Scio Central School Technology Plan

July 1, 2014 - June 30, 2017

3968 Washington St.
Scio, NY 14880
(585) 593-5510

Main contact:

Michael Pavlock - Technology Coordinator
mpavlock@scio.wnyric.org
585-593-5510 ext 1330
fax – 585-593-3468
scio.schooltools.us

Other technology committee members:

Gregory Hardy- Superintendent
Nancy Sampson - K-12 Principal
Cristy McKinley – Curriculum Coordinator
Melody Grabow - Classroom Teacher
Mary Zdrojewski - Librarian
Cathy Law - Parent
Derek Chase - BOCES technician

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SCIO CENTRAL SCHOOL MISSION STATEMENT

The Scio Central School community believes that all children can

learn. Using all available resources, our graduates will be prepared

to be active participants in an ever-changing world. Students will

realize their potential and will be guided in the development of self-

esteem, responsibility, and mutual respect. The home, school, and

community will work together in an atmosphere of shared purpose

and consistent expectations.

Scio Central School is a school of approximately 390 students Pre-K through 12th grade. The school is located in Central Allegany County. We have one building. Our student population is low to middle income with a high poverty ratio. The District Superintendent is Gregory Hardy, K-12 Principal is Matt Hopkins, and Tech Coordinator is Michael Pavlock. There are currently 50 approximately teachers employed by the district.

Vision and Goals

This document was last revised in *July 2013* and is being updated consistently as changes occur. Scio Central School's Technology Plan is built in three phases. These phases are outlined in the spreadsheet at the conclusion of this plan. The first phase are objectives that we hope to achieve in the school year 2014/2015. Phase Two includes those objectives that we hope to achieve in the school year 2015/2016. Phase Three include those longer range goals through 2016/2017 and possibly beyond.

This plan was developed by a group of district employees and residents in a variety of capacities. The stakeholders include:
Gregory Hardy - Superintendent

Melody Grabow - Classroom Teacher
Mary Zdrojewski - Librarian
Cathy Law - Parent
Derek Chase - BOCES Technician
Nancy Sampson - K-12 Principal
Cristy McKinley – Curriculum Coordinator

This technology plan is the result of a sustained, ongoing effort in the Scio School district to promote and develop the use of technology within the school system.   Teachers, administration, parents, and students all had input into this document. It reflects our belief that the appropriate use of technology in our district will improve student achievement in our district and will allow the community to become more involved with our district.

The Technology Committee was instrumental in the production of this document with the support of the Shared Decision Making Team and the School Board. The committee is aware that technologies are changing daily and plans need to be constantly updated to stay abreast of the current developments. It is the committee's hope that the plan will be a road map, giving us direction through the technology maze. The committee understands that without proper training, planning, and follow-up, these goals and objectives will never be met. The district is committing to giving it's students the means in which to achieve the lofty goals set forth in the New York State Standards, and it is their intention to see that the plans set forth in this document will be met.

Learning models that were efficient twenty years ago are no longer desirable or entirely effective.   Current research and practice in New York State points the way to constructivist models of cognitive development.   Cognitive learning is demonstrated by knowledge recall and the intellectual skills: comprehending information, organizing ideas, analyzing and synthesizing data, applying knowledge, choosing among alternatives in problem solving, and evaluating ideas or actions.   We believe that technology supports these new paradigms of teaching and learning.

The Scio Central School plan reflects our desire to move our students and their teachers in the direction of advanced levels of learning and thinking that are facilitated with the use of technology.

Goals.
I. Curriculum
I. A. Curriculum Integration

Goal 1: Increase student communication and collaboration as well as develop cultural understanding and global awareness by engaging with learners from local, national and global locations.

