246	459
Totals	245	277	522

School Affiliation & Philosophy

In order to fully understand the role of technology at Triumph Academy, it is important to understand the relationship between the school and the company contracted to provide professional services.

National Heritage Academies (NHA) is an Educational Services company founded in 1995 to support charter schools with professional management services. Since its first contract with Excel Charter Academy in Grand Rapids, Michigan, NHA has expanded to support 53 schools serving over 32,000 students in 2006-2007.

NHA provides shared services between the schools it manages including, but not limited to:

1. Facility management
2. Curriculum support & staff development
3. Human resource support
4. Accounting and finance support
5. Board relations
6. State compliance & reporting
7. Technology infrastructure design, management, and support

NHA affiliated schools maximize school success through a deliberate process of sharing common resources to leverage economies of scale and sharing best practices to drive for continuous improvement.

For more information about National Heritage Academies, please refer to the NHA website, <http://www.heritageacademies.com>.

High Student Performance

Student achievement is the bottom line for measuring success at Triumph Academy. Bearing this in mind, all activities and programs are evaluated using this metric. Technology, therefore, adds value in as much as it positively impacts student achievement.

We believe that “how” technology is applied in the classroom is substantially more important than “how much” or “how often” technology is applied. Technology’s role in an instructional setting must be deliberate, well-designed and continuously assessed. Ultimately, the successful application of technology for learning lies in the alignment of curriculum, staff preparedness, the quality and availability of training, responsive support systems, and the existence of a reliable and accessible infrastructure.

Safe, Orderly, and Caring Schools

Triumph Academy relies on NHA’s Moral Focus curriculum as a core element for developing a safe, orderly, and caring school environment. In this environment, students learn to make decisions based on morals that reflect the four cardinal virtues of the ancient Greeks: justice, temperance, fortitude, and perseverance.

In a culture that is increasingly dominated by the presence of technology, students must be able to see the connection between actions and consequences. Just as NHA aligns its technology with its instructional goals and objectives, the policies relating to technology use must align with the development of strong moral character and good citizenship. This alignment is reflected in documents such as the Acceptable Use Policy [AUP] (see **Appendix A**), Internet Usage Policy, the application of copyright laws, etc.

In an effort to ensure safety in the school environment, technologies such as classroom telephones, security systems, and facility monitoring systems are leveraged.

Quality Teachers, Leaders, and Staff

Triumph Academy is committed to developing an environment that fosters professionalism, personal growth, and knowledge acquisition. Technology plays a key role in the development of this environment by providing tools that can increase productivity, allow access to NHA’s curriculum resources, and connect teachers with resources and people throughout the world. To develop truly world-class teachers and administrators, Triumph Academy will implement a targeted staff development program designed to help the teachers at school become more effective in their various roles by leveraging technology. This staff development effort will be supported by NHA resources and methodologies as part of a larger staff development effort.

Strong Family, Community, and Business Support

Triumph Academy is committed to partnering with parents as a foundational element of our educational program and the development of a strong school culture. Accordingly, over the 2006-2007 school year, a technology committee made up of Triumph Academy administration, teachers and parent consultant was established to begin the initial process of developing and finalizing this plan. A parent representative from the Triumph Academy School Improvement Team has also reviewed and approved this current plan's emphasis and goals.

With the support of NHA, Triumph Academy believes that communication technology can be a powerful force in removing the barriers that sometimes exist between the classroom and the living room. NHA has already initiated efforts that build and support technologies to extend the learning environment beyond the walls of the classroom and into student's homes. With these technologies, parents at Triumph Academy will gain real-time access to information about their child(ren)'s academic performance through a secure Internet connection. Communication with parents and teachers is facilitated through the AtSchool Student Information systems which provides for classroom newsletters to be published and also through NHA secure email system. Triumph Academy also has established a school webpage <http://www.triumphcharteracademy.org/Brix?pageID=401>.

Implementing the use of the school webpage provides involvement with the community as a resource of information about Triumph Academy.

Effective and Efficient Operation

Triumph Academy derives several significant benefits through our association with NHA. Chief among these is access to professional services and resources that would otherwise be unaffordable. Because Triumph Academy is one of 53 schools receiving services from NHA, we are able to take advantage of a shared services model that results in economies of scale. Through our contract, we are serviced by a professional technical team that provides Triumph Academy with consulting, implementation, and support for all technology efforts. As a result of these shared services, our school is part of a network of other schools and best practices are shared readily. Ultimately, the partnership between Triumph Academy and NHA allows the school's staff to focus its efforts on the delivery of instruction and student achievement.

Curriculum and Instruction

Current Situation

While NHA provides a recommended curriculum scope and sequence for technology use and skill development, Triumph Academy is focused on implementing these resources to ensure that all students to develop the requisite computer skills to be technologically literate by the time they leave the Eighth Grade.

With access to technology as outlined in the infrastructure & connectivity section of this plan, Triumph Academy has the resources necessary to effectively deliver the curriculum. In addition, the school allocates time for technology use to meet NCLB and state standards as detailed in the table below:

Time Committed to Technology Instruction (Weekly)	
Kindergarten	30 minutes
First Grade	40 minutes
Second Grade	40 minutes
Third Grade	40 minutes
Fourth Grade	40 minutes
Fifth Grade	40 minutes
Sixth Grade	40 minutes
Seventh Grade	40 minutes
Eighth Grade	40 minutes

- As an organization, NHA delivers to the students it serves a rigorous academic program based on sound research and proven practices to the students it serves.
- Incorporating NHA's approach to technology into the school environment, students will develop information literacy skills through a comprehensive technology curriculum.
- Teachers will develop an appropriate technology skill-set through well-aligned professional development opportunities and will apply these skills in the classroom throughout the curriculum.

Goals for Curriculum & Instruction

1. Develop technology-enhanced curricular resources that will be available for teachers at all grade levels.
2. Promote the acquisition of appropriate technology skills as specified in the NHA technology scope and sequence.
3. Electronically collect and manage student performance data to drive the continuous growth in student achievement.

- During the upper elementary years (grades 3-5), the curriculum calls for students to develop specific technology skills that are aligned with state and national standards. In many NHA schools, computer elective courses are offered in grades 6-8. In these courses, more advanced computer skills are taught and applied.
- Teachers in grades 6-8 will continue to include the development of computer skills in their classroom activities and students will be expected to apply these skills appropriately to enhance their learning and to produce academic work in preparation for their entry into secondary school.

Strengths of the Current Model for Technology & Instruction

- Technology-infused lessons have been collected, developmentally sequenced, and indexed. Each NHA affiliated school has access to a collection of lessons designed to integrate technology use with the academic curriculum while developing technology skills so that students are technologically literate by the Eighth Grade.
- Each technology integrated lesson has an assessment component of which teachers can transfer student abilities (data) to a checklist for clear record keeping and progression of skill development of each student.
- Teachers at NHA schools have a high degree of flexibility regarding technology use in the classroom. Within the context of a rigorous academic curriculum, technology is leveraged to support and enhance instruction as teachers see fit.
- LTSs provide the catalyst within the school to encourage and support appropriate use of technology, to provide or develop curricular resources for teachers, and to encourage acceptance of technology integration through real-time support and staff development.
- LTSs have assisted teachers to be more thorough in their assessment of student skill levels and to re-teach areas where gaps in learning have occurred.

Future

Philosophy

By incorporating NHA's approach to technology into the school environment, students at Triumph Academy will develop information literacy skills through a comprehensive technology curriculum. Teachers will develop an appropriate technology skill-set through well-aligned staff development opportunities and will apply these skills in his/her instruction.

Technology Approach by Grade Level

	Philosophy / Approach	Resources
K – 2	<p>Technology skills are not formally taught or assessed.</p> <p>Technology is used throughout the curriculum to enhance instruction as appropriate and as indicated in the curriculum guidelines.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Students access technology in the classroom (mobile computer labs) or the media center as part of an instructional activity. Use of technology is designed solely to reinforce mastery of the content material. • Teachers use technology to enhance the presentation of material to their students through simulation, projection, etc. 	<p>LCD projectors, Internet connectivity</p> <p>Limited student access to computers in common spaces or in the classroom</p>

<p>3 – 5</p>	<p>Instructional time is dedicated to developing specific technology skills such as:</p> <ol style="list-style-type: none"> 1. Computer operations 2. File management 3. Word processing 4. Keyboarding 5. Presentation tools 6. Spreadsheet use 7. Database basics 8. Internet use & responsibilities <p>Examples:</p> <ul style="list-style-type: none"> • All fourth grade students take part in a 9 week keyboarding course with periodic refresher lessons throughout fifth grade • Teachers provide students with technology-specific instruction to prepare them to apply the use of technology to their learning. For example, a teacher may give instruction on writing formulas in a spreadsheet in preparation for a unit in which data will be stored and evaluated using a spreadsheet. • Teachers will use a combination of curriculum-aligned activities and fully technology-integrated units of curriculum to deliver instruction and build technology skills as dictated by the Technology Scope & Sequence. 	<p>LCD projectors, Internet connectivity Regularly scheduled student access to computers required in either a shared space (lab / media center) or in the classroom.</p>
<p>6 – 8</p>	<p>Instructional time in the middle school is devoted to developing specific technology skills in an authentic learning context. The skills developed in the middle school build on those developed in the upper elementary grades and expand to include:</p> <ol style="list-style-type: none"> 1. Digital imaging 2. Digital audio 3. Desktop publishing 4. Presentation 5. Basics of good design 6. Web page authoring 7. Application integration 8. Appropriate Internet use <p>Examples:</p> <ul style="list-style-type: none"> • Students will be asked to create and incorporate various digital media elements into consistent and cohesive projects that support the curriculum such as presentations, Web sites, spreadsheets, etc. • Teachers will require students to begin to view technology as a tool for producing academic work, undertaking research, and presenting knowledge learned. 	<p>LCD projectors, Internet connectivity Pervasive student access to computers required in either a shared space (lab / media center) or in the classroom. The technology should become part of the tools used in the classroom.</p>

Timeline for Curriculum Integration

The following timeline serves to address the integrated technology activity a student will participate in at Triumph Academy:

Grade Level	Integration Activity
K - 2	Classroom teachers are encouraged to lead technology integrated lessons when possible. They have access to resources on Curriculum Center enabling them to do so.
3 - 6	Classroom teachers will teach technology integrated lessons encompassing the Technology Scope and Sequence within their core academic curriculum. Option 1: By following the recommended technology lesson sequence for Open Court (found on Curriculum Center), the teacher will accomplish the Technology goals for that grade level within the framework of the Open Court Reading Curriculum. Option 2: Alternatively, teachers may follow the recommended technology lesson sequence termed "Cross-Curricula" and will meet the technology objectives for that grade level within the framework of the core curriculum.
7 - 8	Classroom teachers will continue to integrate technology into the core subject areas. In addition, a "Computer Teacher" will instruct students on the technology skills necessary to complete a technology literacy exam successfully. Students will be able to successfully complete an exam and will also be introduced to advanced technology concepts.

