Forestville Central School District



Technology Plan 2007 - 2010

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Forestville CSD Technology Plan for 2007 - 2010

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FORESTVILLE CENTRAL SCHOOL DISTRICT TECHNOLOGY PLAN for 2004 - 2007

Technology Vision.

The primary mission of the Forestville Central School District's Technology Plan is to infuse technology into all aspects of the K-12 educational program. In order to achieve this mission, the technology plan:

- Prepares all students to meet the changing technology needs of society
- Prepares our students for the challenges of their post-secondary lives
- Provides daily access to learning environments which integrate technology
- Empowers the educational community by
 - Providing comprehensive and ongoing staff development and support
 - Establishing partnerships which link school, family and the community
 - Providing for exchange of information
 - o Providing equal access to technology
 - Providing for collaborative planning
- Provides an informational system that facilitates the processing, distribution, application, and sharing of information within the educational community

Stakeholders.

The Forestville School District Technology Team consists of members from all areas of the educational process including:

John O'Connor – District Superintendent Daniel Grande – Elementary Principal Charles Leichner – Middle/High School Principal Joelle Woodward – Business Executive Michael Murphy – Technology Coordinator Shari Moore – School Librarian Barbara Faxlanger – Elementary Teacher Jon LeBaron – HS Science Teacher

Introduction.

Forestville Central School District (FCSD) is committed to providing ample opportunities for all students to develop the technology skills and knowledge that will enable them to connect what they learn in the classroom to the world of work and post-secondary education. Fundamental to this commitment to technology education is a solid foundation in the basic technological literacy and computational skills combined with the thinking skills necessary to put knowledge to work. Society's current expectations require elementary and secondary schools to meet significantly enhanced technological goals today. Technology skills can no longer be viewed as simply desirable, but instead should be seen as integral and essential to all educational programs. Improving the match between what higher education and the world of work require and what students are taught obligates FCSD to continuously reevaluate how students learn best, improve how instruction is delivered, and determine the technology resources that will facilitate this process.

Current Status.

Currently, FCSD students have access to technology resources through the libraries, classroom computers, distance learning lab, resource room workstations, mobile wireless laptop carts, and computer labs. There are teacher workstations in every elementary and secondary classrooms and a variety of computers available for student use for research, skill development and drill. Our two libraries utilize subscription Internet databases for newspapers and periodicals along with several other research resources.

The computer lab at the secondary school is occupied most of the day with computer application and technology classes. There is very limited open lab time for other core subject classes to utilize the computers for creative writing or research projects. A mobile laptop cart based in the Library with 16 wireless laptops has been procured to mitigate this limitation. The elementary computer lab serves grades K-5 only once every six days. There are also computers in all classrooms for student use.

FSCD has access to the Internet (filtered by PacketSure) which is available for both students and staff. Students and teachers have the opportunity to instantaneously link current events to ongoing instruction. This provides a real opportunity to connect classroom learning to real life situations.

All regular teaching classrooms in the secondary school are equipped with state-of-the-art multimedia projection systems consisting of a high-brightness, high-definition projector, large 60x80 screens, full-fidelity sound systems, VHS/DVD playback units, Windows XP-based multimedia computers connected to the internet for PowerPoint presentations and streaming videos, and a high-definition document camera (Wolfvision). A similar system has been installed in a shared room at the elementary school for teachers to take classes for special technology-infused lessons.

In the year 2000 Building Project, a dedicated Distance Learning Lab (DLL) was constructed to allow students to take classes being offered by other schools through similar rooms. As part of the BOCES Gigabit Network, an average of 6 elective classes are being offered throughout the day to students through the live interactive video/audio sessions. In addition, a portable videoconferencing unit was purchased for each building for a multitude of uses including virtual field trips to locations around the world, class to class lesson collaboration with other schools near and far, and building to building conferences.

The school's Local Area Network is upgraded on a yearly basis. Currently, the network has Gigabit backbone to all wiring closets, and a minimum of 100 Megabit switched connections to the workstations. A Gigabit fiber Ethernet network connection between our two buildings provides for a seamless LAN on our campus.

An array of 9 servers running MS 2000 Server provides services to all areas of instruction, support, and the business office. All users are provided with a home directory, including all students in grades 3 – 12. An automated backup system provides for failure protection, including offsite storage for disaster recovery. An Exchange Server is used for e-mail, with mailboxes granted to all staff, along with students in grades 11 and 12, and others as deemed necessary.

The students and staff of the school district use the MS Office suite of applications for producing documents, spreadsheets, presentations, and publications. In addition, an assortment of software is used in the computer instruction curriculum, with an emphasis placed on learning keyboard skills using "All the Right Type" software application.