Actions needed to achieve goal	Staff Development	Person(s) Responsible	Date each action will be completed
Students will participate in collaborative lessons, conversations, or other project based experiences with persons across NYS and around the world.	Teachers will attend professional development offered through CA BOCES and Erie 1 BOCES in the areas of DL and online learning	Superintendent Instructional Staff Principal Curriculum Coordinator Students Technology Dept.	Spring 2017
Inclusion of an international dimension in all subject areas based on: Knowledge of other world regions, cultures and economies, as well as international/global issues, and Skills in communicating in languages other than English, working in cross-cultural environments, and using information from different sources around the world.	Attend K-12 workshops, on-line learning, work with CA BOCES and The Partnership for 21st Century Skills	Superintendent Instructional Staff Principal Curriculum Coordinator Technology Department	ongoing 2014-2017

Goal 2: Educate our K-12 students regarding Internet citizenship, intellectual property rights, accessing and evaluating Internet information and personal safety.

Actions needed to achieve goal	Staff Development	Person(s) Responsible	Date each action will be completed
Implement the components of an Internet safety training	Internet Safety curriculum	Superintendent Technology Dept Teachers K-12	Ongoing 2014-2017

Goal 3: **Increase the quality of Technology integration to support the development of engaging instruction, critical thinking, and 21st Century Skills**

Actions needed to achieve goal	Staff Development	Person(s) Responsible	Date each action will be completed
Promote the use of student Web 2.0 tools, internet video conferencing to facilitate communications with external expert audiences	All Staff K-12 participate in CA BOCES, Erie 1 offerings	Superintendent Instructional Staff Principal Curriculum Coordinator Technology Dept. CA BOCES Staff	Ongoing 2014-2017
Promote the use of	All Staff K-12 participate	Superintendent	Ongoing 2014-2017
Thinkfinity, BrainPop, BrainPop Jr., and other online resources and databases	in CA BOCES, Erie 1 offerings	Building Principals Technology Coordinator	
K-8 Technology Performance Indicators (NCLB requirement/ISTE standards)	All Staff K-12 participate in CA BOCES, Erie 1 offerings	Superintendent Principal Technology Coordinator	Ongoing 2014-2017

Goal 4: **Students will use learning technologies to support achievement of the New York State Learning Standards**

Actions needed to achieve goal	Staff Development	Person(s) Responsible	Date each action will be completed
Monitor the district implementation	New teacher orientation	Superintendent	Ongoing job-embedded

| of these instructional strategies and supporting technologies | continued support of current staff | Principal Technology Dept | training |

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| Teachers will investigate how technologies can improve student academic results | All Staff K-12 participate in CA BOCES, Erie 1 staff development. Use after school curriculum time to research new technologies in their curriculum area | Superintendent Principal Technology Coordinator | Ongoing 2014-2017 |

Goal 5: **Prepare out High School students for the online learning environment experienced in higher education environments.**

Actions needed to achieve goal	Staff Development	Person(s) Responsible	Date each action will be completed
Implement online course and distance learning courses as needed	Participate in Moodle courses, Professional Development opportunities offered by CA BOCES	Guidance Counselor Principal Curriculum Coordinator Technology Coordinator	Ongoing 2014-2017

I. B. Student Achievement

Technology Integration Examples:

Our students have participated in virtual field trips in many areas.   For example, a Spanish class connected with a class in Virginia that helped facilitate a series of collaborative experiences between the two classrooms. The virtual experiences were made possible through the use of the Distance Learning Room, which leverages our school district's broadband connection to the internet. In addition students in sixth grade classes completed a series of very engaging conversations with scientists at the National Aeronautic and Space Administration (NASA). Second grade students were inspired by the visit to the Badlands National Park and an opportunity to engage scientists at the National Aeronautic and Space Administration. Our adoption of the ISTE standards for students Creativity and

Collaboration has driven our efforts to provide these authentic experiences and encourages students to be lifelong learners.

Goals Using Advanced Technology to Improve Academic Achievement:(Aligned to above timeline in I. A. Curriculum Integration)

Goal 1: Increase student communication and collaboration as well as develop cultural understanding and global awareness by engaging with learners from local, national and global location.

ISTE Standard(s) Addressed:

Communication and Collaboration

Digital Citizenship

Indication of Success

Students/Teachers at all grades complete one global connection in
using DL, Videoconferencing by Spring 2014, 2015 and 2016
Evaluation of curriculum in observations, modeling of inclusion in classrooms K-12

Goal 2: Educate our K-12 students regarding Internet citizenship, intellectual property rights, accessing and evaluating internet information and personal safety.

