



Schenectady City Schools

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TECHNOLOGY PLAN

2007 - 2010

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Introduction

April 18, 2004 marked the 150th Anniversary of the Schenectady City School District. Just as our city is one of the oldest cities in the nation, our school district is one of the first public school districts ever to offer widely available secondary education.

The district originated in April 18, 1854 when the Union Classical Institute opened. Over the many years, school buildings have opened and some have closed, but each of them is significant to the legacy, history and tradition of excellence in our district.

Schenectady is comprised of a richly diverse student population with students who speak more than 27 different languages including Spanish, Pashto and Farsi.

Today our district includes 17 schools with over 10,000 students. Schenectady has steadily transformed each school into enhanced state-of-the-art learning centers. Each Schenectady school and grade level, from Pre-K through high school, offers extraordinary educational programs, student support services, an array of curricular and extra-curricular options geared to meet the diverse needs of our students.

Preface

The Schenectady City School District, as a result of forward-thinking leadership over the last few years, is well situated to sustain its leadership role in the delivery of technology-enriched education to its community. This will ensure that the school district is preparing a technology savvy workforce for our business community and specifically to meet the forecasted needs of the Albany Nanotech Initiative. Developing community access to the outstanding resources of the Schenectady City School District meets the directive of the developing Strategic Plan for the district. “We will form strong community and family relationships with the school district to achieve our mission” is the fifth strategy.

The school district showed their commitment to technology by establishing the Chief Technology Officer position, which is part of the executive cabinet. A nation wide search was conducted and the position was filled in early August of 2003.

Our plan covers five basic areas, covered in more depth in the report:

1 - Clear Goals and Realistic Strategies

2 - Professional Development Strategy

Our plan incorporates the outstanding technology training opportunities afforded by the Schenectady Center for Professional Development, the resources of an on-staff Technology trainer, the availability of EETT Technology, Grant funds, Technology Mentors, and participation in the excellent Model Schools Program.

3 - Assessment of the district’s current hardware and software solutions

Emphasis will be on examining current platforms, centralized/standardized data, improved scrubbing process for data and the refreshing of our hardware/software.

4 - Budget

Schenectady has been very successful in seeking Federal and State funding for technology initiatives. E-rate, district funds, BOCES aid, and other grants all work in concert to support district efforts. We work very closely to support and compliment the various grants to avoid duplication of effort and maximize the benefits to the students and teachers affected.

5 - Evaluation

Evaluation occurs on many levels. In the past the University of Albany Evaluation Consortium annually evaluated grants in which we participated alone or in a consortium and remains an option for future use. The district has staff assigned to evaluate results from grants and NYS grade 3-8 Math and ELA testing.

The school district has implemented an Educational Technology Task Force which will guide, evaluate programs, and develop a technology roadmap for the elementary, middle, and high school. The task force members are represented from all areas of the district and meets monthly.

Mission Statement

The Schenectady City School District will incorporate technology as a natural part of education through an integrated, comprehensive framework to govern acquisition, application, and evaluation of technology. This will ensure that all students have the opportunity to be productive citizens in an information-driven, global society. The use of technology will be curriculum driven and will be equitably integrated into the total school environment. Technology needs to support instruction and learning.

Historical Plan Summary

The last few years have been a period of remarkable transformation for the Schenectady City School District. Following the development of a comprehensive technology plan in 1996, this district continues to evolve into a state-of-the-art learning environment. With an aggressive approach toward educational reform and the constant pursuit of excellence, Schenectady has employed resources and effective strategies that support the district's technology initiative and educational goals. Schenectady's steadfast commitment to the technology program has resulted in the deployment of over \$20 million dollars in state-of-the-art technology, tremendous on-going multi-disciplinary staff development programs, and the introduction of over 10,000 children and their families to a world beyond the classroom. Every classroom in the district is wired for Internet and Video Conferencing. The ratio of state-of-the-art computers available for student use is 1 to 5.