Technology's Role in the Academic Curriculum

Although specific technology-related skills are not treated equally at each grade level, the underlying philosophy regarding technology's role in the delivery of instruction is consistent across all grade levels. Teachers and students must have access to tools (such as computers, scanners, digital cameras, LCD projectors, etc.) and curriculum that can unlock the potential of these digital technologies. All teachers will be expected to develop basic competencies in the use of teaching technologies (see Technology Staff Development section of this document) and to use these technologies appropriately to enhance the delivery of instruction. Additionally, NHA must continue the development of curriculum that capitalizes on the multi-modal aspects of digital technology. (See **Appendix**)

Online Access to Curriculum

Triumph Academy has resources developed for and aligned with the NHA curriculum. These resources include:

- Unit plans
- Lesson plans
- Background readings
- Presentations
- Activities
- Handouts
- Interactive Web sites
- Assessments
- Reading lists
- Handbooks

Many of the lessons are also aligned with specific technology-skill objectives.

Managing Curriculum with Technology

To support the management of student performance information at Triumph Academy, NHA will develop and implement a tool set that will enable regular reporting of student performance based on assessment data. The use of information technology in this process is vital to the management of the data and reporting both teachers and school leaders need.

Goals

Goal	Objective/ Strategy	Resources Needed (Human & Material)	Person(s) Responsible	Budget Needs	Time-line (Beginning & Ending dates)	Method of Evaluation
1. Teachers will be able to integrate technology, including the use of online tools, into curricular lesson plans to meet the requirements of the NHA Technology Scope & Sequence.	Complete a minimum of 15 lessons/projects that incorporate technology.	Library Technology Specialist. Academic Curriculum Resources.	Library Technology Specialist Individual Classroom Teacher. School Administration	NHA annual operations budget allocations for professional development and curriculum development	Professional Development opportunities during the 12 month calendar year	Review annually the projects logs for comprehensive technology integration

<p>2. Teachers will utilize online tools to track student performance, and communicate student progress with their student's parents.</p>	<p>Teachers will know how to generate and read progress reports.</p>	<p>Computers. Online student performance system.</p>	<p>Individual Classroom Teacher.</p>	<p>NHA annual budget allocations for student information systems and testing</p>	<p>September through June each year.</p>	<p>Review AtSchool reports for new teachers to assess their skill development during the year – review annually in May and June</p>
<p>3. Schedule all media centers and computer labs flexibly so that students and teachers can access resources and services at point of need.</p>	<p>Develop a fixed media center schedule with open time slots for use when needed.</p>	<p>Library Technology Specialist Media Center Schedule</p>	<p>Library Technology Specialist Classroom teachers Principal</p>	<p>NHA budget allocations for school improvement planning</p>	<p>September through June each year.</p>	<p>Completion of media center log showing class accessibility and use of computers and review of student schedules each spring</p>

Staff Development

Current Situation

Total cost of ownership (TCO) is centralized and available from NHA's corporate office. Educational Technology support is available at the school level through the Library Technology Specialist and at the corporate office through the Library and Educational Technology Services Department.

Educational Technology (school-level support)

In order to provide teachers with high-levels of support for the use and integration of technology, NHA created a Library Technology Specialist (LTS) role within the school staffing model. This position combines the role of librarian (media specialists) with educational technology to create an information specialist. Individuals serving in this capacity will assume the ownership and responsibility of the educational technology program within the school. Responsibilities will include oversight of building-level educational technology efforts, management of the technology staff-development program, and ongoing assessment of educational technology building needs. This person will work hand-in-hand with teachers to support the integration of technology into the academic curriculum.

The LTS is a certified teacher and member of the school staff. The school leader is responsible for hiring, managing and reviewing the LTS. NHA is committed to providing training to LTS' and providing guidelines for their activities. The corporate Library and Educational Technology team will support the LTS by developing curricula, providing specialized training, and making resources available. The LTS is supported by a Library Technology Aide (LTA).

Information Technology (enterprise support)

The Information Technology (IT) team provides centralized management of NHA's technological infrastructure and is responsible for setting IT policies and implementing IT procedures. The responsibilities of this team includes management of NHA's Wide Area Network (WAN), Local Area Networks (LANs), file servers, desktop and portable computers, Web (WWW) servers, application servers, software configurations, etc. In addition to managing this infrastructure, the IT team provides technical support through a centralized help desk that employees can access via telephone or through the internet.

The following table details the results of a staff self-assessment at Triumph Academy.

Technology Professional Development Area	Staff Competency Before Training (%)	Staff Competency After Training (%)
Login & Use of Administrative Systems		
NHA Network	30%	90%
Network Drives	30%	90%
Email to create, reply and forward messages	60%	100%
Email to send, open and download attachments	80%	100%
Use of School Administrative Database System		
Attendance	60%	100%
Grade book	60%	100%
Progress Reports	60%	100%
Report Cards	60%	100%
Computer & Hardware Use		
Set up and use an LCD Projector	60%	90%
Digital Camera	30%	90%
Scanner	30%	90%
Writer Keyboarding Units	30%	90%
Productivity Software Use		
MS Word	80%	90%
MS Publisher	60%	90%
MS Excel	60%	90%
MS PowerPoint	60%	90%
Instructional Software Use		
Inspiration	20%	80%
Encarta	50%	90%
Timeline	30%	80%
Graph Club	30%	80%
Instruction & Curriculum		
Utilizing technology to enhance Educational Instruction	40%	80%

Staff Development Philosophy

Training and staff development are often underrated elements of successful technology implementation. Triumph Academy is committed to including a technology plan that includes a well-organized and comprehensive staff development component. This component is aligned with the academic curriculum, educational philosophy of the school, and it must ultimately focus on improving student achievement.

Developing a Framework

In order to facilitate a consistent, proven staff development program, Triumph Academy will utilize the staff development framework developed by NHA. This framework is aligned with the NHA provided curriculum, the school's technology infrastructure, and personnel model for technology support. While much of the framework is provided by NHA, it has been designed to maintain a great degree of site-based flexibility.

The NHA technology staff development framework contains several component processes. The core curriculum for staff development activities is based on both state and ISTE (International Society for Technology in Education – www.iste.org) standards.

1. Establishing Priorities

The NHA technology staff development framework relies on the school leader and the school improvement team to establish this priority. This prioritization should be aligned with the goals identified in the school improvement plan and should reflect the needs/demands of the school environment.

2. Identifying Needs

Triumph Academy will use the self assessment tools provided by NHA .

3. Setting Goals

Using the information gleaned from the individual self-assessments, the LTS will work with each staff member to develop individual staff development goals. Ideally, these goals should be tied-in to each staff member's personal performance goals.

4. Delivering Training

Triumph Academy will provide on-site training opportunities to staff through the LTS. Meanwhile, NHA is committed to developing an enhanced staff development curriculum that can support self-paced learning, online delivery, small-group training, or whole instruction. Library Technology Specialist at each school will serve as teacher, coach, mentor, and encourager. The school leader, teachers, and the LTS will work together to identify the most effective means for the delivering staff development. NHA will support the LTS by providing ongoing training (training the trainer) opportunities, resources (physical and electronic), and curriculum guidelines.

5. Evaluating Results

Triumph Academy will evaluate the effectiveness of the technology staff development efforts and program annually through a summative self-assessment at the end of the school year.

Timeline for Staff Development

Professional Learning Opportunities – Calendar

To ensure that LTS' possess the information necessary to provide quality professional development; on-going professional learning opportunities are planned. These opportunities include individual professional development, conference calls, Web-Ex sessions and small and large group meetings.