Indication of Success

ISTE Standard(s) Addressed:

Digital Citizenship

Indication of Success

Monitor the number of inappropriate behavior discipline incidents
Monitor Internet usage statistics
Parental feedback

Goal 3: Increase the quality of Technology Integration to support the development of engaging instruction, critical thinking and 21$_{st}$ Century Skills

ISTE Standard(s) Addressed:

Communication and Collaboration

Digital Citizenship

Research and Information Fluency

Creativity and Innovation

Indication of Success

Teacher evaluation of learning objectives – increased understanding of curriculum content after the project
Teacher evaluation of learning objectives – increased understanding of curriculum content after the project
Principal's observation of student work
Portfolio Database of student work

Website Exemplars

Goal 4: Students will use learning technologies to support achievement of the New York State Learning Standards.
Indication of Success
Records of training provided
Principal observations of
test results based on item analysis
Selected technologies for specific curriculum areas with data to demonstrate improved learning results

 Goal 5: Prepare our High School students for the online learning environment experienced in higher education environments.
ISTE Standard(s) Addressed:
Communication and Collaboration
Digital Citizenship

Indication of Success
Quality of student and teacher interaction within the online learning environment
Student improved skills working within an online learning environment
Evaluate results of courses developed online by survey of student grades and course evaluations

I. C. Technology Delivery

  College biology and US History are delivered to high school students by way of our interactive multi-way and multi-point distance learning system which leverages our broadband connection to the internet.
Many of our high school students receive instruction via the web with Keystone Learning and other online schools.   We look to expand opportunities in this area of the curriculum over the life of this plan.

I. D. Parental and Community Relations
Action Plans for Parent Communication Goals
Goal 1: Increase parent communications by improving district website and incorporation of web based Student Information System

Actions needed to achieve goal	Staff Development	Person(s) Responsible	Date each action will be completed	Indication of Success
Provide teachers, administrators, and department staff with a website development tool	Monthly staff development opportunities for the expansion of information shared	Administration Technology Coord Website Coordinator Teachers	Ongoing implementation	HS teachers will have a classroom website building will have a content rich website
Provide parents with access to attendance and academic data to monitor their child's progress	Ongoing	Administration Teachers	Ongoing	C7ontinuation of Powerschool parent portal
Parent Feedback Provide parents with access to the district technology plan		Website Coordinator	Ongoing	Posted plan on district website Community Feedback

I.E. Collaboration

We currently have no adult literacy service providers in our district

II. Professional Development

II. F. Professional Development
Professional Development Strategy:

In order to meet our first goal of conducting ongoing faculty and staff technology training, several professional development initiatives are in place.

The Cattaraugus-Allegany BOCES provides adult education at twenty-five sites within the region. School district planning has been aligned with BOCES provided instructional programs aimed at learners of all ages. Adult education

programs now use school district facilities including technology-based resources.   School district technology resources will be made available for use by adult education programs operating within the district boundaries.

Teacher training and professional development in technology play a key role in it's ultimate acceptance and use in the classroom.   Research indicates technology planning that does not address comprehensive and continuous professional development will likely have minimal success. Multiple levels of training and staff development must be offered to teachers and administrators so they feel empowered to use technology to facilitate their own productivity.

Recent staff surveys reveal that electronic mail and word processing software are the two most utilized program applications within the district. Our daily bulletins are published electronically.   Electronic mail has quickly changed the pattern for inter-classroom communication.   Teachers are using "email" to form their own "Ad Hoc" teams that are independent from moderation by district offices.   This paradigm shift has already transferred the center of information from the central office to a virtual center that changes dynamically as it's requirement changes throughout any given day or week.

We currently have two standards for productivity software in Scio. Microsoft Office as our standard for all our users.   Most of our staff has been trained in the appropriate piece of software.   Most users are conformable with the word processing portion of the software, fewer with the spreadsheet application, and even fewer with the database.   As a result of discussion and surveys, it shows that our greatest need for staff development is in the areas of research technologies (internee and CD-ROM databases), presentation and multimedia technologies (Powerpoint), and technology integration into the classroom.

