

**Whitehall Central School District
Whitehall, NY 12887**

**Planning for Technology
Years 2010-2012**

Mission and Goal Statement –

Mission - The Whitehall Central School recognizes that technology is an integral part of today's society. It is the mission of our school to provide meaningful technology experiences and training for its students, staff and community.

Current Program Status-

The District recognizes that planning for technology is an ongoing process. To that end the District continues to explore, develop and enhance its computer systems, software applications and training. Both schools in the District have Internet capability in all classrooms and lab space for specific educational training.

The district has purchased and installed 16 Smart Boards throughout the Jr. Sr. High School and Elementary School Buildings. Our continued Model Schools participation allows for technical training in the use of the new technology.

As continued desire for network bandwidth over the Internet, the district has employed dynamic bandwidth throttling capabilities to allow priorities to Academic Field Trips, and other "Real Time" streamed events, while not impacting on the day-to-day educational activities of the district.

A Capital Project at the Jr./Sr. High School was completed in 2006. This new wing provides presentation capabilities in the LGI (Large Group Instruction) area with hearing devices available. The four new classrooms have Internet capability and one of the rooms has been set up for future use as a Distance Learning Classroom.

A Capital Project was completed in 1999 in the Elementary School that fully wired and outfitted a computer lab and classroom space for a comprehensive software program that provides instruction to all students K-6. The Library Media Centers and resource materials were linked via fiber optics for the sharing of resource materials and software.

The District does currently, and will continue to, participate in the Model Schools Program for Computer Technology through the W-S-W-H-E BOCES. Through this program technical assistance is available and can be provided on a regular basis. The High School Library's floor plan has been rearranged to allow for a variety of new technological devices. In the Quiet Listening Area" of the library we have installed a 32 inch DVD/VHS player on a swinging wall mount. In this same area we have installed CD and tape listening systems for students to use

books on tape or CD. We have installed 20 dual core multi-gigahertz class computers for student use in the library, all of which have either DVD or CD-ROM capability, and supervised Internet access.

The District will continue to add and enhance equipment and software as needed, and as funding levels allow upon the recommendations of the Technology Committees to the Administration and the Board of Education.

Elementary School Curriculum (targeted)

The Whitehall Elementary School uses the *Techworks* program K-6. *Techworks* presents technology skills in logical and sequential format. By following the scope and sequence and teaching the *Techworks* lessons, the students are being adequately prepared to interact with technology.

The program consists of the following scope and sequence of technology skills: General Technological Awareness, Keyboarding, Paint, Draw, and Graphics, Word Processing, Information Systems/CD-ROM, Network Awareness, Internet/Telecommunications, Multimedia, Video, Electronic Presentations, Desktop Publishing, Databases, Spreadsheets and Programming.

The District has been using this program for several years with good success.

A. K- 2- Beginning in kindergarten and by the end of Grade 2, students will be able to:

- Demonstrate the proper use and care of computer hardware and software.
- Operate a CD-ROM, use a mouse, initiate the beginning of word processing and print and save their work.
- Introduction, mastery and extension of paint, draw and graphics program.

B. Grades 3 & 4 -- Beginning in Grade 3 and by the end of Grade 4 students will be able to:

- Use information systems: create electronic bookmarks, search key words, names, and phrases; capture information from a CD Rom article and transfer notes to notepad or a work processor.
- Network awareness: explain operation of a network server, access and open programs on a network.
- Introduction to Power Point, databases and spreadsheets.
- Internet: open, read and retrieve e-mail, reply to an e-mail, copy and paste information into an e-mail message, participate in an Acceptable Use Policy, open a WEB browser, use search engines.

C. Grades 5 & 6 -- Beginning in Grade 5 and by the end of Grade 6, students will be able to:

- Spend at least 80 minutes per week using the computer independently in a lab setting, to complete class assignments, refine and improve keyboarding and work processing skills, using a thesaurus, “save as”, footers and headers, import spreadsheets into work processing documents.
- Paint, draw, and graphics apply special effects such as rotate and flip horizontal/vertical.
- Information systems: create an outline for a report using information from a CD-ROM.
- Internet: manage sites, understand HTML, and implement a project using online resources.
- Multimedia: add scanned images and images from a digital camera to screen, add simple animation information.
- Electronic presentation: concept of a template, creating slides, adding video clips and adding background elements.
- Desktop publishing: headlines, graphics, body text and using a layout grid.
- Databases and spreadsheets: what items to use, fields, use of database to suggest trends.
- Introduction to computer programming.

Jr-Sr High School (targeted)

A. Grades 7 & 8 -- Beginning in Grade 7 and by the end of Grade 8, students will be able to:

- Explore the potentials of using computer technology as powerful, time saving tools used to store, retrieve and manipulate information.
- Students will successfully demonstrate the ability to utilize a word processing application program. Abilities to be successful will include opening a word processing application, opening an existing document, creating a new document, entering text, using screen features for editing, saving, font, size, etc.
- Students will be able to successfully incorporate classroom work and computer technology to complete homework assignments.
- All students will be able to utilize technology available within the school library for reference, research and utilization of the World Wide Web.