Date	Professional Learning Opportunity	Focus
8/15-17/06	NTO	NEW LTS Staff Training
08/23/06	AtSchool WebEx 3:30 -4:30 pm	Attendance and Grade book
08/28/06	United Streaming Webinar 3:00-4:00 pm	Introduction to the Program
08/30/06	AtSchool WebEx 3:30-4:30 pm	Publications and Progress Reports
08/31/06	<i>Scholastic Keys*</i>	<i>Pilot Schools</i>
09/06/06	AtSchool WebEx 3:30 – 4:30 pm	Grade book Advanced Features
09/13/06	AtSchool WebEx 3:30 – 4:30 pm	Calendar
09/14/06	IT Conference Call 3:30-4:30 pm	Technology Equipment Issues
09/15/06	TDS distributed to teachers	Teacher Technology Skills
09/15/06	First Meeting with Principal Arranged	Monthly Plan for Tech Integration and PD for staff
09/1-30/06	Integrated Technology and Information Literacy Lessons	Create portfolio of effective lessons to add to our NHA Technology Curriculum Resources
9/27/06	AtSchool WebEx 3:30 -4:30 pm	Q & A
10/3/06	Accelerated Reader Workshop – Toledo	How to!
10/11/06	Final AtSchool WebEx 3:30-4:30 pm	Grade book
10/1-31/06	Integrated Technology and Information Literacy Lessons	Create portfolio of effective lessons to add to our NHA Technology Curriculum Resources
10/12/06	IT Conference Call In 3:30-4:30pm	Topic TBA
10/26-27/06	Regional Conference – Ohio, NY, NC, Indy	TBA
October	Second PD Meeting with Principal	Planning/Report
October	Arrange meeting of Library Committee Arrange meeting of Technology Planning Committee	Planning/Collaboration with Teachers
October	Tentative – Internet Safety Workshop	Preview for Students

October	Tentative – Collaboration with Teachers Workshop	Integrating Technology and Information Literacy Skills
11/2-3/06	Regional Conference – West Michigan	TBA
11/6-7/06	Regional Conference – East Michigan	TBA
11/16/06	IT Conference Call In 3:30 – 4:30 pm	Topic TBA
November	Integrated Technology and Information Literacy Lessons	Create portfolio of effective lessons to add to our NHA Technology Curriculum Resources
November	PD Meeting/Update with Principal	Planning/Report
12/14/06	IT Conference Call In 3:30-4:30 pm	Topic TBA

Date	Professional Learning Opportunity	Focus
	Happy New Year!	
01/10/07	AtSchool WebEx 3:30-4:30 pm	Grade book
01/17/07	AtSchool WebEx 3:30-4:30 pm – Please include Principals!!	Reports
01/18/07	IT Conference Call In “Join the Call” 1-866-613-5217 Access code: 7855462	Topic to be announced
01/15/07	<i>Schedule Meetings with Principal to evaluate PD</i>	<i>Staff technology literacy and student technology literacy</i>
01/24/07	AtSchool WebEx 3:30 – 4:30 pm	Attendance
01/31/07	AtSchool WebEx 3:30 – 4:30 pm	Newsletters
02/07/07	AtSchool WebEx 3:30 – 4:30 pm	Q & A
02/13/07	IT Conference Call In “Join the Call”	TBA
02/15-16/07	NORTH CAROLINA ONLY!! Technology Planning Conference	Greensboro, NC
February	Integrated Technology and Information Literacy Lessons	Create portfolio of effective lessons to add to our NHA Technology Curriculum Resources
03/15/07	IT Conference Call In “Join the Call”	
03/26-27/07	2nd Annual LTS/TF/LTA Spring Conference! Grand Rapids, Michigan	Variety of exciting sessions, save the date!
03/15/07	Continue to plan and evaluate Staff PD with Principals	Student achievement aligned with staff development assessment
March	Integrated Technology	Information Literacy Focus
04/19/07	IT Conference Call In 3:30-4:30pm “Join the Call”	Topic TBA
April	Integrated Technology	Enhancing the classroom learning activities

05/17/07	IT Conference Call In 3:30-4:30pm "Join the Call"	TBA
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This timeline will be followed each year to monitor progress toward the Staff Development Scope & Sequence developed using the ISTE and NETS for teachers' standards.

Other Staff Development Efforts

National Heritage Technology, all new teachers attend New Teacher Orientation, each August and receive instruction on the National Heritage Academies Technology Systems. Additionally, a LTS was requested to provide more individualized training to Triumph Academy Teachers.

Goals

Goal	Objective/ Strategy	Resources Needed (Human & Material)	Person(s) Responsible	Budget Needs	Time-line (Beginning & Ending dates)	Method of Evaluation
1. Develop annual technology development plans with the assistance of building-level Library Technology Specialists.	Administer self-assessment survey for the development of individual staff development plans.	Library Technology Specialist. Staff Survey. Individual staff Development Plans.	Library Technology Specialist.	NHA annual operations budget for professional development	September through June each year.	Staff list of individual technology staff development plans.
2. Professional Development will be delivered in multiple mediums to meet the various needs of individual teachers.	Provide training in appropriate medium based on individual staff development plan.	Library Technology Specialist. Training Materials. Access to various training resources.	Library Technology Specialist. Principal	NHA annual operations budget for professional development	September through June each year.	Staff Survey.
3. One teacher representing lower elementary, upper elementary, and middle school will take part in professional development geared toward the mentoring of other staff members in the use of technology.	Administer self-assessment survey for the identification of staff technology mentors.	Library Technology Specialist. Staff Survey. Training Materials.	Library Technology Specialist. Teacher Leaders IC	NHA annual operations budget for professional development	September through June each year.	Completed Staff Surveys.

4. The school will assess the effectiveness of its professional development and establish new school-level goals annually.	Develop a communication and evaluation tool for assessing effectiveness of staff development.	Library Technology Specialist.	Library Technology Specialist. Teacher(s). Principal	NHA annual operations budget for professional development	September through June each year.	Review of completed evaluation tool.
5. Offer high-quality training opportunities.	Provide appropriate training based on 'needs' assessment.	Library Technology Specialist. Staff Development survey.	Library Technology Specialist.	NHA annual operations budget for professional development	September through June each year.	Staff Development Survey.

Connectivity & Infrastructure

Current Situation

Through its affiliation with NHA, Triumph Academy benefits from the professional services and shared infrastructure provided to all NHA affiliate schools. This infrastructure has been developed to support the needs of the school while minimizing the cost by effectively managing the infrastructure lifecycle, accessing shared resources, and leveraging economies of scale.

NHA aligns aspects of the technological infrastructure with the NHA educational program. The process of aligning these elements of instruction and infrastructure must be a deliberate and ongoing effort. The processes involved in this effort include:

1. Hardware selection
2. Hardware allocation and distribution
3. Software selection and adoption
4. Network design and implementation
5. Network usage policies

By aligning its infrastructure requirements and educational goals, NHA will determine the base hardware and software infrastructure it deploys within the school's standard operating budget. In addition to the hardware/infrastructure included in the budgeting process, NHA's IT team is committed to consulting with and supporting the acquisitions of additional technology. Any new technology will meet the technical standards and hardware requirements

Goals for Connectivity and Infrastructure

1. Develop and publish processes for setting technology infrastructure standards.
2. Develop a system to review and implement appropriate emerging and existing technologies to provide greater flexibility for use in the instructional environment.
3. Develop a methodology for measuring, reporting and controlling TCO.
4. Develop processes for documenting and publishing building-level best practices for the effective integration of technology.

defined by the NHA hardware model. NHA is committed to providing ongoing support.

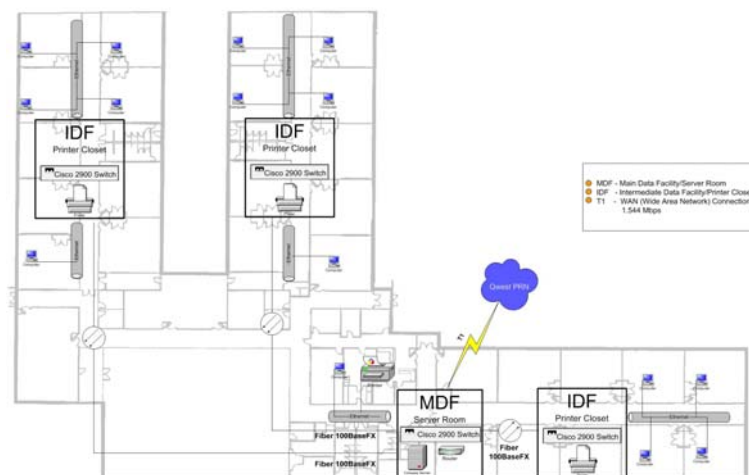
The current infrastructure at Triumph Academy consists of the following elements:

- 1) Local Area Network (LAN)
- 2) Wide Area Network (WAN)
- 3) Internet Access
- 4) Telephony

LAN Infrastructure

The Triumph Academy facility is cabled with Category 5 wiring throughout the building. Each physical room in the building (except restrooms and mechanical closets) contains at least one data port with all classrooms containing at least 4 ports. There are currently a total of approximately 200 ports in the building. All data ports are terminated in one of 4 Closets. The closets are connected via fiber optic cabling.

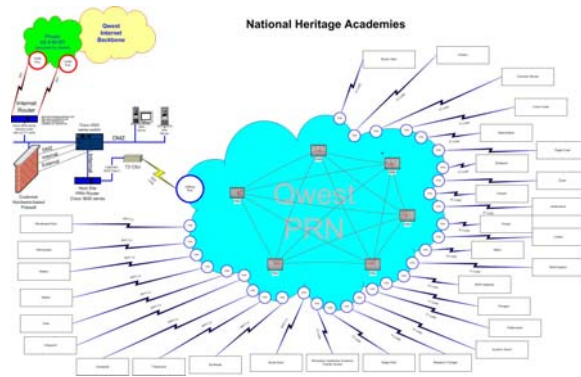
The active networking hardware operates at 100Mbps in a completely switched environment; providing 100Mbps access to each device on the network. The LAN utilizes TCP/IP exclusively. This component of the infrastructure is detailed more clearly in the diagram below:



The LAN was designed and installed by NHA's technology staff. All LAN management is handled through remote management tools by the NHA technical staff. In the event that onsite maintenance is required, the NHA technology staff either comes to Triumph Academy or contacts the appropriate local contractor to resolve the issue.