The vision of the district's leadership has resulted in an infrastructure second-to-none in New York State. As a result, our plan will focus on increasing student achievement through appropriate use of technology, professional development to use the resources we have, exploration of new techniques to incorporate technology in the delivery of curriculum, and ways to improve communications with the community at large. Schenectady is the recipient of millions of dollars in grant funding. As the lead agency for a \$1.4 million collaborative Technology Literacy Challenge Grant, a 5-year, \$11.83 million-dollar bond initiative, and a \$4 million dollar E-rate award, this district has solicited the resources that are necessary to pave a most accessible thoroughfare. Through these comprehensive programs, Schenectady continues to provide all teachers and classrooms with the tools and training that are necessary to encourage independent and higher level thinking. Each of 765 teachers are engaging in professional development and technology training opportunities.

With refreshed enthusiasm, students and teachers are demonstrating an eagerness to explore. Extraordinary projects, lesson plans, and innovative hands-on activities have become a part of daily instruction throughout the district. In a short period of time, reform efforts have had indicative impact upon recent patterns of growth on many levels. Entering the eleventh year of the program, this district has implemented a number of organizational changes to support reform efforts. While the teaching and learning

environment is rapidly transforming, student achievement remains the program objective. Professional development and turnkey training remain integral components of the program and continue each year. A technology- consulting group continues to co-steer infrastructure, design, implementation, and maintenance plans, with key district personnel being incorporated in the areas of network maintenance and support.

Goals and Objectives

Technology Objectives and Plans

A. Overview

Schenectady City School District Technology Program Objectives

- Provide a learning environment where students are focused on high levels of achievement and continual growth and improvement.
- Provide a learning environment that actively engages students in independent study, research-based curriculum emphasizing higher- level thinking, inquiry, and decision-making skills.
- Utilize research-based projects and teaching approaches.
- Change the teaching and learning environment to best address the requirements for higher achievement as reflected in the New Standards and Frameworks.
- Integrate technology as a delivery system and a tool in the teaching and learning environment, extending curriculum, instruction and assessment practices.

As the Schenectady Technology Program flourishes, the district will seek signs of improvement in many areas including:

Student Motivation

Attendance

Use and Understanding of Technology Tools

Improved Test Scores

Improvement in All Academic Areas

Enhanced Projects

Sustaining steady progress, Schenectady has taken notable strides toward achieving program goals. Community recognition, participation, and support continue to play important roles in the development, implementation process, and measurement of short- and long-term achievements. The following components or program goals will support the district efforts to implement systemic reform and technology integration.

OVERALL OBJECTIVES

Goal #1

To support a comprehensive technology infrastructure that will provide widespread access and connectivity for students and teachers within the electronic learning community. Through an interconnected learning community, all students, teachers, staff, and the community will have access to technology tools and resources. The infrastructure will be comprised of several types of technology allowing for transparent user-friendly communications.

The district vision of connecting students and teachers to the world beyond the classroom has indeed become a reality. Entering the 11th year of the technology program, students, staff and families of the Schenectady City School District are benefiting from a network infrastructure that connects throughout each building, has access to each building, and connects to outside networks. The network is comprised of a high-speed fiber optic ring, which circles the city. The ring is tied together between five schools using high speed Asynchronous Transfer Mode (ATM) Technology. The network supports 100Mb switched Ethernet, as well as positions the district to support ATM and Gigabit (1,000Mb) Ethernet services across the network. Stability, flexibility, manageability, performance, and cost-effectiveness support the infrastructure.

Schenectady has employed Windows 2003 as the network operating system. A server farm of 51 servers has been installed to provide specialized support services including file sharing, shared printers, shared applications, CD ROM, DVD, and video servers, electronic mail on-site, web-hosting for district Intranet and public web site, and security and proxy filtering services.

The Schenectady City School District student per computer ratio is 5 to 1.

Taking an aggressive approach in preparing third through eighth grade students for NYS Math and ELA testing, Schenectady has installed clusters of computers in many of the classrooms. Ten wireless laptop carts containing 32 units were deployed in the three middle schools along with four more wireless carts deployed at the high school to address the need to improve ELA and math scores.