B. Grades 9-12 Students throughout 9-12 shall be able to:

- Utilize computer equipment within regular classrooms, computer lab, and school library to complete classwork, research projects through

multi-media, use of spreadsheets and other software available to students in their respective courses of study.

- Students shall be computer literate to the point of being college ready for technology application in the post secondary school setting.

Goals –

1. To maintain the current networks in the district between the Elementary, Jr/Sr High buildings and libraries for continuous K-12 computer curriculum and make full use of video and data networks.
 - Further utilize online subscription databases. (Destiny Library Manager has been installed in both libraries featuring a subscription database integrated directly within the electronic, web-accessible card catalog).
 - Virtualize network servers for ease of maintenance, backup, and long-term portability.
 - Migrate Server and User Storage to a SAN – or Storage Area Network to facilitate backups and redundancy of data.
 - Assess additional needs to integrate systems.
 - Purchase Mobile Smartboard Multimedia Carts for use with a dedicated Laptop. Such a screen can be used for DVD viewing as well as live streaming and regular classroom Smartboard activities.
 - Replace outdated equipment where needed.
2. To build upon the current base of teacher and student access to technological resources in the classroom, library and labs.
 - Increase the number of available PCs for student and classroom use, either through the library, additional classroom PCs, or other mobile computing labs.
 - Further integrate technology into “Special Areas” such as Music, Art, and Technology programs through the use of specialized software.
 - Virtualize desktops as “images” for security and rapid development of new software and patches.
 - Encourage student, teacher, and administrative use of flash drive technology to replace the use of floppy disks.
 - Installations of “Thin Client” computers to reduce lab replacement costs and standardize the computer-use environment.
 - Increase time allocated to technology administration and maintenance.
 - Continue participation in the Model Schools Program for Computer Technology through the WSWHE BOCES.
3. Provide the necessary technological equipment and software to both educators and administrative staff to be able to maintain, report and analyze student and administrative data.
 - Standardize equipment and software purchases.
 - Standardize toner and ink purchases purchases.

- Further explore integrated data management software for student information K-12. (PowerSchool Installed – June 2005, Follette June 2007, IEP Direct June-2008).
 - Explore Transportation software with a database that can be integrated with the student information database.
4. Whitehall Central School District embraces the use of assistive technology to provide students with needed tools to reach their full potential in educational settings.

Assistive technology is defined as “any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of children with disabilities.” (34 CFR 300.5) Assistive technology devices are used to assist students in compensating for their specific areas of need in relation to their disability, as it impacts their ability to succeed in accessing the learning environment.

- Current Software Applications:
 - To achieve this goal, a substantial investment has been made in software and assistive technology devices in the fall of 2006. Currently, the elementary special education classrooms provide students with Co:Writer, Write:Outloud, Boardmaker, Kidspiration, and Intellitools Classroom Suite software. In addition to the software available in the special education classrooms, students with needs in the area of writing and organization in grades 1, 2, and 3 have access to computers in the general education setting which support the following software: Kidspiration, Co:Writer, Write:Outloud, and Intellitools Classroom Suite. The primary usage of this software relates to promoting student development of writing skills, using Kidspiration to develop templates for writing and Co:Writer to assist with word prediction during writing. Intellitools classroom suite is also used to assist students in organizing their thoughts and learning to apply new vocabulary to writing topics. In addition to these software programs, students are also provided with the use of alpha smart devices, with some equipped with co:writer word prediction software. Alpha smarts are portable word processing devices that allow students to type and save notes and reports to later download them and print in a word processing application.. These devices assist students who have difficulty writing due to motor concerns, students who struggle with organizing their writing, and students in need of support with spelling and grammar. Through the use of these software programs and assistive technology devices, students with special needs are better able to succeed in the general education curriculum, and will leave high school better prepared to enter a world of work requiring technological skills and knowledge.
 - Whitehall Central School has further begun integrating Open Source type software applications into the daily curriculum. This has allowed the use and free delivery of some computing software to the computer stations deployed in the district as well as available to the students and their families at home. Our school district has a significant low income population and the available of software programs to students for use at

home as enabled access to high quality programs that otherwise would have been out of reach for many families. Beyond word processing, such software decisions have allowed for a great deal of technology penetration with the following software programs: The GIMP, a photo manipulation and drawing program similar to Adobe Photoshop; Inkscape, a vector graphics program similar to Adobe Illustrator; Blender, a 3d modeling program; Freemind, a lightweight, flash drive portable, mind mapping program similar to Inspiration. In addition we continue to explore new opportunities to provide our students educational experiences and tools that can be used both at school and at home.

