

## Ellenville Central School District

# Strategic Long-Range Technology and Integrated Technology Curriculum Plan 7/2007-6/2010

Contact Info: Vince Napoli  
Director of Technology  
845-647-0216

[vnapoli@ecs.k12.ny.us](mailto:vnapoli@ecs.k12.ny.us)

[www.ecs.k12.ny.us/techplan/techplan.pdf](http://www.ecs.k12.ny.us/techplan/techplan.pdf)

## District Executive Summary

### District Mission Statement

The Ellenville School Community continues to believe in the power of education to determine the future of our society. Through a shared-decision making process that sustains a challenging academic and vocational program, we will model and instill those values that produce a citizenry aware of its responsibilities, alert to the future and capable of achieving and enjoying an enhanced quality of life.

### District Vision Statement

By realizing the outcomes listed, every student will possess the necessary skills to live a full and independent life.

### District Student Outcomes

- ❖ Every student, regardless of race, native language, gender, nationality or ability, will possess the knowledge and understanding that will enable him/her to participate in a global, technological society.
- ❖ Every student will have the skills to work with others, to set goals and to work cooperatively in achieving these goals.
- ❖ Every student will be aware of his/her uniqueness and his/her ability to make a difference.
- ❖ Every student will develop critical thinking and problem solving skills.
- ❖ Every student will master fundamental academic subjects and all other topics prescribed by the individual's course of study.
- ❖ Every student will realize that education is a life long process and will develop an appreciation for learning.
- ❖ Every student will understand that he/she is part of a global society that he/she can learn from past experiences and understand how present actions affect the future.

## Introduction

### District Summary

The Ellenville Central School District consists of one Elementary School, one Middle School, one High School, one Central Office building, one school related building, all used for education. The district has other offsite buildings used for storage.

Grade Level	# of Students (Avg)	# of Teachers / Aids (Avg)
Elementary (K - 4)	630	50
Middle (5-8)	564	46
High (9-10)	547	46

## Technology Vision Statement

### Technology Mission Statement and Plan Summary

The district's vision for technology is for the growth and optimal use of current technologies and the mindset to challenge and accept future technology. Over the past years technology has become an integral part of our district and by realizing the outcomes listed below, technology will continue to be integrated into instruction and administrative functions.

- ❖ Students will have the skills necessary to select appropriate sources and will have access to a broad range of information.
- ❖ Students will be instructed in the use of a standardized selection of software.
- ❖ Students will have the skills to use multimedia.
- ❖ Students will have the opportunity to communicate using electronic mail with other students, parents, teachers and administrators.
- ❖ Students will have access to distance learning.
- ❖ Faculty, administrators and staff will have the technological skills and resources to perform administrative and instructional functions.
- ❖ Faculty, administrators and staff will have the opportunity to communicate using electronic mail with other students, parents, other districts, the public and each other.
- ❖ Faculty, administrators, staff and students will have the opportunity to be exposed to current technology.
- ❖ Technology will be used to improve our education and library services.

## Professional Development

### Training

The district realizes the importance for aligning staff development with state and national standards and makes all attempts to keep current with training. Various times throughout the school year both in-service and out of district training programs are offered, enabling faculty and staff the opportunity to enhance their skills, to learn new software or learn how to integrate technology into their instructional program. Training programs are offered during superintendent conference days when the schedule permits

Technology Liaisons, funded via a grant, offer classroom push-ins, weekly meetings, in-service trainings.

The district offers instructor led, train the trainers for various district owned software applications.

Faculty and staff attend conferences, such as NECC, NYSCATE.

In addition to in-service and out of district training there is encouragement and development of cross department training on the uses of technology in the classroom or administrative offices.

District policies and user manuals are available via the district website and a network share. (Manuals include, but are not limited to: Software applications used in the classroom, voicemail & phone system, online help is available for productivity suites and office automation applications (ie: electronic gradebook, electronic student management system)

The district subscribes to Powermedia Plus, as part of a BOCES CoSer, for the use and distribution of electronic multimedia presentations.

### **Staffing**

Currently there are seven computer labs (HS – 3, MS – 3, ES – 2) with at least seventeen computers each, three media centers (HS, MS, ES) with at least six computers, (HS has 50 computers, MS has 18 computers, ES has 11 computers) each staffed with a full-time school library media specialist.