The school district maintains service contracts to support technology use from technology hardware and software vendors.   Several purchase contracts including ongoing services for user support.   Contracted services are used for building wiring, network installation, network maintenance, internee service, and software maintenance.

The district provides software acquisition on an ongoing basis, funded from district and grant sources.   State-of-the-art software for the productivity, presentation, administrative, curriculum, and information resource software is regularly purchased, maintained and upgraded as needed.

In order to meet our second goal of encouraging the ongoing development and adaption of courses where technology is integrated into the curriculum, the district occasional includes professional development sessions as a part of faculty meeting.   During that time, curriculum issues are discussed and training is given in different curriculum areas.

One of the ongoing themes of the curriculum training is technology integration training.   BOCES trainers and school personnel are used to help teachers discover, learn, and implement new methods of integrated the current technology we have in the building into the curriculum

Present Level Of Staff Skills

The current staff at Scio Central School has a varied level of skills with technology.

- All teachers have the ability to Log into their computer and use their network folder to save and retrieve files.

- All teachers and staff have a Lotus Notes Account and have the ability to send and receive email.

- All teachers have the knowledge to use the internet and have training on appropriate usage

- All teachers are able to use Microsoft Word to produce documents for classroom utilization

- 100% of teachers have the ability to use a smart board in the instructional process

Goal 1: Provide a multi-tiered approach to technology training.

Actions needed to achieve goal	Staff Development	Person(s) Responsible	Date each action will be completed	Indication of Success
Provide entry level training for beginning users of technology	New teacher orientation Job embedded support or 1:1 training or BOCES workshop	Tech department BOCES	Ongoing support	Administration observes increase in the number of staff participating in ongoing training
Targeted Staff Development based on administrative	Job-embedded support 1:1 training	Tech department BOCES	Ongoing support	Admin. observations Log of trainings

observations and expressed
needs by teachers

G. Supporting resources

The Scio Central School district policy manual has policies that support ongoing technology professional development.

The technology coordinator has prepared several documents to help people work their way through the district owned Software.   This includes Powerschool and Lotus Notes to name a few.

The school webpage (www.scio.wnyric.org) contains many helpful items for community members, teachers, and students that supports the use of district technology and stresses the appropriateness of its use.

III. Infrastructure, hardware, technical support, and Software

Current Status and Needs:

Currently, our school has over 500 ethernet computer drops spread throughout the building.   Each classroom has 6 drops and a cable outlet. All classrooms have new telephones and all district employees have voice mail.   Our high school computer lab has been relocated to Room 133.   We have purchased a large number of smartboards that have been installed in several classrooms.   All Scio classrooms currently have a smartboard and teacher have been trained as to their use.

Educators are the driving force behind as well as the key constituents of the technology committee, contributing to the development of technology integration plans at the school/classroom level.   However, the support of other key stakeholders is essential to sustain the broad-based, continual support needed for long-range technology planning. The active involvement and support of parents, students, school committee members, political leaders, post-secondary and

higher education personnel, community and business leaders are very important to the overall success of our technology planning effort.

The District Technology Committee is comprised of the district technology coordinator, the district superintendent, the district's BOCES technician, an elementary teacher, a high school teacher, a member of the bargaining unit, and parents.   It serves as a steering committee to develop a shared vision for the use of technology in achieving our educational mission and develops the hardware and software standards used in the implementation of the vision. Hardware and software standards are developed regionally by the Western New York Regional information Center.   Our adoption of WNYRIC standards follows de-facto for our technology equipment to function effectively on the regional wide area network (WAN).

Each new technology initiative is monitored carefully during the early stages of implementation so that district staff can make any adjustments to the program necessary to ensure its success.   The implementation of the technology plan is monitored and evaluated using 2 strategies.   The first is that the initiatives in the action plans have measurable or demonstrable outcomes for monitoring and evaluation purposes.   the evaluative component include the identification of how monitoring will take place, who will be responsible for the monitoring of each initiative, and when the evaluation of progress will take place.   The second is that the technology committee evaluates the planning process to determine how well the planning efforts have addressed the research-based critical factors for successful implementation of the technology plan.