WAN Infrastructure

Triumph Academy receives many of its data services through its access to the NHA provided WAN. The WAN connectivity provides access both to NHA resources and to the Internet. The school currently has a T1 circuit provisioned through Qwest Communications. This circuit uses Qwest's Premium RPN service to connect securely to all other NHA sites in a fully meshed topology. (see WAN diagram below)



WAN connectivity is monitored and managed remotely by the NHA technology staff. A WAN engineer at NHA maintains responsibility for circuit, equipment, and configuration issues.

Internet Access

Internet access for Triumph Academy is obtained through the schools connection to the NHA WAN. All traffic emanating from the school is routed through a web filtering solution. All incoming SMTP traffic is routed through a content filtering application to reduce the amount of unsolicited E-mail received by staff. By providing firewall, SMTP, and HTTP filtering at a single Internet connection point, NHA is able to provide Triumph Academy with reliable services that meet or exceed CIPA guidelines while minimizing the overhead cost to the school.

Telephony Infrastructure

Telephone access is provided in every classroom at Triumph Academy through 3Com's NBX voice over Ethernet system. The telephone system provides a high degree of functionality and individual voicemail. The NBX system includes a Web-based configuration tool employed by NHA's technology staff to provide support remotely for telephone issues. The specification for the NBX system our outlines in the table below:

System capacity: Supports up to 200 devices (lines and stations), including up to a maximum of 100 PSTN Central Office lines and up to 80 hours voicemail storage
PSTN gateway options: Loop-start analog, T1/PRI, E1/PRI, ISDN BRI-ST
WAN port connections: Via external router with IP-ToS support
LAN port connections: one 10 Mbps MDI (RJ-45) and one BNC Coax Connector on the call processor
Analog phone devices: Supports 2500 series-compatible analog devices, including cordless phones, fax machines, night bells, and door ringers
Network standards: 100BASE-T, 10BASE-T, 802.1p/Q, 802.2, 802.3, IP, IP-QoS, IGMP
Application standards: TAPI 2.1, TAPI/WAV, IMAP4, HTTP, H.323

Future

The development of a flexible and connected infrastructure for Triumph Academy is important. However, it is even more important that this infrastructure be designed to handle the applications that drive the instructional program at the school. Through its relationship with NHA, Triumph Academy relies on NHA for support of both its curriculum and its IT infrastructure. These departments at NHA work closely with school officials to ensure that adequate resources are available to meet the needs of students.

Goals

Goal	Objective/ Strategy	Resources Needed (Human & Material)	Person(s) Responsible	Budget Needs	Time-line (Beginning & Ending dates)	Method of Evaluation
1. All staff members will have their own classroom computer.	Identify staff needs and purchase appropriate number of computers.	Library Technology Specialist. Staff Needs List.	Library Technology Specialist. Administrator.	NHA annual operations budget for technology	Ongoing throughout the school year assessment and review of inventory and equipment needs	Purchase and maintain computers for all staff – review helpdesk reports and staff development skills each spring
2. Allocate and distribute hardware throughout the building to meet instructional requirements and improve student achievement.	Provide greater access of computers to students.	Library Technology Specialist. Computers.	Library Technology Specialist.	NHA annual operations budget for technology	Ongoing throughout the school year assessment and review of inventory and equipment needs	Review student schedules and determine if additional instruction time boosted student technology literacy skills

Personnel

Current Situation

Instructional Technology Support

In order to provide teachers with high-levels of support for the use of technology, Triumph Academy employs a full-time Library Technology Specialist. The LTS's responsibilities include the supporting the delivery of a technology-integrated curriculum and the delivery of staff development.

Media Center Support

An LTS staffs the majority of the Media Center at Triumph Academy. Media center policies and procedures are shared throughout NHA schools by a media center coordinator.

Information Technology Support

NHA provides technology support services to Triumph Academy through its Information Technology (IT) team. This team provides centralized management of NHA's technological infrastructure, consults with school staff regarding technology needs and use, and sets IT policies for all NHA affiliate schools. The responsibilities of this team includes management of NHA's Wide Area Network (WAN), Local Area Networks (LANs), file servers, desktop and portable computers, Web (WWW) servers, application servers, software configurations, etc. In addition to managing this infrastructure, the IT team provides a technical support through a centralized help desk made accessible via telephone or through a Web browser.

The centralization of IT support creates economies of scale and lowers the TCO for technology implementation at the school. Currently, NHA supports 2000 desktops with four technicians (500:1 ratio) by leveraging management technologies.

Future

Triumph Academy must maintain a strong alignment between the instructional goals for technology use and the personnel in place to support those goals. The school will continue to benefit from shared resources through its affiliation with NHA, relying on NHA to provide technical support, curricular materials, and staff development resources. This partnership with NHA will allow Triumph Academy to provide effective support to instructional and administrative staff while minimizing the overall cost to the school.

Technology Facilitator

The school's Library Technology Specialist (LTS) will assume the ownership and responsibility of the technology program within the school. Responsibilities will include oversight of building-level technology efforts, management of the staff-development program, and ongoing assessment of building needs. This person will work hand-in-hand with teachers to support the infusion of technology in the academic curriculum.

The LTS will truly be a member of the school staff. The school leader will be responsible for hiring and managing the LTS. NHA is committed to providing training to LTS's and providing guidelines for their activities. The corporate IT team will support the LTS.

Technical Support

Technical support will be provided through the school's relationship with NHA. NHA will continue to assess its technical resources to maintain internal SLA response times to its customers. The NHA support system currently utilizes both online and telephone ticket management.

Shared Technical Services

Triumph Academy will continue to develop its strategy of centralizing technology services. With this strategy as its focus, NHA's technology team will evolve to be organized in three teams:

1. Network & Infrastructure services
2. Technology Deployment services
3. Application Development & Integration services

As a result of this philosophy, Triumph Academy will strive to maintain the highest caliber of technical and curriculum support with the minimum number of resources.

Goals

Goal	Objective/ Strategy	Resources Needed (Human & Material)	Person(s) Responsible	Budget Needs	Goal	Method of Evaluation
1. The school will continuously seek additional funding sources to establish a staffing model that extends time allotments for the Library Technology Specialist to maximize services of curricular and staff development.	Establish extra funding for increased work hours for the Library Technology Specialist.	Funding.	Administrator.	LTS Salary and benefits.	September through June each year.	Increase in work hours for the LTS based on additional funding.

Resources

Current Situation

Resources

NHA schools have access to several technology resources. Every computer at NHA schools is connected to the LAN and has access to the Internet through the NHA WAN. This level of connectivity and network access allows instant access to state resources via the Web, and school resources through the LAN (i.e. OPAC access via Follett, instructional software, browser-based E-mail access, and access to appropriately secured administrative systems).

The software resources offered as part of the model can be grouped into these categories:

- (1) Instructional Software - titles designed specifically for educational purposes
- (2) Productivity Software – titles for personal and professional productivity
- (3) Management Software – to improve the manageability of the systems on the network

Software included in current model includes:

BASC	Social Assessment (Social Worker)
Bowmac REDI for School Emergencies - office	Emergency - State
Earobics v 3.4	Speech & Language (Special Education)
Encarta 2006	Research (3-8)
Finale Notepad v2005	Music Composition
Follett v 6.1	Library Administration
Graph Club v 2.0	Math (K-3)
Inspiration v 8.0 (Upgrade Fall 2006!)	Concept Mapping -Cross Curricular (3-8)
Intel QX3 Microscope	Science
Timeliner 5.0	Time line program/all subjects
AtSchool (School Management/Report Cards etc)	
NWEA Test Taker	MAP Testing (K-8)
Scanners – HP 3400, HP 3670	General Productivity
SIRS	State Reporting
Star Early Literacy	MAP Testing (K-2)
Test Wiz – Office/Principals only	MAP Testing Administration
Scholastic Keys (Pilot Fall 2006)	Cross Curricular (3-8)
Type to Learn (2006 upgrade)	Keyboard instruction (2-8)
LifeTouch Image CD v 9.1	Yearbook
Yearbook Forms Wizard	Yearbook

Distribution of Technology Access

The appropriate tools must be readily available for all stakeholders to access technology. Triumph Academy envisions a school environment in which every device is connected to the school network and where stakeholders can access resources appropriate to them through any device. NHA's technology group has already made great strides in this area, providing a LAN & WAN design that allows for roaming users and customized access to resources. The wireless connectivity is now available throughout NHA schools.

Triumph Academy is committed to parent involvement. To support this, Triumph Academy has made computer access available in its parent room as well as access to other technologies as needed.

Alignment of Resource Selection

Providing access to resources is only part of the solution. These resources must be aligned with student and curricular needs. To provide guidance to the selection process, a resource selection policy must be engaged. This policy should provide guidelines for the selection process that include a needs analysis based on the results from student assessments.

Publication of School Information

NHA is committed to providing parent access to student information via AtSchool.com, a proprietary Web-based student information system. Moving forward, NHA and Triumph Academy will extend this functionality to include more school-related information (i.e. this School Technology Plan, calendars, publications, memos, etc.) and allow for parents to access it via the Web

Several beneficial resources are available from outside the school as well. Triumph Academy realize the value of resources outside its network by tying NHA's core curriculum to research and resources such as

- Community and Regional libraries
- Intermediate School Districts, REMC's, and RESA's
- Video libraries
- Online media (such as video teleconferences)

Goals

Goal	Objective/ Strategy	Resources Needed (Human & Material)	Person(s) Responsible	Budget Needs	Time-line (Beginning & Ending dates)	Method of Evaluation
1. Investigate use of electronic resources into classroom practice.	Align use of educational software (e.g. Inspiration, Timeliner) and NHA History Interactive into classroom practice to improve student achievement.	Computers. Software. Regular academic Curriculum Resources. Internet Connection.	Library Technology Specialist Teacher(s).	LTS Salary and benefits.	September 04 through June 14.	Completed rubric highlighting software use with academic goals.
2. Select resources based on assessment of student needs.	Highlight appropriate resources for student instructional needs.	Library Technology Specialist Hardware & Software. Educational Resources.	Library Technology Specialist Teacher(s).	LTS Salary and benefits.	September 04 through June 14.	Individual instruction plans matching resources with student needs.