Assessment of Needs.

The following is an assessment of current telecom services, hardware, software, professional development, and infrastructure needs. This information is adapted from the most recent Federal Title IID Consolidated Application for the Forestville CSD. The district is currently in the mode of maintaining the current number of computers, and following a six-year replacement cycle.

The types of technologies to be acquired (services, software, and digital curricula) include the acquisition of the following technology equipment: 135 computers; 4 high-volume color printers; and 3 servers. 18 Data Projectors and 6 Visualizers (WolfVision Units) will also be acquired to replace units that fail due to aging. All components are interoperable with each other.

The supporting resources (such as services, software, other electronically delivered learning materials, and print resources) that will be acquired to ensure successful and effective use of technology include: maintaining a video-on-demand server with over 1300 videos for teacher instructional use; and expand wireless network with 6 additional access points.

The Forestville Central School District needs to be able to provide ongoing, high quality professional development opportunities for faculty and staff members. The current levels of skills for the staff are varied. At a minimum, all staff members are able to perform the following: Introductory Word Processing using Microsoft Word, including be able to compose and edit, print and save a document; Introductory E-mailing skills using MS Outlook, including be able to compose, reply, and forward e-mails; and web browsing and searching skills using MS Internet Explorer. Staff members also have at least a minimum skill level in using MS XP Operating system, including be able to log-in to the network, file management, and print to network printers. As noted in the District's Professional Development Plan, the District intends to support and emphasize the use of continuing professional development opportunities during Superintendent's Conference Days as well as through attendance at technology training workshops. One of the three main professional development goals for the District continues to be to better integrate instructional technology into the curriculum. The professional development opportunities will be sustained efforts that afford teachers and staff the chance to improve their technology skills by attending intensive high quality training in the integration of advanced technology into curricula and instruction. They will also better use new technologies to create new learning environments such as in our model classrooms at the middle/high school.

Technology Plan Strategy and Objectives.

Major objectives for the FCSD technology plan include staff development integrating technology into teaching and learning, instructional management, professional development for teaching staff and administration. A minimum level of ability for using technology will be established each year. At the beginning of the school year, teachers and other appropriate staff will be required to perform a selfassessment through a Technology Assessment Rubric. These rubrics will then be collected and compiled to determine progress that has been made from the previous year, as well as to establish the extent of technology training needed for those not meeting the current standard. Continuous review and acquisition of knowledge of new developments in technology that can be utilized for instructional purposes will be accomplished through our professional development programs. We will provide learning opportunities for all personnel by offering instruction through workshops, seminars, conferences, and individualized training competency. We will make literature available to staff concerning technology uses in instruction in the elementary and secondary schools. Through these educational workshops, seminars, and literature, we will keep abreast of technology changes and the technological advances utilized in the business world and in institutions of high learning. The District will continuously consider adapting these changes to the educational system and curriculum so that Forestville CSD continues to graduate students who are prepared to attend post-secondary institutions and who are trained to function in the highly technical environment that now exists in business and industry. By providing opportunities, incentives, and support for staff to develop model practices using technology, the District visualizes a learning environment that continues to promote age-appropriate technology skills.

In addition to instructional opportunities for staff, the District has developed a plan that increases students' and staff's access to various technologies by expanding the number of computers and related resources available in each classroom. A major component of this equipment is the unlimited resource of access to the Internet, distance learning, and video conferencing. The upgrade of our Internet connection to a Gigabit Ethernet connection with Erie1 BOCES provides for our students, staff, and community members opportunities that were previously unavailable to them. The District plan recognizes that an Internet connection, with the related training and instructional integration, will allow teachers, students, parents, and community members, to reach beyond their physical boundaries and participate in continued learning by accessing distant libraries, databases, and professionals in every field of study.

Technology Plan Goals.

In order to benefit the FCSD stakeholders (students, parents, staff, and community members) and to move the school district forward in the area of technology, several technology goals must be accomplished:

- Goal 1. Provide extensive professional development training for staff members to promote technology awareness and integration of available technologies into the curriculum.
 - Action Step 1.1. Evaluate new technology and survey staff training needs.
 - **Action Step 1.2**. Plan and conduct workshops on inservice days for instructional staff to demonstrate how to better integrate technology into existing curriculum.
- □ **Goal 2.** Provide opportunities for community members to have access to these technology resources, thereby supporting their continued learning experiences.
 - **Action Step 2.1**. Determine community members' needs in the area of technology.
 - **Action Step 2.2**. Make secondary school library-media center available for public use one night per week during the school year.
 - **Action Step 2.3**. Offer adult education technology workshops based on needs.
- Goal 3. Provide opportunities within the individual classrooms through the availability of networked computers with filtered Internet access to enhance and tie the curriculum together.
 - **Action Step 3.1**. Survey classroom teachers to determine needs and willingness to embrace technology.
 - **Action Step 3.2**. Provide model classrooms for secondary school teachers as needed.
 - **Action Step 3.3**. Demonstrate new equipment capabilities and provide continuing professional development support.