The district technology plan received input from several groups that represent the community served by our school, school board members, political leaders, the school administration, the teachers, students, staff, and community members.   All groups share the common goal of quality education for all students throughout the district, yet each comes to the table with differing perspectives and priorities.   All approaches must be acknowledged, prioritized, and incorporated into the long-range vision and implementation schedule.

School improvement committees have developed and written mission statements for the Scio Central School District.   All planning that is done with technology considers these mission statement when evaluating possible technology initiatives.

Building wiring, hardware, and software standards have been established through the regional standards presented by the Western New York Regional Information Center to assure the interoperability of technology components.   The building wiring design assures connectivity and interoperability of both PC's and Macintoshes through

local and wide area networks.   Software standards assure interoperability across workstation platforms.   These standards are constantly reviewed for currency.   Standards require expandability and upgrade paths to accommodate future applications.   Our current workstation standards include Dell, and Apple Macintosh,. Industry standards and the anticipated demands of software and hardware to the used by administrators, teachers, students, and staff figure heavily in our decision making process.   District technology staffs identify multiple options of each type of technology device that meet current standards and school administrators and teachers can select and purchase from approved lists.

Other technology devices reflected in the Technology Plan include inkjet printers, laser printers, smart boards, digital projectors, digital cameras, video camera recorders, laptop computers, network routers, network switches, and file servers.

Elementary and secondary libraries have been fully automated.   Mandarin library software operating on a HP server and several networked computers in each library allow Scio students state of the art research facilities.   Each library is also equipped with laser printers and color inkjet printers.

Our current plan has put at least one networked computer in all district classrooms.   However, many classrooms currently have more than one computer.   At this time more than three hundred and fifty computers are used in our classrooms. All networked computers have access to electronic mail (Lotus Notes), Microsoft Office and Internet Browsers.   We currently have three computer labs containing sixty--six computers.   One lab is for high school programming, one for high school business, and one for elementary.   We also have three laptop carts that are used in classrooms when teachers need them.   All district administrative and support staff have access to computers as well.

Scio Central School is currently involved with the Western New York Regional Information Center and other area schools in a consortium entitled the "Common Set of Learning Objectives".   CSLO is a regional service co-sponsored by the Western New York Regional Information Center and the School Effectiveness Service of Erie I BOCES.   The purpose of the service is to engage teachers, through inter-district collaboration, in the development of classroom practices, which integrate the New York State Learning Standards, assessments and technology for higher student achievement.

The initiative is driven wholly by our eagerness to implement the New York State Learning Standards.   Currently two teams of teachers from both the Elementary and High School are involved with the planning and implementation of systemic changes in our instructional methods.   This year is our first year of involvement with the Common Set of Learning Objectives.

Since educators first began to use computers in the classroom, researchers have tried to evaluate whether the use of educational technology has a significant and reliable impact on student achievement. Searching for an answer, researchers have realized that technology cannot be treated as a single independent variable, and that student achievement is gauged not only by how well students perform on standardized tests but also by students' ability to use higher-order thinking skills.

The variety and scope of available software for instruction continues to grow rapidly, making its way into mainstream instructional practice. The technological tools found in schools must be used to promote the varied types of learning as well as learning styles and abilities.

Therefore, software selected for instructional purposes must take into consideration curriculum goals, teaching styles at the various levels, and learning styles and abilities. Priority should be given to software in the areas of electronic mail, word processing, desktop publishing, critical thinking skills, internee access, and development of process skills throughout the curriculum.

As in any other profession, education's technological tools continue to evolve and improve. Providing the administrators, teachers, staff, and students with the best tools available will enable them to perform their respective tasks more effectively and productively. In addition to the rich academic preparation the students will receive in each subject area, they will also become more aware of the technology tools available to support information access, analysis, synthesis, management, and communication.

We have introduced a way for parents to be more involved in their student's education through technology. Parents are given a login into Powerschool where they can see their child's current grades and comments. We encourage parents to be as involved with their children as possible. We have incorporated evening sessions where parents and children work together on technology projects. We also have nights where parents are invited to the school to see student's technology projects and have the children serve as teachers.