Connectivity has also enhanced communication and contributed to a most efficient system of operations throughout all 17 schools and administrative offices.

Infrastructure, maintenance and program modification are guided by a technology consulting firm and district technical staff. Twenty-four hour support to the technology program is provided through out-sourcing. "The Help Desk" provides daily assistance and service, including one-on-one and small group training to all district personnel.

Goal #2

To provide on-going staff development that will guide teachers and help other staff to use technology tools and resources in ways that will provide the maximum educational benefit. When technology is effectively used in classrooms, new opportunities are opened to students for learning, which in turn promotes student achievement.

The Schenectady City School District is committed to the task of preparing and equipping all students and staff with the tools that are needed to be successful throughout this swift moving technological evolution. In our efforts to improve student achievement and demand higher standards this district recognizes the importance of offering continued training, equipment, and an array of resources to Schenectady staff.

Recognizing the importance of professional growth, this district maintains a solid commitment to seeking resources and continues to provide on-going extraordinary development opportunities. To coordinate and support professional development efforts, Schenectady has:

- Employed a full-time professional development supervisor
- Employed a full-time development officer

Goal # 3

To insure that technology is integrated into the curriculum and instruction as an integral part of the Schenectady City School District's mission, with focus on:

- Learning differences
- Encourage use of new math and science technology such as graphing calculators and Microcomputer Based Lab science probes for data collection and analysis.
- Providing increased access to resources and courses than are available in the district through traditional means
- Providing students and teachers with a means to collaborate on learning projects and lessons with others around the world
- Meeting higher achievement requirements of the New York State Learning Standards
- Using computers and networking technology to search out, analyze, graphically organize and present information
- Developing basic skills and knowledge
- Developing knowledge of technology and applications and how to use in everyday life

The Schenectady City School District's reform efforts continue to support the New York State Learning Standards. The curriculum committees at all grade levels, the Chief Technology Officer, the Professional Development Supervisor, Building Leadership Teams, and the Educational Technology Task Force will continually explore and develop strategies to enhance the program, focusing on integrating technology into the classroom.

Technology integration continues to be guided by a concise action plan.

- Staff training on software including softchalk, blackboard and learning.com
- Requirements of teachers - using technology for instructional presentation
- Implementation of CCC Success Maker instructional software on all levels
- Teachers using assessment tools like Edutest to determine what students know
- Expanding use of Microsoft Office products
- Student Requirements – Minimum of two projects using Internet activities
- Keyboarding and Computer Literacy Skills
- Plan for using wireless laptop carts
- Superintendent's Staff Training Days for the district
- Para training on Office products and selected district educational software
- New employee training on phone system, email and voice mail
- Training and new log-in procedures
- District-wide training on the new Pentamation student information system
- Research and program development

A firm commitment to the plan has kept Schenectady on schedule and has facilitated a smooth transitional process. With refreshed enthusiasm, teachers are engaging students by employing innovative strategies and exciting new lessons. Teachers continue to be trained to use technology in each subject area as both a teaching tool and as a learning tool. They are encouraged to use planning resources. Many of these materials are technology-enhanced lessons and technology integrated projects that have been produced by individuals and by a number of student and teaching teams within the district. These projects are starting to appear on the district's web site.

In an attempt to actively engage students in the learning process, Schenectady is employing cooperative learning models. This district is emphasizing the effective communicator and decision-making component of the New York State Standards. Strong infrastructure plans and professional development programs are contributing to a successful comprehensive program. Integration becomes fluent as each component continues to develop.

Goal # 4

To expand access of district technology to the Schenectady Community as a whole.

- Continue expanding upon relationships with local agencies such as Boys and Girls Clubs, Child Guidance Center, and other community based groups.
- Maintain the daily operation of SCS-TV Channel 17 allowing the Schenectady City School District to keep the community informed of events in our schools.
- Maintain district web site for timely dissemination of information.
- Integrate/expand at-home learning with notebooks and cable modems

Goal # 5

To develop and expand new technologies for integrating technology and curriculum

- Develop online courses for professional development and future student curriculum
- Develop online courses in **Algebra, Geometry, Trigonometry** and Biology using streaming video technology.
- Develop online, web-based resources for professional development courses using Blackboard as our platform standard.