Each computer lab integrates the use of Microsoft Office, ELA, Math software, Compass Learning or skills building software.

### **Assessment of existing skills**

Each school has at least 10% of its staff to be considered highly developed computer users, whom most people would consider Power Users. 80% of the staff would be considered to be of moderate abilities and the remaining 10% to have little to no technology experience.

## **Current Program Status**

Currently our schools offer programs focusing on the use of technology as a primary tool, software courses (including word processing, spreadsheets and database software), ELA and Math related software as educational tools (Math Blaster, Reading Blaster, Mavis Typing, RM Math, etc). Our Elementary School has been using Compass Learning since the 99-00 school year. During the 06-07 school year the district implemented the NWEA – MAPS assessment program for grades 3-12 and Children's Progress assessment program for grades K-2.

## **Curriculum Integration**

### **Kindergarten**

- ❖ Identify the computer as a machine that helps people work and play
- ❖ Identify physical components of a computer system (e.g.; monitor, keyboard, CPU, printer)
- ❖ Demonstrate the correct use of a computer

- ❖ On a keyboard, identify letters, numbers, and other commonly-used keys (e.g.; [return], [enter], [space bar])

### **Grade 1**

- ❖ Identify uses of technology at home and at school
- ❖ Demonstrate respect for the computer work of others
- ❖ Identify the function of physical components of a computer
- ❖ Identify fundamental computer terms
- ❖ Demonstrate correct use of hardware and software
- ❖ On keyboard, demonstrate the use of letter keys, number keys and special keys
- ❖ Identify and use gaming software to help educate and expose students to learning on a computer

### **Grade 2**

- ❖ Identify uses of technology in the community
- ❖ Describe the right of an individual to ownership of his/her created computer work
- ❖ Identify the function of the physical components of a computer system
- ❖ Demonstrate correct use of hardware and software
- ❖ Locate and use symbol keys and special function keys (e.g.; period, question mark, CAP Lock)
- ❖ Demonstrate correct keyboarding posture and finger placement for the home row keys
- ❖ Identify word processing terms (e.g.; word processing, cursor, open, save)
- ❖ Demonstrate beginning word processing techniques of entering selected home row words, saving, printing, opening documents
- ❖ Communicate visually, graphically and artistically through multimedia presentations
- ❖ Identify and use gaming software to help educate and expose students to learning on a computer

### **Grade 3**

- ❖ Identify the ways technology has changed the lives of people in communities
- ❖ Explain that the copyright law protects what a person or a company has created electronically
- ❖ Identify the physical components of a computer system
- ❖ Demonstrate the correct use of hardware and software
- ❖ Use commercial software in content areas
- ❖ Demonstrate proper keyboarding techniques
- ❖ Use a word processor program to create, save and print documents
- ❖ Communicate visually, graphically and artistically through multimedia presentations

### **Grade 4**

- ❖ Identify the ways technology has changed the lives of people in New York State
- ❖ Identify computers as tools for accessing information
- ❖ State that violation of the copyright law is a crime

- ❖ Use commercial software in content areas
- ❖ Demonstrate proper keyboarding techniques
- ❖ Use a word processor and multimedia programs, to create, save and print documents
- ❖ Identify and use gaming software to help educate and expose students to learning on a computer
- ❖ Describe the difference between a print database and a computer database
- ❖ Identify computers as tools for accessing information
- ❖ Communicate visually, graphically and artistically through multimedia presentations
- ❖ Access, retrieve, evaluate and interpret visual/auditory information