Hardware Recommendations

Current Situation

NHA has adopted stringent hardware standards designed to ensure system reliability and performance while simultaneously minimizing support time and costs. These standards are enforced through acquisition and support policies and enable NHA to reach a 500:1 computer to technician ratio while maintaining the highest standards for support. Hardware standards address product continuity, total lifecycle cost, reliability, and performance. These criteria are applied to telephony hardware, desktop and portable computers, cabling, networking hardware, software, digital imaging devices, software, and management tools.

NHA envisions the development of a technology rich environment that would enable:

- 1) Technology literate students with ready access to technologies that support the collection of information and the creation of content.
- 2) Technology empowered teachers with access to technologies that enhance their instruction in powerful and dramatic ways.
- 3) Technology-enabled administrators able to effectively manage school operations and monitor academic progress at the student, classroom, and school levels.

NHA will apply the following criteria to decisions related to hardware acquisition:

- 1) Instructional/curricular requirements
- 2) Operational requirements
- 3) State/industry standards
- 4) Support requirements (maintenance, remote management)
- 5) Total Cost of Ownership
- 6) Scalability
- 7) Return on Investment (ROI)

School Assets

Currently the Triumph Academy maintains a 1 computer per student computer ratio during assigned computer lab periods. Additionally, Triumph Academy is equipped with a full compliment of tier 1 networking equipment (Cisco or HP router and switches) as well as network attached workgroup printers located throughout the building and a multi-function printers/scanners/fax machine. For instructional purposes, Triumph Academy also employs 7 LCD projectors throughout the school.

Controlling TCO through Lifecycle Management & Standards

Hardware at Triumph Academy is procured, installed, and managed through its relationship with NHA. This arrangement allows the school to maintain its focus on the instructional uses of technology while relying on IT professionals at NHA to focus on issues of performance, scalability, reliability, TCO, licensing, etc.

The following sections describe the current state of the hardware specified by NHA's hardware standards.

Telephony Hardware

Triumph Academy places a high value on providing telephone access in every classroom, making it standard issue for all NHA classrooms. In addition to providing ready access to communications in the event of an emergency, the telephone also provides a critical link that supports the Parent-Teacher partnership. Triumph Academy has 28 handsets at the facility.

Networking Hardware

Triumph Academy houses a Local Area Network (LAN) and a connection to NHA's Wide Area Network (WAN). This networking hardware is housed in data closets (MDF and IDFs) to maintain some level of security and to protect the equipment from damage. Each closet houses active networking hardware necessary to provide network connectivity for all data jacks within that wing.

The NHA WAN is in place to provide connectivity between NHA affiliated schools for data transport and to serve as a common gateway for access to the public Internet. NHA's headquarters in Grand Rapids, Michigan, provides Internet access, content filtering and firewall services for nodes on the WAN. By providing a single Internet gateway, NHA is able to manage the security cost-effectively for Triumph Academy by spreading that cost over all NHA affiliated schools. This design reduces the likelihood of unauthorized access to nodes on the network and streamlines network management functions with the ultimate goal of significantly reducing TCO.

To provide data for WAN management, the NHA technology group has standardized on Cisco 2600/2800 series or HP 7100 routers.

Computer Hardware

Perhaps the hardware with the largest TCO (as a percentage of purchase price) is the personal computer. NHA deploys technology that should be sufficient for at least four years, with six year on the thin clients, without requiring any upgrades or maintenance. Hardware is replaced through a scheduled process entitled "refresh." This is done to insure interoperability of equipment and provide for necessary upgrades. Each school is equipped with two servers with the primary purpose of storing data, managing network printing, and serving network enabled applications to client computers.

NHA's technology group revises the standard annually to match the latest technology and insure the most effective migration path for all devices. Since 1998, NHA schools have worked exclusively with HP (Compaq) for servers, desktops, thin client computers, and laptop / portable computers.

Future

Triumph Academy envisions the development of a technology rich environment that would enable the following:

- 1) Technology literate students with ready access to technologies that support the collection of information and the creation of content
- 2) Technology empowered teachers with access to technologies that enhance their instruction in powerful and dramatic ways
- 3) Technology-enabled administrators able to effectively manage school operations and monitor academic progress at the student, classroom, and school levels.

Improve Accessibility

Triumph Academy will involve consultation from the IT professionals at NHA in an effort to make educated, impacting decisions.

In addition to the hardware provided through the contract with NHA, Triumph Academy will pursue external funding sources to provide enhance access to technology within the school. Technology acquired through external funding sources must meet all NHA hardware Standards. After consultation and acquisition, the NHA technology team is committed to provide ongoing support.

Enhance Robustness & Security

Due to the sensitive nature of student information, the technology employed at each Triumph Academy school must be dependable, reliable, robust, and secure. When considering security, confidential student information must be protected from hackers, students should be shielded from access to inappropriate material, and systems must be protected from the potential damage that can result from computer viruses. To achieve this level of security, Triumph Academy relies on NHA's technology group to employ security best practices. Such practices will include scheduled security audits, group policies for desktop computer security, policies for maintenance of security patches, employing encryption for the transmission of student data, implementations of secure technologies such as VPN and PRN.

Provide Greater Flexibility

Technology is most successfully implemented in the school environment when its use is most closely aligned with the instructional and cultural environment in the school. While NHA's technology professionals determine hardware standards Triumph Academy must determine the appropriate quantity, distribution, and utilization of the technology to meet student needs. As a result, the technology available at Triumph Academy must provide for increased flexibility while balancing the need for hardware and software standards.

Technical Support Procedures

Triumph Academy has clearly defined technical support procedures designed to take advantage of NHA's shared IT support functions. All technical support issues are addressed through NHA's help desk. Once a ticket has been issued, the ticket is immediately assigned to one of NHA's technicians. These technicians determine whether this is a hardware or software issue. The technician connects to the computer remotely and demonstrates how to correct the problem to the customer.

NHA will continue to seek more efficient methods for addressing technical support issues as both the technologies and the organization evolves.

Lower Total Cost of Ownership (TCO)

As the recipient of public funds, TA strives to demonstrate good stewardship of its financial resources. Lifecycle management and attention to TCO are both essential elements of effective financial stewardship. With assistance from NHA's technology group, Triumph Academy will continue to apply industry best practices to technology integration with the goal of reducing the costs of ongoing support and maintenance costs. NHA will continue to track these costs over time and report the results to Triumph Academy on an annual basis.

Goals

Goal	Objective/ Strategy	Resources Needed (Human & Material)	Person(s) Responsible	Budget Needs	Time-line (Beginning & Ending dates)	Method of Evaluation
1. Plan for and acquire hardware in accordance with the guidelines stated above.	Purchase extra technology hardware.	School Budget. Corporate Technology Consultant.	Library Technology Specialist.	Ongoing throughout the school year assessment and review of inventory and equipment needs – School Improvement plan goals for technology funding	September through June each year.	Determine if technology goals for the year have been met – decisions each June

Policy

Current Situation

Triumph Academy has adopted several policies and procedures to ensure compliance with applicable state and federal guidelines for technology use in schools. The following list details the policies currently in effect and those currently under consideration for adoption.

Current Procedures	Procedures in Development
Deployment Procedures Help Desk Technical Support Request policy	A plan for translating all student/parent-related policies into the predominant languages of the community (not applicable at this time)
Current Policies	Policies Recently Adopted
A hardware and software procurement policy that follows Information Resource Management (IRM) technology standards. CIPA compliant Acceptable Use Policy Network security policy A policy for equipment maintenance, repair, replacement, and disposal A policy for equipment/materials donation A comprehensive policy for inventory control	A Materials Selection Policy as mandated by GS115C-102.6 A Copyright Policy Guidelines for Web site development A comprehensive policy for inventory control (in progress) An Access to Information Policy that, if filtering systems are used, ensures adequate data retrieval capabilities for both students and staff A policy that addresses advertising and commercialism on school resources and equipment A data privacy policy that addresses FERPA and state legislation

New additions during the 2006-2007 school years.

Web Site Development

The NHA Admissions department has created the ability for each school to have their own webpage; Triumph Academy has an established website for the last two years.

Data Privacy

NHA must develop and publish a data privacy policy in compliance with the Family Educational Rights and Privacy Act of 1974 (The Buckley Amendment), 20 U.S.C. S123g and 34 C.F.R. Part 99.

Access to Information Policy

NHA affiliated schools will have an Access to Information Policy as NHA develops Internet filtering mechanisms in accordance with Public Law 106-554, The Children's Internet Protection Act (CIPA) and the Neighborhood Children's Internet Protection Act. This policy must ensure adequate data retrieval capabilities for both students and staff and provide for legal requirements relating to Internet access. This policy will include disaster recovery.