Professional Development

Brief History

District-wide professional development in technology began with the development of a wide-ranging technology plan in 1996. In the following two to three years, all district teachers and paraprofessionals were trained in basic applications within a systematic process in every building. Since that time the district has continued to incorporate technology training with selected groups in conjunction with grants and within course offerings within the professional development program.

Since it's beginning, the district's professional development program has had an array of technology course offerings. The same courses are not always repeated every year. Offerings presented rely on presenter submissions within the Call for Proposals, and all teachers who need skill development in technology do not participate, as selection of courses is elective.

New opportunities to reach students have evolved through grants focusing on technology integration and technology courses that have been presented. Projects, lesson plans, and innovative hands-on activities have become a part of daily instruction throughout the district on all levels. For many Schenectady teachers, professional development technology offerings have revolutionized technology integration as a delivery system and a tool in teaching and learning. Technology has extended the curriculum, instruction and assessment practices. It has maximized educational benefits. Technology integration and use in classrooms has relied on a teacher's skills and comfort level with this strategy.

The Past Eight Years

During the past 8 years, professional development course offerings have included, but not been limited to the following components:

- Basic computer skills and software training (application based)
- Refining technology skills: PageMaker, Hyper Studio, PowerPoint, Learning.com. Etc.
- Technology as a teaching and learning tool / Enhancing classroom practice via technology integration

- Resources on the Internet: Providing increased access to resources that are not available in the district through traditional means
- Developing online courses: We have seen evidence of new online courses being considered, as a result of teachers participating in such offerings.
- CCC, Publisher, BlackBoard

Year 2006-2007

This year the following technology courses have been offered in the following formats:

- Traditional Courses
 1. Publisher
 2. Web Resources for K-5
 3. Excel in the Classroom
 4. Pentamotion Nuts and Bolts part 1
 5. Eschool Plus Gradebook
 6. PowerPoint Games
- Online Courses
 1. Using United Streaming Videos in Your Classroom
 2. Treasurers on the Internet - Levels 1 & 2
 3. Blackboard Orientation Part 1&2
 4. Museum Websites for the Classroom
 5. Overcoming Library Phobia

The Schenectady Center for Professional Development has encouraged more courses in all areas of technology in its Call for Proposals with the hope that opportunities for technology-based professional development will expand and grow with the program

New Teacher Mentor Program

An added voluntary component to the professional development program is included within the New Teacher Mentor Program. This information is not included in the professional development brochure, because it is an adjunct to the Mentee Seminars designed for only our new teachers. These are customized sessions that focus on basic skills. District E-mail, attachments, applications in Microsoft Office, and using the district's Website as a resource. However, for those that choose to participate, just knowing how to use a computer is not enough. These teachers must become knowledgeable about technology and self-confident enough to integrate it effectively in their classrooms.

Fact: Teachers have to become *masters* of technology integration. Online research and resources make many textbooks obsolete.

Equipment Plan

In order to maintain and expand state-of-the-art technology program, the Schenectady City School District has sought supplemental funding opportunities. As a result,

Schenectady has included a \$1.5 million dollar technology bond initiative in \$30.5 million Capital Bond project that was passed in January 2004. In January 2007 a \$48 million dollar construction bond was passed with \$1 million dollars directed towards technology. The district continues to seek grant awards, collaborative program efforts and other business opportunities that will fund technology.

The initial rollout of IBM computers was approximately 11 years ago and the time to refresh that hardware was well over due. In the summer 2005 750 desktops were replaced with the latest hardware available. The operating system for desktop/laptop platforms was migrated from NT 4.0 to Windows XP, the server platform was migrated to Windows 2003. In the summer of 2006 800 more desktops were replaced with new up-to-date hardware. The district looks to continue upgrading desktop and laptops every summer to avoid being left with antiquated equipment. Every classroom in the district is wired and has access to the Internet and World Wide Web and the district upgraded from 100 MB Ethernet to Gigabit Ethernet in 2006. In the assessment section of this plan you will find additional proposed technology projects that will be reviewed by the technology committee.