The chart on the next three pages summarizes our current status with telecom services, hardware, software, and network devices:

	Current Status	Needs Year 1	Needs Year 2	Needs Year 3

Telecom Services	*The district has 14 cellular phones for custodial/administrative use* *The district has a Gigabit Broadband Wide Area Network for data and internet access* *The district has a distance learning room*	*We need to purchase cellular phones as needed as new staff are hired or as current staff members require them. We need to maintain and replace current phones and pagers as needed.* *Continue to have Broadband Access to the internet for digital video and distance learning applications* *Research faster ways for community (town library) and students to access the internet from outside the school*	*Ongoing purchase and repair of cellular phones or pagers as needed* *Continued need for broadband internet access* *Continue need for outside internet access* *Evaluate and improve usage of the distance learning room*	*Ongoing purchase and repair of cellular phones as needed* *Continued need for broadband internet access* *Continue need for outside internet access* *Evaluate and improve usage of the distance learning room.*

		Develop ways to utilize the distance learning room.		
	The district uses IP Phones	*Continue to support and update equipment as needed*	*Continue to support and update equipment as needed*	*Continue to support and update equipment as needed*
Hardware	*The district has 280 Macintosh Computers all of which are in classrooms or labs.* *The district has 20 Dell Computers, 0 of which are in classrooms or labs and 20 of which are in administrative or staff offices* *The district has 100 printers, 80 of which are in labs or classrooms. 20 printers are used in office areas.*	*We need to replace 50 Macintosh computers due to age* *We need to replace 10 Dell computers due to age* *We need to purchase at least 5 more network printers to meet the growing needs of the current users.*	*We need to replace 50 Macintosh computers due to age* *We need to replace 10 Dell computers due to age* *We need to purchase 5-10 network printers to meet the expanding needs of technology usage in the district*	*We need to replace 50 Macintosh computers due to age* *We need to replace 10 Dell computers due to age* *We need to purchase 5-10 network printers to meet the expanding needs of technology usage in the district*

	The district has 75 ipads which are in teachers hands or in carts for classroom usage.	*We need to add another 20 ipads as a result of high usage.*	*We need to replace 20 ipads due to age*	*We need to replace 20 ipads due to age*
	The district has 3 laptop carts with 45 laptops for student use. We also have 10 laptops for faculty and student signout	*We need to purchase 10 or more laptops as an increased demand and needs for PARCC testing develop.*	*We need to purchase 10 laptops or more due to PARCC testing requirements.*	*We need to purchase 10 laptops due to age or increase testing requirements*
Software	*We currently have the following software utilized extensively through the district: Microsoft Office - 100 licenses Lotus Notes - Erie1BOCES Powerschool - Erie 1 BOCES Internet Explorer - free Firefox - free Part 200 – Erie IBOCES Mandarin - Erie I BOCES*	*Need to purchase more licenses of certain software titles to keep up with usage.* *Need to upgrade Microsoft Office* *Need to update antivirus software continuously*	*Need to continue to upgrade software as new versions and titles come out.* *Need to evaluate internet filter to determine if there are new products out there that better meet our needs.*	*Need to continue to upgrade software as new versions and titles come out.*

	Lightspeed *- Erie I BOCES* *Symantic Antivirus* *Software* *- 150 licenses* *Castle Learning* *- site license* *Study Island* *- site license* *Geometers Sketchpad* *- site license* *Riverdeep LMS* *- network license*			
Network	*We currently have:* *2 Data Servers* *Lotus Notes server* *Mandarin Server* *Mac OS Server* *1 Router* *25 Switches* *Ethernet wiring through the building*	*Update as needed for Broadband Access* *Need more switches for extra computers* *Update servers as needed*	*Update router as needed for Broadband initiative* *Purchase switches as more computers are purchased* *Update and repair wiring as needed* *Update servers as needed*	*Update router as needed for Broadband initiative* *Purchase switches as more computers are purchased* *Update and repair wiring as needed* *Update servers as needed*

III. H. Increase Access

Scio Central School has been students below the poverty level where access to technology outside of school is an issue. We have instituted a laptop signout program for students where they may sign out a laptop for the night to work on any assignments or papers that have been assigned digitally.   This has been a popular program and will continue in the three years this plan is in effect.