### **Grades 5-8**

- ❖ Identify the role of technology in a variety of careers (Career Zone)
- ❖ Describe the influence of technology on life in the United States
- ❖ Identify ways that telecommuting promotes a global community
- ❖ Identify telecommuting terms
- ❖ Identify, as intellectual property, work created using a computer
- ❖ Distinguish between different types of data as to which are public and which are private
- ❖ State the need for protection of software and hardware from computer viruses
- ❖ Discriminate between ethical and unethical access to information stored electronically
- ❖ Identify terms related to computer-generated productions
- ❖ Describe the advantages of using computers to generate various types of productions
- ❖ Identify examples of copyright law violations and possible penalties
- ❖ Identify computers as tools for accessing information
- ❖ Describe the need for protection of software and hardware from vandalism
- ❖ Use commercial software in various subject areas
- ❖ Identify the function of word processing utilities
- ❖ Use a word processing program to edit text, publish a document containing tabs, centered text and more than one paragraph
- ❖ Identify the difference between paper spreadsheets and computer spreadsheets
- ❖ Identify spreadsheet terms
- ❖ Enter and edit data into a prepared spreadsheet to test simple “What if?” statements.
- ❖ Identify database management terms
- ❖ Use a database to sort records
- ❖ Use a database to search for desired information
- ❖ Compare the process of sending and receiving messages (electronically vs. non electronically)
- ❖ Use telecommuting hardware and software to communicate with a distant computer or online service
- ❖ Communicate visually, graphically and artistically through multimedia presentations

- ❖ Use of Web Quests to spur Internet thinking
- ❖ Access, retrieve, evaluate and interpret visual/auditory information

### **Grades 9-12**

- ❖ Identify examples and analyze the societal impact of advanced and emerging technologies
- ❖ Identify and independently use computer hardware and software for class and personal use
- ❖ Effectively utilize publishing software to prepare and publish High School Newspaper
- ❖ Identify and understand information systems and be able to derive conclusions based on decision making processes, enveloped with the study of data and information.

## **Parental Involvement**

The district currently utilizes its [website](#), school calendar, calendarwiz.com, Phonemaster automated dialer, email and school newspaper to communicate with parents regarding status of attendance, events, menus and academics involving technology and how technology is used with students. It is the district's intentions to get parents to communicate more frequently with faculty members via email. This will be accomplished by posting homework assignments on the teacher's website and by publishing the teachers' email address.

## **Adult Literacy**

The district actively supports the Ulster County Adult Learning Center and Ulster County Community College by providing classroom resources, Internet access, LAN access and telephony resources through the district's technology center. Courses are available to anyone within the local community.

## **Distance Learning**

The district owns state of the art, IP and ISDN distance learning / video conferencing equipment, which is available to any classroom teacher who wishes to use it. Currently the district conducts virtual field trips and co-teaches robotics with a school in California. In addition, the district uses Powermedia Plus for interactive multimedia video streaming.

## **Information Technology Assessment**

Current Inventory of equipment and services

The district's technology staff remains in constant communication with infrastructure vendors who offer their expertise and knowledge in offering ideas and training regarding the districts hardware and wiring needs.

Every five years the district evaluates its telephone system and infrastructure and evaluates annually its contract with its telephone service provider.

The school board has adopted a 5 year hardware replacement plan.

The district employs a full-time Director of Technology, a part-time BOCES Lan Technician, and two part-time summer techs.

### Computers and Equipment

Q_inventory_counts											
Equipment Type	<>	Classroom	Control Room	Data Center	Inventory	Lab	Library	Networking	Office	Other	Team Room
AlphaSmart		62					30				
Apple		5							2		
Apple PC						5	1				
Camera		11				2			1		
CD Writer				1		1					
DANA							60				
Equipment				2							
external Hard Drive				1							
fax									6		
Fax Machine				1					1		
Flat Screen Monitor				1		1			18	2	
Hub		13		2	1	11			2		
IPOD									1		
Laptop		8			3	25	1		17		
LCD Projector		44				10			2	2	
MAC									2		
Modem				1							
Other		1		1		1			5	1	
PC	1	237			6	160	41		71	1	5
PDA					2				12	1	
Presenter						1					
Print Server						6	2		7		
Printer		118			7	13	6		68	1	7
Router				1							
Scanner		12			1	8	1		13		
Server			1	3							
Smartboard		34				3					

Q_inventory_counts											
Equipment Type	<>	Classroom	Control Room	Data Center	Inventory	Lab	Library	Networking	Office	Other	Team Room
Switch							1	11			
Switch 12 port						1					
Tape Drive				3							
UPS		1	1	3	1	5		4	6	2	
Wireless		1									