Policies, Procedures, Guidelines	Date of Adoption or Implementation
Policies	
A. Materials Selection	June 2003
B. Hardware and Review and Purchase	Revised June 2005
C. Copyright Policies	Revised June 2006
D. Acceptable Use Policy/ Internet Safety Policy	Revised June 2006
E. Access to Information Policy	June 2003
E. Access to Services Policy	June 2003
F. Data Privacy Policy	June 2003
G. Inventory Control Procedures	Adopted January 2005
H. Equipment/Materials Donation Policy	December 2006
I. Replacement of Obsolete Equipment	December 2006
J. Network Security Policy	June 2007
K. Advertising and Commercialism Policy	June 2003
L. Discipline Policy	June 2003
Procedures	
A. Hardware and Software Deployment	Revised June 2005
B. Equipment maintenance and repairs	Revised June 2005
C. Outdated Resources and Equipment Replacement	Revised June 2005
D. Disaster Recovery of Data and Hardware	June 2003
E. Administration of Online Courses	June 2003
Guidelines	
A. Policy Translation	In development
B. Web Site Development	June 2005
C. Instructional Use of Videos	June 2003
D. Development of Online Resources	June 2003

Budget

Current Situation

Budgeting Philosophy

All technology expenditures and decisions of allocating these funds at the school are fundamentally tied to being successful in fulfilling the vision of all students becoming computer literate by the eighth grade.

Lifecycle Management

Triumph Academy utilizes a hardware refresh cycle for managing the cost of technology throughout its lifecycle. All equipment and software supplied through NHA is being purchased. The refresh cycle for thin client computers is six years and the remaining equipment is four years. The technology department may decide that a certain piece of hardware is still viable after the refresh cycle and will continue to deploy it.

Specific Budgeting for Instruction, Staff Development, Personnel, Resources, Hardware, and Evaluation

Budget allocations for the Technology Facilitator role at Triumph Academy are embedded in the school's personnel budget. This role is budgeted as a .5 FTE once the school has more than 400 students enrolled.

Other budgeted items such as shared services provided by NHA (i.e. Internet access, WAN access, Help Desk) are accounted for in a billed services model. Triumph Academy is billed for a proportional portion of the services they receive from NHA's IT department. Other services such as access to AtSchool/atschool.com, the curriculum center, development of the Technology Curriculum, support for the LTS/LTA are included as value-add services and are not billed or included in the school budget.

Future

Aligning the Budget

Triumph Academy and NHA are committed to providing the necessary tools and resources to its students to ensure academic success. The distribution of technology within the school must be fully aligned with the educational philosophy and fiscal constraints at Triumph Academy. External funding sources may be sought to enhance the use of technology at the school.

Managing TCO

NHA is committed to developing systems, procedures, and support structures to improve technology's impact while reducing the TCO. NHA's Information

Goals

Goal	Objective/ Strategy	Resources Needed (Human & Material)	Person(s) Responsible	Budget Needs	Time-line (Beginning & Ending dates)	Method of Evaluation
1. Develop a plan for seeking external funding to develop and sustain the addition of instructional computing resources, curriculum and professional development.	Establish extra funding for instructional requirements.	Library Technology Specialist Funding.	Library Technology Specialist.	NHA annual operations budget for professional development	September through June each year.	Listing of an increase and implementation of additional technology resources.
2. Research and seek external funding sources to facilitate and expand professional development opportunities in technology.	Gain external funding for professional development.	Library Technology Specialist.	Library Technology Specialist.. Administrator.	NHA annual review of grant applications and funding received.	September through June each year.	Documented increases of staff development opportunities.
3. Research external funding sources to improve student access to technological resources.	Purchase extra computers through external funding.	Library Technology Specialist.	Library Technology Specialist.	NHA annual review of grant applications and funding received.	September through June each year.	Improvement in student access and computer ratio based on external funding.
4. Research and seek grant monies to facilitate and expand professional development opportunities in technology.	Gain grant funding for professional development.	Library Technology Specialist. NHA Intervention Services	Library Technology Specialist. Administrator.	NHA annual review of grant applications and funding received.	September through June each year.	Documented increases of staff development opportunities.

Communication & Collaboration

Current Situation

Through its association with NHA, schools are able to take advantage of several vehicles for communication and collaboration NHA offers. NHA has demonstrated a strong commitment to use technology for communications. NHA's strategy for communicating via technology can be traced back to the development of *AtSchool*, NHA's proprietary Web-based student information management system. This system has become a hallmark of our internal operations and serves as a major communication vehicle both within the organization and externally with parents. *AtSchool* currently serves as the primary vehicle for disseminating information throughout the NHA school community. In addition to information such as school calendars and newsletters, *AtSchool* also allows teachers to communicate specific student information with parents such as subject-by-subject grade summaries and attendance data.

Principal Meetings – NHA currently provides technology updates (covering report card processes, resources, reviewing policies procedures, instructional practices and general questions) at monthly principal meetings for all NHA affiliated schools.

Library Technology Specialist - Principal Meetings – Library Technology Specialist (LTS)' at each school have periodic meetings with school leaders, school leadership teams, and at full staff meetings to discuss educational technology issues at their school (i.e. instructional uses of technology, project ideas, and teacher training).

Classroom Planning – LTS' currently meet with individual teachers, small groups, or entire staffs to devise effective uses of technology with respect to the NHA curriculum.

Regional LTS Meetings – As the primary support structures within the school, Library Technology Specialist must be well trained in the various aspects of their role. To support these efforts, NHA has committed resources that allow for regularly scheduled regional training sessions for Library Technology Specialist.

Future

Strong channels for communication and powerful tools for collaboration must be available not only within the organization, but must provide means for outreach into the local and professional communities. Schools have committed themselves to providing the infrastructure necessary to facilitate communications. In order to fully realize the investment in this infrastructure, however, NHA must provide tools that encourage sharing and improve communication.

Affiliated Groups

Triumph Academy has identified the following groups as potential partners for collaboration at the local, regional, and national levels:

Local / Regional

Intermediate School Districts – Assist NHA with communication on state reporting regulations and access to state technology resources.

Universities & Colleges – Local colleges and universities have a wealth of technological resources at their disposal. Through affiliation with local institutions, schools may have opportunities to become part of pilot programs or benefit from access to the resources of the institutions.

Granting Agencies – NHA schools may be able to collaborate with local foundations, institutions, or businesses to form partnerships. These partnerships may result in access to grants, donations of services or goods, opportunities to share resources, or may take other forms.

National Heritage Academies - National Heritage Academies provides opportunities for collaboration through programs such as the NHA University Summer Institute (a summer training opportunity for teachers), monthly principal meetings, New Teacher Orientation (offered to all new NHA teachers), etc.

Goals

Goal	Objective/ Strategy	Resources Needed (Human & Material)	Person(s) Responsible	Budget Needs	Time-line (Beginning & Ending dates)	Method of Evaluation
1. Promote parent collaboration in their child's education through the use and access of student data systems (atschool.com).	Hold a parent information meeting to highlight access, availability of online student assessment data.	Computers Student Data systems	Library Technology Specialist. Administrator.	NHA annual budget allocations for AtSchool	September 04 through September 28.	List of parent applications for online access to the student assessment data.
2. Staff will be proficient in using electronic tools (i.e. Email) to communicate and collaborate with other people throughout the organization.	Provide training on Email use based upon individual staff development plan.	Library Technology Specialist. Training Materials.	Library Technology Specialist	NHA annual budget allocations for professional development	September 04 through September 28.	Staff Self-Assessment.
3. Staff will be able to use network drives and resources to share knowledge and 'best-practices'.	Provide training on accessing and using network drives.	Library Technology Specialist. Training Materials.	Library Technology Specialist.	LTS Salary and benefits.	September 04 through October 03.	List of "best-practice" resources posted on network drives.

Evaluation

Current Situation

Evaluation of technology integration efforts at Triumph Academy are performed informally. The Technology Facilitator is primarily responsible for the implementation of the instructional and staff development portions of the technology plan. The Technology Facilitator and the school leader meet on a regular to assess the state of the technology efforts at the school.

On an annual basis, goals devised through the technology planning process are reviewed in the development of each school's annual action plan.

Future

The Triumph Academy technology plan must become a living document, transforming to meet the changing demands of the school as the environment changes. The Technology Plan, as mentioned in previous sections, is valid only inasmuch as it aligns with the instructional needs and plans for the school. In order to ensure that alignment, the Triumph Academy technology plan must, in effect, serve as an extension of the Triumph Academy School Improvement Plan. Using this frame of reference, the evaluation of technology use must be tied into the school improvement process and overseen by the school improvement team. Additionally, identifying and measuring the key metrics for technology use must become part of the evaluation performed by NHA on an annual basis. Ultimately, since teachers drive the integration of technology at the classroom level, metrics and technology goals should become a part of the teacher evaluation process at Triumph Academy.

Goals

Goal	Objective/ Strategy	Resources Needed (Human & Material)	Person(s) Responsible	Budget Needs	Time-line (Beginning & Ending dates)	Method of Evaluation
1. Identify goals of school level educational technology plans and continuously assess progress towards those goals.	Monitor progress of goals on a monthly basis.	Library Technology Specialist. School Technology Plan. School Improvement Plan.	Library Technology Specialist.	NHA annual budget allocations for school improvement planning	September 04 through June 14.	Monthly progress report.
2. Support the creation and use of teacher created rubrics to evaluate students' media and technology projects.	Create and train teachers in the use of a technology skill assessment checklist/rubric.	Library Technology Specialist. Technology Scope & Sequence	Library Technology Specialist.	Budget allocations for teacher planning time per semester/substitute pay	September 04 through June 14 each year.	Teacher use and submission of completed rubrics.
3. Make course corrections to media/technology projects and/or technology plan as needed, based on formative assessment.	Measure student skill development during project completion.	Library Technology Specialist. Lesson Plans outlining formative assessment procedure(s). Technology skill checklist.	Library Technology Specialist. Teacher(s).	NHA annual budget allocations for school improvement planning	September 04 through June 14.	Completion of skill checklist.
4. Collect baseline data at the start of every media and technology initiative.	Create and administer a baseline technology skill project.	Library Technology Specialist.	Library Technology Specialist.	NHA annual budget allocations for testing and reading and reporting data	Ongoing through the calendar year	Completion of skill checklist.