Special Education students who have print disabilities have been using software in both our elementary and secondary schools to read previously inaccessible printed materials. This has enabled these students to participate with their peers in the regular classroom and in this instance assistive technology is promoting a least restrictive environment for the students with special needs. These students have access to Kurzweil 3000™ software and both students and classroom aides have been trained to scan books and other printed materials into a format that allows it to be read to the students by the Kurzweil 3000™ software.

III. L. Coordination of Resources
Technology budget is funded through a local line item in the budget and this budget includes items that are purchased through a variety of services most of which are provided by the Western New York Regional Information Center at Erie 1 BOCES and our local Cattaraugus Allegany BOCES in Olean, New York. New York State Computer Aid and New York State Software Aid along with Title IID and other Federal Grant programs. Our network is administered by the Technology Coordinator working in concert with a team of two certified microcomputer technical support personnel supplied to the district by contract with the Western New York Regional Information Center at Erie 1 BOCES. In addition to our local support staff, we coordinate our needs and planning with members of the Western New York Regional Information Center Wide Area Network support team which includes a senior microcomputer support specialist who works under a separate contract with us. Our equipment is maintained in good repair through coordination with hardware support contracts with both the Western New York Regional Information Center and the Cattaraugus-Allegany BOCES Center in Olean, New York. Our network is protected by content filtering that is housed and managed locally.

Information Services

      An everyday technician supplied through Erie I (one three day technician and one two day technician) and one full time technology coordinator (who also teaches) administer our network.   Research recently completed by the Center fro Educational Leadership and Technology indicates that one qualified person can effectively administer 80 computers on a given network.

      At the present time our standard network operating software is Windows 2000.   Our current file servers include the following:

Lotus Notes Server – Dell Poweredge R510 – Windows 2012

Data Server - Dell Poweredge 2900 – Windows 2008

Powerschool/Part 200 Server - Dell Poweredge 2400 – Windows 2008

General Use Server - Dell 2850 Poweredge - Windows 2008

OS X server – Macintosh G4 – 1GHZ RAM – Mac OS X

DVR Server – Dell Poweredge 2950 – Windows 2008

NetApps Server – Dell Poweredge R200 - Windows 2008

Or internet access is currently supplied by the Western New York Regional Information Center via a broadband internet connection to the WNYRIC.

We are currently filtering using the PacketSure Appliance that been approved for use by Erie I BOCES.   We are filtering all material that the district deems inappropriate for student use.   We are also using Erie I BOCES Spam Filtering service for Lotus Notes.

With the purchase of the Powerschool software for scheduling, attendance, and grading purposes, the district will allow parents to access their child's grades and attendance from home.   Students and community members are also able to borrow laptops from our current supply of twelve PC and Macintosh computers.   Students are encouraged to borrow the laptops for writing papers and doing other school-related tasks.

Action Plan

Computer Replacement Plan –

Every year a three year IPA (Individual Purchase Agreement) will be agreed to with Erie I BOCES.   Each year purchases will be made that will either replace or institute new technologies in the district.   The technology coordinator will be in charge of coordinating the replacement plan.   Replacement will be done as follows:

- In general, the district will attempt to have a four year cycle for replacement.

- The oldest computers in the district will be returned to BOCES – they will be replaced either by new computers or by computers being passed down from another area.

- New computers will always be placed in areas of highest usage – including the offices, computer labs, and teacher's computers.   As they age, the computers will be passed on to lower usage areas, including student use computers in classrooms and staff computers.

- Exceptions may be made in unusual circumstances by the technology coordinator or the district technicians.

IV. Funding

The district coordinates all funding sources to support various aspects of the technology plan.   Local, federal, state, and grant funds are allocated to purchasing the technology resources identified in the technology plan.   From the outset, it is critical that financial resources are identified that will be able to sustain the budget over a long period of time.

Approximately $10,000 per year comes from State Aid Hardware funds.