Technology Program Monitoring and Evaluation Process

The Schenectady City School District's reform efforts continue to support the New York State Learning Standards. The curriculum committees at all grade levels, the Chief Technology Officer, the Professional Development Specialist, Building Leadership Teams, and the future Technology Task Force continually explore and develop strategies to enhance the program, focusing on integrating technology into the classroom.

Technology integration continues to be guided by a concise action plan.

- Staff training on software including e-mail and Internet Explorer
- Requirements of teachers - using technology for instructional presentation
- Implementation of CCC Success Maker instructional software on all levels
- Teachers generating and using Success Maker reports
- Expanding use of Microsoft Office products
- Student Requirements – Minimum of two projects using Internet activities
- Keyboarding and Computer Literacy Skills
- Plan for laptop carts in the classroom to alleviate the need for computer lab time
- Support Staff Training
- Paraprofessional training on Microsoft Office products and curriculum software
- New employee training
- Training and new log-in procedures
- District wide training on new phone system and voice mail

The future Technology Task Force, will be comprised of teachers, paraprofessionals, administrators, and parents, which will guide the implementation of the Technology Plan. Adjustments are made and long-term planning occurs, balancing the needs of the different levels and constituencies. This group will meet monthly, for the full day.

There is also a Board Technology Committee, comprised of parents, Board members, teachers from elementary and secondary levels, paraprofessionals, and administrators. This group has been instrumental in determining the course of the overall plan, from choosing the computer platform and software, to developing technology-related policies.

Evaluation of Computer Curriculum Corporation Success Maker software:

Scatter of gain time extensive analysis has been done for several years on the effectiveness of the multi-million dollar investment in Success Maker software. Student progress has been closely monitored and compared with gains on the grade 3- 8 Math and ELA exams.

Assessment

The Chief Technology Officer (CTO) met with various staff members of the district, with various departments, houses and programs for the district to perform a first blush assessment of the state of Technology for the district. The CTO prepared a Technology Analysis of the Schenectady School District, which was shared with the School Board in November 2003. The analysis looked at the following for the district:

Strengths

- Staff/people dedicated and put in long hours
- Strong Technology commitment from the Board of Education and the Superintendent of Schools
- Strong Telecomm infrastructure and has the bandwidth capacity to expand to meet future needs
- Strong buy-in from the curriculum staff that technology can make the difference
- Advanced technology solutions have been implemented in the district
- Successful grant funding to feed technology
- Cisco Academy
- Oracle Certification Program
- Maximizing E-rate funding
- Strong partnership with BOCES

Weakness

- Staffing is not sufficient to support technology
- No refresh plan for old hardware/software
- Lack of redundancy, load balancing and failover for critical systems
- Data is not centralized or standardized
- No Q&A scrubbing process for data
- No policies and standards for technology solutions and applications
- Professional Development training needs to revamped and updated
- No Q&A process for Web content management
- No SLA's or priorities assigned to problem tickets, projects and MAC's

- Poor communication to users on problems, issues and resolution to problems from technical staff
- Lack of adequate software tools for help desk, inventory control, change control and software distribution of patches, fixes and images
- Lack of sufficient budgetary money allocated for technology

Opportunities

- All weaknesses highlighted can be resolved and corrected
- To utilize technology as an effective education tool
- To implement technology that includes the community in educating our kids
- To maximize learning opportunities for our kids globally in a cost-effective manner
- To prepare a technology-savvy workforce for our business community

Proposed Technology Future Projects

- Data Warehouse/Centralized Data Base Management Solution
- Seamless Application that benefits HR, Business Area and the census data with a common platform
- New curriculum software for K-12
- Tools for E-Learning and on-line course development
- Web-content management Solution
- Enterprise Network Management Solution
- A/C for labs and classrooms
- Refresh Storage Solution and SAN environment
- Introduce Wireless/Mobile Cart solution to the classroom
- Refresh Intel desktop and laptop hardware solutions to meet needs
- Refresh Apple Technology where needed
- Reexamine and refresh printer strategy
- IT staffing additions

Since the analysis in 2003 all points of weakness identified have been addressed or are currently being addressed. A new analysis is planned for in the fall of 2007 with an expected SWOT to be presented in the November timeframe.