Technology Acceptable Use Policy (AUP) - National Heritage Academies

The Internet is a vast collection of integrated communication and resources, including the World Wide Web, News Groups, Blogs, Wikis, E-Mail, and more. This collection of media enables students to access thousands of libraries, databases, museums, and exchange personal communication with other Internet users around the world.

Software used in school is becoming increasingly integrated with the Internet, using Internet resources to enhance the fundamentals of the software. Within our current software model, more than half of the titles are integrated with the Internet in some form. It has become inevitable and imperative for students to have access to the Internet when using a computer within the NHA network.

Families must be aware that some material accessible via the Internet contains illegal, defamatory, inaccurate, or potentially offensive language and/or images. While the goal of the school is to use Internet resources to achieve educational goals, there is always a risk of students accessing other materials. We believe you should be aware of these risks.

While there are risks, we believe that the benefits of using technology outweigh the disadvantages. Our teachers will be trained in the appropriate use of technology with students. We will make every effort to integrate the schools moral focus with lessons that utilize technology, but ultimately, parents and guardians of minors are responsible for setting and conveying the standards for students regarding the use of media and information sources at home and at school. Therefore, we support and respect each family's right to decide whether to allow their child to access the NHA computer network by having the option of accepting the **Technology User Agreement and Permission Form**. However, by choosing not to accept the **Technology User Agreement and Permission Form**, your child will not have permission to use a computer or any device attached to the NHA computer network.

Responsibilities and Expectations

All use of computers, furnished or created data, software and other technology resources as granted to the employee and student body are the property of National Heritage Academies and are intended for business and educational use. Network users shall not access, or willingly allow another person to access, any network resource without proper authorization.

Students are responsible for appropriate behavior on the school's computer network just as they are in a classroom or on a school playground. Communications on the network are often public in nature. General school rules for behavior and communications apply. It is expected that users will comply with this policy and the rules set forth on the **Technology User Agreement and Permission Form**. The use of the network is a privilege, not a right, and may be revoked if abused. The user is personally responsible for his/her actions in accessing and utilizing the NHA computer network and/or the computer resources of the school.

General Rules of the Network

- 4) **Privacy** -- Network storage areas may be treated like school lockers. National Heritage Academies reserves the right to monitor Internet traffic, retrieve and read any data composed, sent, received, and/or stored using our network and/or Internet connections. Network administrators may review communications to maintain system integrity and insure that students are using the system responsibly.
- 5) **Storage capacity** -- Users are expected to remain within the allocated disk space and delete e-mail or other material, which take up excessive storage space.
- 6) **Proper usage of printing resources** - Users are expected to use good judgment when printing on network printers. Paper, toner and color ink can be costly and excessive use of these resources is wasteful. Please proofread documents carefully before printing. Only print the part of the document that you need. In addition, users must obtain permission from their instructor before printing documents on the color printer. The color printer should only be used for work submitted as part of an assignment or project which requires color copy. All color printing should be done under direct supervision of the instructor overseeing the project.
- 7) **Illegal copying** -- Users should never download or install any commercial software, shareware, or freeware onto network drives or disks. Nor should users copy other people's work or attempt to intrude into other people's files. All copyright laws must be respected. A copy of the copyright laws pertaining to digital property can be obtained from the technology department.
- 8) **Inappropriate materials or language** -- Profane, abusive, pornographic and/or impolite language or materials is not permitted on the NHA computer network. Accessing materials not in line with the rules of school behavior is not permitted. A good rule to follow is never view, send, or access materials that you would not want your instructors and parents to see. Should students encounter any inappropriate material by accident, he/she should report it to their instructor immediately.
- 9) **Virus Protection** - All data from outside sources will be scanned for viruses before use on any computer within the NHA network. Downloading/saving of non-work related attachments to e-mails, on any computer within the NHA network, will not be allowed unless proper authorization is obtained from their instructor.

Protection of Data

1. Every effort will be made to ensure the safety and integrity of your data using a daily backup system and other security measures. However, National Heritage Academies makes no warranties of any kind either expressed or implied, for the service it provides.
2. National Heritage Academies will not be responsible for any damages to your data. This includes loss of data resulting from delays, non-deliveries, mis-deliveries, or service interruptions caused by the NHA computer network, outside networks, and/or your errors or omissions.
3. Use of any information obtained via the Internet is at your own risk. National Heritage Academies is not responsible for the accuracy or quality of information obtained through the Internet or the NHA computer network.
4. Vandalism and/or the failure to abide with this policy and/or failure to abide with the rules set forth by the **Technology User Agreement and Permission Form**, may result in cancellation of any or all network privileges. Vandalism is defined as any malicious attempt to harm or destroy any files and/or school hardware or software.

Installing Software

Network users are NOT authorized to install any software on any computers or computer related technology within the NHA computer network. Any software installed by anyone other than the network administrator will not be supported by NHA technicians and will be removed from the computer(s) on which it was installed. This is necessary to maintain network integrity and to follow all applicable software licensing agreements.

Publishing of Student Work and Photographs

From time to time, student work and photographs may be published on NHA's Intranet. This work may be published in a manner that is accessible on the World Wide Web. By agreeing to this policy, you are granting the right to use your child's work and/or photograph on an Internet accessible server.

Additional Information

1. Users are expected to be responsible, courteous and thoughtful when using school computers. Common sense should prevail. The use of the NHA computer network should be in support of education and research and consistent with the educational objectives of National Heritage Academies.
2. Teachers are expected to monitor student use of computers.
3. While Internet usage is intended for work-related activities, incidental and occasional brief personal use is permitted within reasonable limits with the instructor's permission.
4. Use of any other organizations' network(s) or computing resources via our network must comply with the rules appropriate for that network and the instructor's permission.
5. Transmission of any material in violation of any US or state regulation is prohibited. This includes, but is not limited to: copyrighted material, threatening or obscene material, or unlawful material.

6. In accordance with the Children's Internet Protection Act (CIPA), NHA has placed a filter on its Internet access as one step to help protect our users from intentionally or unintentionally viewing inappropriate material. We currently filter through a service called Websense. Websense reviews websites and places them into one or more of their 30 predefined categories. NHA blocks the categories which are determined potentially inappropriate from user groups (students/general, teachers/office/library). Enforcement of this measure is found in the following policy:

Student Internet usage is permitted only via the NHA network and only in the presence and supervision of a teacher, the child's parent or guardian, or other designated adult school personnel. All adults who monitor student activity on the Internet will be approved by the school, have read and signed the NHA Acceptable Use Policy detailed above, and be familiar with the safety/protection technology already installed on the NHA network.

TECHNOLOGY USER AGREEMENT
AND PERMISSION FORM
2006 - 2007

A. As a parent or guardian of a student at National Heritage Academies, I have read the **Technology Acceptable Use Policy** about the appropriate use of computers at the school and I understand this agreement will be kept on file at the school. (Questions should be directed to the principal or technology department for clarification.) I have explained the following rules to my child to the best of my ability to help them understand the responsibilities that correspond with use of the NHA computer network:

- 10) The user's data must remain within the allocated disk space on all data drives and on the e-mail server.
- 11) Downloading or installing of any commercial software, shareware, or freeware onto network drives or disks is not permitted.
- 12) Copying other people's work or attempting to intrude into any user's folders or files is not permitted.
- 13) Using profane, abusive or impolite language to communicate and/or accessing, viewing, sending or displaying offensive, obscene, or abusive materials is not permitted.
- 14) Users must obtain a username and password from the National Heritage Academies Technology Department.
- 15) Sharing your password or allowing another person to access network resources under your username is not permitted.
- 16) Leaving a resource that you are logged onto unattended is not permitted.
- 17) Logging onto a resource for use by another person is not permitted.
- 18) Visiting non-education websites, chat rooms, or personal email accounts is prohibited.
- 19) Disclosing any sensitive data to others lacking the authority or right to view that data is not permitted.
- 20) Request a password change in the event you suspect your password is no longer confidential.
- 21) Using a computer to harm people or their work is not permitted.
- 22) Damaging the computer or the network in any way is not permitted.
- 23) Violating copyright laws is not permitted.
- 24) Wasting printing resources such as toner, color ink, and paper is not permitted.
- 25) Should students encounter any inappropriate material by accident, he/she should report it to their instructor immediately.

B. As a parent or guardian of a student at National Heritage Academies, I have read the above information describing the NHA position on the appropriate use of the Internet in the classroom. I understand my child will be using devices that are connected to the Internet in a supervised and educationally focused environment. I also understand that any breach of this "User Agreement" will result in the loss of computer privileges.

ACCEPT We accept and agree to abide by **the National Heritage Academies Technology User Agreement and Permission Form**. This agreement is on record and valid until my child is no longer enrolled with a school affiliated with National Heritage Academies.

DECLINE We decline the right to use the technology devices provided by National Heritage Academies.