▪ Professional Development: Wildwood Programs staff Debbie Leutkenholter and Brianna Murratti has provided a series of trainings on assistive technology topics from October through December 2006. This professional development module supports our recent initiative to empower general and special education teachers to provide assistive technology supports to students with special needs in general education settings. Assistive technology devices are used to increase, maintain, or improve the functional capabilities of children with disabilities. These devices assist students with disabilities in accessing the general education curriculum. Assistive technology accommodates students with disabilities by allowing them to demonstrate their learning in alternative formats. Professional topics included an Introduction to Assistive Technology on October 30th attended by seventeen teachers and staff, Co:Writer and Kidspiration Software on November 3 and November 13th for eighteen staff members, and Intellitools Classroom Suite on December 11th attended by fourteen staff members. This professional development, paired with the addition of an assistive technology support staff and an investment in new technology, has provided special education students tools to achieve their potential for learning.

5. Revisit the system for ongoing evaluation and assessment of technological needs and student, teacher and administration progress and success.
 - Technology committee- The school district Technology Committee consists of two school board members, Superintendent of Schools, Business Manager, district Computer Coordinator, building principals, Library/Media Specialist and teaching staff as requested by the Administration.
 - The committee should meet during the year and review a reports from the Technology Coordinator and building principals regarding student and teacher progress and needs.
 - The Board of Education and Administration will explore and pursue grants available for technology funding, include annually in the school district budget fund for technology and create a financial plan in order to keep district technology equipment updated on an annual basis.
 - Continue review of specific targeted areas in K-12 curriculum, which were documented in Plan #1 to ensure continued success. Targeted computer proficiency was broken down by grade level in the following manner, K-2, 3-4, 5-6, 7-8 and 9-12 (see current program status)

II. Staff Development Plan

- Continue support of CCD program through BOCES, which provides for staff training days during the school year.
- Encourage and provide support of teacher training sessions outside of the district.
- Enhance the libraries with learning tools and access to training.

III. Current Inventory Summary

Computer Equipment	Batch Purchased	Elementary School	Jr. Sr. High School	Other
Laptop Computers*		5	6	2
CM Elite Computers	09-10 Year	18	14	
CM Centuron PC	08-09 Year	17	28	
CM Elite / Bk Enlight	07-08 Year	4	25	1
Proteon	06-07 Year	12	1	
Other		59	52	
N-Station Terminals		24	36	
Totals	304	139	162	3

*Excluding those affixed to AV Equipment

Computer Locations	Elementary School	Jr. Sr. High School
Classrooms	87	98
Technology Labs	24	11
Libraries	11	23
Admin and Offices	11	19
Other	3	11
Totals	139	162

Audio / Video Equipment	Elementary School	Jr. Sr. High School
Smartboard w/ Projector	18	9
Mobile Smartboard w/ Prj.	6	6
AV Cart (Laptop / Projector)	1	1
ELMO Presenter	2	2
AV Laptop		1
Ceiling Mount Projector	1	2
Totals	28	21

III. **Budget:** 2010-2011

- \$37,592 System Administration – In house
- 8,420 Internet Access T1 Line (net E- Rate Discount)
- 2,300 Misc. Supplies
- 44,000 PC's, Printers, replacement monitors, LCD Projector
- 11,540 State Aided Hardware (Instructional)
- 13,526 State Aided Software
- 5,706 BOCES Services (Software support, licenses, on site training)

Total 2010-2011 Budget: **\$123,084.**

IV. **Budget:** 2011-2012 (*Estimated*)

- \$39,095 System Administration – In house
- 8,756 Internet Access T1 Line (net E- Rate Discount)
- 2,392 Misc. Supplies
- 45,760 PC's, Printers, replacement monitors, LCD Projector
- 11,540 State Aided Hardware (Instructional)
- 13,526 State Aided Software
- 5,934 BOCES Services (Software support, licenses, on site training)

Total 2011-2012 Budget: **\$127,003.**

Evaluation Process-

Evaluations/Assessment - For successful integration of technology into the curriculum and state standards it is necessary to evaluate our programs and obtain feedback from school district professional staff on the implementation of computer curriculum into the mainstream. This will be done as follows:

- A. Committees will meet on a regular basis to discuss and review needs. Input will be obtained from the Building Principal from Department Heads, Computer Coordinator and the Library Media Specialist.
- B. Building Principals will provide a report to the District technology committees annually; to help determine the needs for in-service education, student training and computer upgrades.
- C. The District Technology Committee will hold regular meetings in order to obtain current information on the implementation of the district technology program across the District. The minutes of these meetings shall be reported to the full Board of Education on a regular basis for the purpose of sustaining both financial and program support.
- D. Community feedback shall be sought through the District Curriculum Committee that consists of Board of Education members, Administration, faculty and parent representatives. The minutes of these monthly meetings shall be shared at the regular meetings of the Board of Education for the purpose of sustaining both financial and program support.