Current Inventory of Equipment and Services

1. Computers and Software

1. See Attachment #1 for Hardware
2. See Attachment #2 for Software

Summary

1. Networked PCs – 3827
2. Networked printers – 221

3. Computer: student ratio- 5 to 1

2. Telecommunications

1. Voiceover ATM

1. Asynchronous Transfer Mode, or ATM, is a multiservice, high speed, scalable technology. It is a dominant switching fabric in carrier backbones, supporting services with different transfer characteristics. ATM simultaneously transports voice, data, graphics and video at very high speeds. Every classroom and office in the district has a telephone connected to the ATM network. In addition, Microsoft Outlook provides a graphical interface to interact with the voicemail and messaging features of the phone system.

3. Internet Access and Services

1. Internet access through T3

2. Multipoint Video Conferencing using RADVISION's *viaIP* MCU allows for real-time voice and video collaborative communications. The *viaIP* provides full compliance and interoperability with IP and ISDN networks. When used with the Radvision GW20 gateway, the MCU enables H.323 and ISDN, to participate in the same conference session. Both the MCU system and conference sessions are managed, configured, and dynamically modified through a Web-based interface that offers conference control and administration for the end users. T120 data collaboration is also available on the MCU.

3. Multipoint Video Conferencing through CuSeeMe Multipoint Conferencing Server CUseeMe® Conference Server is the next generation of CUseeMe Networks' award-winning Meeting Point Conference Server, a software product that delivers multimedia group interaction across IP-based networks. CUseeMe Conference Server, formerly named Meeting Point Conference Server in Version 4.0.5 and earlier, offers multipoint conferencing services to H.323 standards- based clients, including CuseeMe Networks' own CUseeMe Pro videoconferencing client. This allows participants using a variety of videoconferencing clients to work, learn, and socialize in a multipoint conferencing environment.

CUseeMe Conference Server:

- Allows groups of users with networked personal computers or conferencing systems to interact in real-time, sharing any combination of audio, video, text, and data.
- Enables administrators to control the use of multimedia communications on their network, offering bandwidth control and optimization, security, conference administration, and monitoring services.

- Offers easy integration into existing network environments. It runs on Microsoft® Windows XP or 2003 Server, Sun® Solaris™, and Red Hat™ Linux™ platforms, and can be accessed from most computer platforms through a Web browser.
- Intelligently manages the amount of bandwidth required for group interaction, takes full advantage of IP Multicast technology.

4. Other Technologies

Video over Network – Infovalue software delivers multicast MPEG1 and/or MPEG2 to every desktop PC. Currently we are broadcasting the Tools for Schools video on the new Math B Assessment, PBS, Annenberg/CPB channel from satellite (fed into the network and distributed to every PC requesting it). It is described below.

QuickVideo OnDemand - an innovative software product that seamlessly delivers high-performance video streaming to networked users. QuickVideoOnDemand employs InfoValue's patented streaming technology for the most efficient client/server streaming over any IP compatible network, including Ethernet, Fast Ethernet, Gigabit Ethernet, ATM, cable modems, and xDSL modems.

Windows 2003 Streaming Media Servers

- Currently using this technology - described by Microsoft as “highest-quality audio and video at any connection speed with the Windows Media Format for audio and near-broadcast-quality video, using less bandwidth compared to other formats; and integrated intelligent streaming that automatically adapts the quality of streaming broadcasts based on network availability and connection speeds” - to deliver professional development opportunities over the Internet.