Approximately $9,000 per year comes from State Aid Software funds

All extra purchases come out of the IPA line of the budget.   In 1996, the district invested $30,000 in purchases in an Individual Purchasing Agreement (IPA) over a three year period.   The same amount of money was invested in 1997 and 1998.   At that point a $90,000 pool of money was invested in new technology.   At that point as one IPA was paid off, the money was reinvested in another IPA the next year.   This reinvestment has been ongoing ever since allowing us to purchase a consistent amount of technology each year without increasing the budget.

The anticipated costs include:

1. Hardware, equipment, and software costs

        - At least $25,000 is budgeted each year to acquire, maintain, and upgrade   technology equipment in our classrooms and offices.

        - Several Individual Purchasing Contracts (IPAs) have been and will continue to   be written with the Western New York Regional Information Center to purchase   large amounts of hardware and support services.
        - Our recent building project included over $300,000 for technology which we   are in the process of purchasing and installing.

2. Set-up charges

        - When purchasing with an IPA, all set-up charges are figured into the package.

- Other charges are included in the hardware budget.

3. Network Access Fees

    - Approximately $20,000 per year through the Western New York Regional
    Information Center

4. Service contracts and maintenance charges

    - Per contract with the Western New York Regional Information Center at $4,000
    per year.

5. Operating Costs (phone lines, security systems, utilities)

    - Approximately $25,000 per year

6. Consumable materials (paper, disks, labels, ink cartridges, ribbons)

    - Approximately $7,000 per year

7. Staffing

    a. Technology Coordinator - New York State Certified Teacher, with background and experience commensurate with technology planning and integration. The coordinator will also teach classes in Computer Science and Mathematics. This is a regular 10 month position with extra pay received for coordinator work and summer work and follows the teaching contract with the school district.

    Besides teaching duties, is responsible for:

        - Technology and curriculum planning for the district

        - Coordination of Common Set of Learning Objectives

- Coordination and planning of staff development opportunities

- Coordinator of schedule for two-day technician

- Troubleshooting and repair for the three days without a technician

- Coordinating the setup of new hardware and equipment

- Responsible for internet and electronic mail management

b. One or two technology specialists – five days per week shared position coordinated by the Western New York Regional Information Center. Should have experience in microcomputer maintenance, repair, network administration, construction, and troubleshooting.   They report to the district technology coordinator.   Salary is paid through the Western New York Regional Information Center.

c. Elementary computer teacher assistants - Ten month position.   This position includes teaching elementary computer classes to students in Grades K-6.   Will be paid as per the Scio Teachers Association contract.

8. Professional Development

Staff development in technology is currently coordinated with the Western New York Regional Information Center to provide instruction in:

- Application supported by the Common Set of Learning Objectives

- Microsoft Office

- Lotus Notes

- Internet Applications and trainin
- SMART board

- Powergrade

- Other course-specific software

School district staffs now participate in a variety of professional development programs sponsored by the Western New York Regional Information Center and the Cattaraugus-Allegany BOCES Center Department of Instructional Support Services.   In addition to improved and expanded professional development provided directly from the BOCES, services are provided linking other professional development resources such as colleges and universities, non-profit agencies, government agencies and businesses including Alfred State College, Jamestown Community College, Houghton College, Alfred University, St. Bonaventure University, Steuben-Allegany BOCES, Allegany County Employment and Training, and the Allegany ARC.

V. Monitoring and Evaluation

This document and it's goals and plans will be used as a working document when planning for future technology needs.

Quarterly, the committee will look at the goals and needs that are laid out in the plan and determine if that goal or need has been met.   The determination will be based on what the goal or need was.   If it simply was a purchase of an item or a service, the purchase and installation will constitute goal achievement.   If a goal is based on training and or professional development, an evaluation will take place where the teachers involved in the professional development will be surveyed to see if their needs were met and if the training was effective.   If the goal or need is broader and needs more of a substantial evaluation, the technology committee will determine how to best evaluate those goals.

If a goal has been determined to be unmet, the committee will either reshape or resubmit the goal for the next year.   A determination will be made as to why the goal was not met, be it budget related or any other reason and then modifications will be made to the goal as needed.   This process will occur once per year at the same time as the annual budget is being developed so that any budgetary issues can be addressed as part of the review.

The results of the committee's evaluation will be documented and made available to anyone who is interested