Student Signature: _____

Parent Name (print): _____

Parent Signature: _____ **DATE:** _____

Please sign, date, and return this form to your school

Copyright Protocol

Dated 11/09/06

- NHA employees who provide original written, musical or technical work for NHA, in the course of their employment, are bound by the terms and conditions of the Copyright Clause contained in the Employee Handbook.
- Vendors hired to create written, musical or technical work for NHA, should sign an Assignment of Copyright. The Assignment transfers all copyright ownership to NHA. An Assignment of Copyright can be obtained from Dani Phillips, Legal Services & Risk Manager (616.954.3090) or dphillips@heritageacademies.com.
- Classroom Teachers are given considerable advantage in using copyrighted materials but should be trained in proper citation requirements and the scope of materials that can be copied.
- NHA customer service center employees who use materials from an outside source must follow the copyright clause displayed within the body of that source (e.g. a copyright clause may require permission before using the materials). NHA may be held to a higher standard than a Classroom Teacher. All sources should be properly cited.

Copyright Training:

Step 1: Library Technicians should be the initial point of contact for questions regarding copyright use. The "*Copyright Guidelines for Administrators*" by Hall Davidson is an excellent resource for training (www.techlearning.com).

Step 2: The above referenced poster may be used for nonprofit purposes. Approval must be submitted to techlearning_editors@cmp.com.

Step 3: The "*Copyright Guidelines for Administrators*" should be displayed in the Library. Training of teachers should be conducted on-site and on a semi-annual basis.

Step 4: Copyright guidelines should be taught to students and volunteers by each individual teacher.

Step 5: Annual review should be conducted of the Technology Policy and Plan.

Step 6: Semi-Annual audits should be conducted of licensed and registration materials.

National Heritage Academies

Technology Scope and Sequence for Staff

N	Novice: Introduction and overview of learning concepts/areas
B	Basic: Developed skills through planned training sessions
P	Proficient: Applied learning without direction
C	Technology Coach: Can train and assist others

Network Basics

		Years as a NHA Teacher	NTO	1	2	3	4	5
Login and Network:								
	NHA Technology Standards & Model							
	Log-in to the NHA Network	N	B,P	P	P	P	P	C
	Identify and use school network drives such as the Personal Z;; Universal & Project Drive(s)	N	B,P	P	P	P	P	C
	Contact the NHA Help Desk (electronic tickets and telephone)	N	B	P	P	P	P	C
	Understand the process and purpose of the NHA Desktop Image	N	B	P	P	P	P	C
	Identify and use other drives (e.g. A: Floppy & D: CD; other...)		N,B	P	P	P	P	C
	Locate computer identification information (e.g. IP address & Serial Number)		N,B	P	P	P	P	C
	Reset a Student's Password		N	B	P	P	P	C
File Management:								
	Save and retrieve documents (Name a file, choose a location and retrieve saved files)		N,B	P	P	P	P	C
	Distinguish between Save and Save As			N,B	P	P	P	C
	Create, save, open and move documents inside sub-folders			N	B	P	P	C
Printing:								
	Set a default printer		N,B	P	P	P	P	C
	Select various printers within the building		N,B	P	P	P	P	C
	Print only selected pages from documents		N,B	P	P	P	P	C
	Print duplex		N,B	P	P	P	P	C

Electronic Mail

	Create a New message; Add multiple recipients	N,B	P	P	P	P	P	C
	Reply to a message	N,B	P	P	P	P	P	C
	Forward a message	N,B	P	P	P	P	P	C
	Use the Address Book (Search for mail recipients)	N,B	P	P	P	P	P	C
	Add Attachments to E-Mail (e.g. pictures, documents)	N,B	P	P	P	P	P	C
	Open an Attachment from E-Mail	N,B	P	P	P	P	P	C
	Download an Attachment to an appropriate storage area (network drive)	N	B	P	P	P	P	C
	Organize E-Mail (create and use filing folders; role of Public Folders)		N,B	P	P	P	P	C

	Sort messages (by name, date subject)		N	B	P	P	C
	Delete E-mails (clean out your Mailbox)		N	B	P	P	C
	Create Distribution and Contact Lists		N	B	P	P	C
	Use the Outlook Web Access Calendar			N	B	P	C

AtSchool Student Information System

Atschool Teacher Modules:							
	Attendance		N,B	P	P	P	C
	Gradebook		N,B	P	P	P	C
	Progress Reports		N	B,P	P	P	C
	Report Cards		N	B,P	P	P	C
	Publications (newsletters)		N	B,P	P	P	C

Hardware

	Set up and use Mobil Laptop Cart		N	B	P	P	P	C
	Set up and use mobile Keyboarding System		N	B	P	P	P	C
	Set up and use the LCD Projector		N	B	P	P	P	C
	Basic Troubleshooting			N,B	P	P	P	C
	Use the Telephone System			N,B	P	P	P	C
	Use the Scanner			N	B	P	P	C
	Use the Digital Camera			N	B	P	P	C
	Use the digital Video Camera				N	B	P	C

Microsoft Software Applications

MS Word: Word Processing							
	Enter text into a new Word Processing document		N,B	P	P	P	C
	Change the font and size of text		N,B	P	P	P	C
	Align text with alignment buttons		N,B	P	P	P	C
	Highlight text with the mouse		N,B	P	P	P	C
	Change the format of text with bold, italics and underline		N,B	P	P	P	C
	Use the cut and paste commands		N,B	P	P	P	C
	Use the menu bar functions		N,B	P	P	P	C
	Insert and format Clip Art		N,B	P	P	P	C
	Use Spell Check		N,B	P	P	P	C
	Learn Keyboard short-cuts (Ctrl-V = Paste, etc...)			N,B	P	P	C
	Learn to use headers and footers			N,B	P	P	C
	Insert and format other digital images			N,B	P	P	C
	Word Processing Tasks - The Options Menu			N	B	P	C
MS Publisher: Desktop Publishing							
	Use the Publisher Menu Bar Functions		N,B	P	P	P	C
	Resize, group and move objects		N,B	P	P	P	C
	Link text boxes for text flow			N,B	P	P	C

	Add other digital images			N,B	P	P	C
	Add and Delete Pages			N,B	P	P	C
	Locate and use existing templates from the Template Wizard			N,B	P	P	C
MS Excel: Spreadsheets							
	Use the mouse to select and enter data into a cell			N,B	P	P	C
	Spreadsheet: Learn to add/subtract cell information			N,B	P	P	C
	Spreadsheet: Formatting (cells; columns; rows)			N,B	P	P	C
	Spreadsheet: Learn spreadsheet terms			N,B	P	P	C
	Spreadsheet: Learn to graph or chart			N,B	P	P	C
	Spreadsheet: Create basic formula functions			N,B	P	P	C
	Learn to use headers and footers			N,B	P	P	C
	Advanced Spreadsheets (Sorting, Filters, Freeze Panes; Copying Worksheets)				N,B	P	C
MS PowerPoint: Presentations							
	Use a readymade PowerPoint Presentation			N,B	P	P	C
	Learn how to select and use a design template			N	B	P	C
	Learn how to create a basic presentation			N	B	P	C
	Learn how to format a presentation with slide transitions and animation			N	B	P	C
	Learn how to insert multimedia (sound, video, etc.) and hyperlinks			N	B	P	C
MS Access: Databases							
	Know how to start a new database document			N	B	P,C	
	Know database terms			N	B	P,C	
	Know how to create fields and enter information into records			N	B	P,C	
	Learn to sort the database based on one field			N	B	P,C	
	Perform a search based on one or more fields			N	B	P,C	

Graphics & Images

	Know how to use basic painting/drawing tools such as MS Paint			N	B	P	C
	Know how to select specific areas of a painting or graphic			N	B	P	C
	Knows the difference between several graphic formats			N	B	P	C
	Printing to a page			N	B	P	C
	Access and use clip art			N	B	P	C

Working with the Internet - World Wide Web

	Filtering @ NHA	N	B	P	P	P	C
	Manually enter an Internet Web Address (URL)		N,B	P	P	P	C
	Learn Internet Explorer button functions (back, forward, stop, etc.)		N	B	P	P	C
	Know basic internet terms		N	B	P	P	C
	Learn to build and organize a 'Favorites' list of most used websites		N	B	P	P	C
	Know how to create website shortcuts and hyperlinks in MS Word		N	B	P	P	C
	Know how to search and use keywords for information within a search engine program			N	B	P	C
	Know how to search for and download graphics/images within a search engine program			N	B	P	C

NHA Educational Software

	Know how to use Graph Club 2.0	N	N	B	P	P	C
	Know how to use Timeline 5.0	N	N	B	P	P	C
	Know how to use Inspiration 8.0	N	N	B	P	P	C
	Know how to use MS Encarta	N	N	B	P	P	C
	Know how to use Type to Learn	N	N	B	P	P	C
	Know how to use Accelerated Reader	N	N	B	P	P	C
	Know how to use United Streaming	N	N	B	P	P	C
	Know how to use Scholastic Keys	N	N	B	P	P	C

Education and Curriculum

Online Resources							
	Know how to access Curriculum Center	N	B	P	P	P	C
	Know how to access and use NHA History Interactive materials	N	B	P	P	P	C
	Know how to locate and use recommended internet sites	N	B	P	P	P	C
	Know how to access, download and print lesson resources from Curriculum Center	N	B	P	P	P	C
	Know how to locate and use e-curriculum	N	B	P	P	P	C
Technology Curriculum							
	Interpret and understand the NHA Technology Scope & Sequence of Content Standards	N	B	P	P	P	C
	Know how to access, download and print grade appropriate technology curriculum resources	N	B	P	P	P	C
	Deliver curricular instruction that incorporates the use of Technology		N,B	P	P	P	C
	Access and download resources to effectively assess and track student progress of technology skills		N,B	P	P	P	C
	Design lessons that incorporate the use of technology to enhance computer literacy in students.		N	B	P	P	C
	Know how to evaluate internet sites for accuracy and suitability	N	B	P	P	P	C