Current Program Status

1. Curriculum integration

- a) Curriculum Corporation’s Success Maker software for Math and Reading in grades 1-7. Students spend a certain amount of time per week working with the software under the supervision of the teacher. The software content aligns well with the New York State Learning Standards.
- b) A large repository of activities has been developed by teachers who have participated in the wealth of technology-related professional development opportunities. Teachers for the last three years have participated in training under the auspices of the EETT Technology Grant, GenYES and with the Technology Mentors. These teachers have attended training as teams from their grade level and worked intensively for five consecutive days on developing standards-based, grade- appropriate lessons.

- c) Plato Learning Systems software is being utilized in our credit recovery program. The mission is to provide students who have failed a course previously a way to receive credit for the course and build self esteem in the student.

EETT Grant work to integrate new technologies into state or local education improvement efforts that have been stimulated by a growing national commitment to raising education standards. These grants will focus on enhancing professional development and teachers' skills to use computers and advanced learning in their classrooms, as well as developing interactive curriculum resources, programs, and products in math and language arts.

Project VIEW, which has just expired, trains teachers to incorporate videoconference and other digital resources into their classrooms in ways that challenges students to achieve to their fullest potential through the technological environment of their future. Project activities include:

- Developing, testing and delivering content-rich, interactive video conferences in learner-centered classrooms
- Creating customizable staff training model, which builds capacity to replicate and/or participate in programs produced by the VIEW project.
- Constructing an Internet "web hub" to showcase and provide easy access to view project and related archives and resources.

2. Staffing and Training

Schenectady has developed an outstanding variety of Professional Development Offerings see the section in this plan for professional development.

Budget

Technology Support Staff (includes benefits)

Position	2006-2007	2007-2008	2008-2009	2009-2010
Chief Technology Officer	\$138,450	\$143,988	\$149,747	\$155,736
Technology Projects Coordinator	\$107,250	\$111,540	\$116,001	\$120,641
Technical Services Manager	\$85,710	\$89,138	\$92,703	\$96,411
Manager Information Systems	\$85,710	\$89,138	\$92,703	\$96,411
Computer Lab Paras (3)	\$107,250	\$107,250	\$109,250	\$109,250
Boces Tech .8	\$66,300	\$66,300	\$68,300	\$70,300
Total	\$590,670	\$607,354	\$628,704	\$648,749

Professional Development (includes benefits)

Position/Program	2006-2007	2007-2008	2008-2009	2009-2010
Supervisor Professional Development	\$91,039	\$94,680	\$98,467	\$102,405
Technology Trainer	\$93,744	\$97,493	\$101,392	\$105,447
Sustained Staff Development	\$125,000	\$130,900	\$135,000	\$140,000
Contractual Expenses	\$25,000	\$27,000	\$29,000	\$31,000
Model Schools	\$8,500	\$8,500	\$8,500	\$8,500
Grant Staff Development	\$50,000	\$70,000	\$100,000	\$100,000
Total	\$393,283	\$428,573	\$472,359	\$487,352

Equipment/Infrastructure

Service/Cost	2006-2007	2007-2008	2008-2009	2009-2010
Infrastructure Support	\$1,150,000	\$1,150,000	\$1,150,000	\$1,150,000
Computer Hardware	\$310,000	\$1,310,000	\$810,000	\$810,000
Computer Software	\$107,500	\$583,000	\$250,000	\$250,000
Computer Repairs	\$36,707	\$40,000	\$40,000	\$40,000
BOCES Computer Services	\$600,000	\$661,000	\$700,00	\$700,000
Telecom Services	\$500,000	\$500,000	\$500,000	\$500,000
Supplies	\$61,100	\$61,100	\$61,100	\$61,100
Total	\$2,765,307	\$4,305,100	\$3,511,100	\$3,511,100

Budget Total

Category Totals	2006-2007	2007-2008	2008-2009	2009-2010
Technology Support Staff	\$590,670	\$607,354	\$628,704	\$648,749
Professional Development	\$393,283	\$428,573	\$472,359	\$487,352
Equipment/Infrastructure	\$2,765,307	\$4,305,100	\$3,511,100	\$3,511,100
Budget Total	\$3,749,260	\$5,341,027	\$4,612,163	\$4,647,201