<b>Telecommunications</b>	2 ISDN lines and PIC Tel Distance Learning Devices, Phone Master (Automated parent notification system), Voice Mail, Automated School Closing and Delay message box
<b>Internet Access and services</b>	OC-3 access, 24x7, Web Server, Email Server, FTP Server, Proxy Server, Web Filtering Server, Anti-Virus Software
<b>Other Technologies</b>	PDA, classroom instruction and monitoring software, Digital CCTV System, Elmo's, Smartboards, LCD projectors
<b>Infrastructure</b>	All 3 schools are connected via Fiber Backbone running at 100 mbps, with each wired classroom connecting at either 10 or 100 mbps.  All classrooms are wired to the campus network

**Software List**

Compass Learning, Network Version
Reading Blaster 9-12, Network Version
Math Blaster 9-12, Network Version
Mavis Beacon Teaches Typing, Network Version
SIRS Researcher – Library Services, Network Version
Encarta Encyclopedia – Network Version
Kid Pix – Network Version
Thinkin’ Science Zap, Network Version
Amazing Writing Machine, Network Version
Carmen Sandiego Math Detective
I Love Spelling, Network License
Microsoft Office 97 / 2000
Internet Explorer version 5.x or greater
NetSupport Remote Control Software
Accounting & Payroll Package

Special Education Software Package
Various CD ROM Titles
EBSCO – Middle Search Plus, Network Version
NOVEL statewide virtual Library services-
Accelerated reader
Jumpstart CD ROM Titles
Neighborhood Map Machine
TimeLiner
Kurzweil
Image Blender

**Budgeting**

Budget (preliminary)

Category	06-07	07-08	09-10
Equipment	\$40,000*	\$47,000*	\$55,000*
Software	\$17,000	\$15,000	\$15,000
Upgrades and Repairs	\$6,900	\$6,100	\$6,100
<i>Related Services (technology related services)(ISDN, Internet Access, Telephone)</i>	<i>\$101,000</i>	<i>\$98,000</i>	<i>\$110,000</i>
Salaries – DOT and BOCES	\$150,000	\$155,000	\$160,000
License Agreements			
• Firewall	\$1,425	\$1,500	\$1,625
• Anti-Virus Software	\$3,850	\$4,000	\$4,100
• Library Automation	\$1,150	\$1,250	\$1,3150
• Sirs Researcher	\$1,245	\$1,245	\$1,245
• Brainpop	\$150	\$150	\$150
• Email Server	\$561	\$600	\$635

\* Includes leases and purchases

Funding will be provided from the Annual Budget

As grants become available throughout the school year, we apply and if the grants are awarded, we take full advantage of them. Grants used in the past have been: SmarterKids.org, 21<sup>st</sup> Century Grant, Title 1, Senator BONACIC grant, Special Ed Grants,

Related Services (Internet Access & Telco) is projected to be funded by E-Rate and Aide. Current telco services are provided by PaeTec via two T-1's. ISDN provided by Verizon and AT&T.

**Scheduled Upgrades & Improvements**

- 80-90 computers will be replaced every 5 years. District servers will be replaced every 5 years.
- Upgrade outdated and broken equipment as needed

- Continue to provide each classroom with a DVD

## Evaluation Process

Administrators will monitor the implementation of the district objectives via communication with district faculty, staff and Building Level Teams and the performance of students. Administrators will coordinate with the District Wide Technology Coordinator making any changes in hardware and / or software needed to sustain and prosper technology in the district.

The District Wide Technology Coordinator will ensure district infrastructure and centralized hardware / software is able to support technology goals and objectives.

Student progress will be monitored on a marking period basis with major changes implemented during the summer (non – school) periods.

Faculty will be encouraged to take additional training and progress in technology skills should increase as in-service / training is completed by more than the existing power users.

Each school building has developed and maintains a database to track students who have had their parents sign the districts Acceptable Usage Policy (AUP). Media specialists and building secretaries enforce and track these documents. All staff members have access to these databases for quick reference.

The district subscribes to an Internet Filtering solution, offered by Ulster BOCES.

Lab managers, Library Media Specialists monitor student usage and adherence to the districts AUP and take appropriate actions as per the student handbook and AUP. Tracking of websites visited and emails sent are logged on a daily basis.

## Committee Members

Vince Napoli – District Wide Technology Coordinator

Bob Hanington – Middle School Teacher

Janet Gerstenhaber – Elementary School Teacher

Christine Natoli – School Business Official

Dan Hart – High School Teacher

Approved by

Lisa Wiles – School Superintendent

School Board