Attachment #1

	Computer Labs	Classrooms	Library or Media Ctr	Admin. Office	Other Location	Total
Computers (list by type)						
HP	500	450	200	40	20	1210
Dell	500	460	100	10		1070
IBM	320	730		50		1100
Laptops	388	22		20	7	437
Apple	10					10
Number of computers listed above that are Internet ready	1020	1225	430	80	200	3827
Number of computers listed above equipped for multimedia	1020	1225	430	80	200	3827
Peripheral Devices						
Printers	41	120	35	25	0	221
Scanners	31	0	17	0	0	48
Smart Boards	0	10	0	1	0	11
Digital Cameras	0	50	5	10	0	65
Assistive/Adaptive Devices	0	0	0	5	0	5
TV Monitors	0	100	17	1	0	118
VCRs/Laser Disk Players	0	100	17	1	0	118
LCD Projectors	25	37	0	5	0	45
Satellite Dishes	0	0	0	2	0	2
Video Cameras	0	0	0	21	0	21
Network Equipment						
Routers	0	0	0	0	20	20
Servers	0	0	0	0	51	51
Switches	0	0	0	0	260	260
Security Video	0	0	0	0	96	96
Number of rooms wired for internal connections	33	520	60	100	100	813
Telecommunication Links						
Full or fractional T1	N/A	N/A	N/A	N/A	7	7
ISDN	N/A	N/A	N/A	N/A	4	4
Full DS3	N/A	N/A	N/A	N/A	1	1
OC3	N/A	N/A	N/A	N/A	12 (internal)	12
OC12	N/A	N/A	N/A	N/A	11 (internal)	11
POTS Lines	N/A	N/A	N/A	N/A	400	400
ISDN/PRI	N/A	N/A	N/A	N/A	6	6

Attachment #2

SOFTWARE (list by type)	TOTAL LICENSES
Microsoft Office	3900
Microsoft Outlook	3900
Internet Explorer	3900
CCC Success Maker	1780
Adobe Photoshop 4.0	100
Adobe PageMaker 6.5	120
Adobe Creative Suites Premium 2.0	28
Adobe Creative Suites Premium 1.0	30
Adobe Acrobat Professional 7.0	50
Adobe Go Live CS2	50
Adobe Premiere Pro 7.0	50
Adobe Premiere 5.1	40
Adobe Live Motion 2.0	50
Adobe In Design	39
Companion Library Automation Software	430
Adobe Web Design Suite	100
Macromedia Web Design Suite	30
Basic Mathematics DB	4 Bldg Site Licenses
Geometer's Sketchpad	4 Bldg Site License
Discover	1 Bldg Site License
Math A/ Math B Database	1 Bldg Site License
Cognitive Tutor Integrated Math 1	1 Bldg Site License
Reading A-Z	34
Chemistry DB	1 Bldg Site License
Biology DB	1 Bldg Site License
Living Environment	1 Bldg Site License
Earth Science	1 Bldg Site License
Physics DB	1 Bldg Site License
US History & Government DB	1 Bldg Site License
Global History & Geography DB	1 Bldg Site License
Faronics Deep Freeze	208
VB6	115
IRM	1 Bldg Site License
CO Writer 4000/ Writing Solution	1
TrendMicro	3900
PD Express	District
Altiris	3900
Learning.Com	District
MXM4.0	1
Microsoft Server 2003	51
Knowledge Adventure	1 Bldg Site License
Sunburst	1 Bldg Site License
Inspiration v6.0	204
Inspiration v7.5	284
Corel	5
Pearson Scott Foresman	29
Front Page	100
Plato Learning	75
BlackBoard	Enterprise License
SoftChalk	1
Trusmart	District

SOFTWARE (list by type)	TOTAL LICENSES
PlanPlus	2
Part200	District License
Finance Manager	District License
Pentamation E-School Plus	District License
Encore	15
Turbo Psych Writer	District License
Adventnet Help Desk	District License
HP Learning Paq	411
Partnership for Innovative Learning Pro Desktop	300
Rockware mapping our World	36
Mathpert	30