- Goal 4. Provide and maintain effective and reliable telecommunication services that allow the District to operate safely and efficiently.
 - Action Step 4.1. Assess current level of telecommunications capacity.

Action Step 4.2. Provide landline and cellular telecommunications to allow for safe and efficient District operations in the areas of technology, administration, and transportation.

Technology Action Plan.

 Goal 1. Provide extensive professional development training for staff members to promote technology awareness and integration of available technologies into the curriculum.

Activities	Timeline	Staff Responsible	Cost	Evaluation
Action Step 1.1. Evaluate new technology and survey staff training needs.	6/2007 — 8/2007	Technology Coordinator/ PDP Team	None	Written recommendations to Superintendent NLT 8/15/07
Action Step 1.2. Plan and conduct workshops on inservice days for instructional staff to demonstrate how to better integrate technology into existing curriculum.	9/2007 — 6/2010	Technology Coordinator/ Principals	\$1,000/year	Teacher surveys/Principal observations

Goal 2. Provide opportunities for community members to have access to these technology resources, thereby supporting their continued learning experiences.

Activities	Timeline	Staff Responsible	Cost	Evaluation
Action Step 2.1. Determine community members' needs in the area of technology.	7/2007 – 8/2009	Technology Coordinator	None	Community survey
Action Step 2.2. Make secondary school library-media center available for public use one night per week during the school year.	9/2007 — 6/2010	Technology Coordinator/ Superinten- dent	\$2,000/yr	Usage reports
Action Step 2.3. Offer adult education technology workshops based on needs.	7/2007 — 6/2010	Technology Coordinator	None (Flow through)	Participant evaluation forms

□ Goal 3. Provide opportunities within the individual classrooms through the availability of networked computers with filtered Internet access to enhance and tie the curriculum together.

Activities	Timeline	Staff Responsible	Cost	Evaluation
Action Step 3.1. Survey classroom teachers to determine needs and willingness to embrace technology.	6/2007 — 8/2007	Technology Coordinator/ Principals	None	APPR Teacher Goals
Action Step 3.2. Provide maintenance for model classrooms for secondary school teachers as needed.	7/2007 — 6/2010	Technology Coordinator/ Facilities Manager	\$11,600/yr	Project completion reports
Action Step 3.3. Demonstrate new equipment capabilities and provide continuing professional development support.	9/2007 – 6/2010	Technology Coordinator/ Contracted consultants	\$1,000/yr	Participant evaluation surveys

Goal 4. Provide and maintain effective and reliable telecommunication services that allow the District to operate safely and efficiently.

Activities	Timeline	Staff Responsible	Cost	Evaluation
Action Step 4.1. Assess current level of telecommunications capacity.	6/2007 — 8/2007	Technology Coordinator	None	Written recommendations to Superintendent NLT 8/15/04
Action Step 4.2. Provide landline and cellular telecommunications to allow for safe and efficient District operations in the areas of technology, administration, and transportation.	9/2007 — 6/2010	Technology Coordinator/ Contracted consultants	\$10,000/yr	Usage reports and Safety Team reviews

Professional Development Strategy.

The following is an extract from the FCSD Professional Development Plan that outlines strategies designed to ensure staff knows how to use new technologies to improve education. This extract is from pages 18 - 22 of the PDP and includes . . . goals, objectives, strategies, activities, and evaluation standards for professional development in the Forestville Central School District."

GOAL: ESTABLISH AN EFFECTIVE STAFF DEVELOPMENT PROGRAM AT FORESTVILLE CENTRAL SCHOOL DISTRICT

Objective 1: To provide a coordinated professional development program that is research based, encourages use of best practices, and meets the needs of District staff members.

Actions:

- 1. Carry out a training program that assists teachers in their efforts to integrate technology into the curriculum.
 - 2. N/A.
- 3. Conduct an instructional needs assessment to identify potential follow up professional development training for the upcoming school years.
- 4. Implement New York State learning standards in all curriculum areas to include special programs.
 - 5. N/A.
- 6. Recognize and disseminate successful instructional practices among teachers and campuses.
- 7. Encourage continued implementation and enhancement of initial training through follow-up activities.

Staff responsible: Superintendent, campus principals, technology coordinator, and teachers.

Time Line: 2007-2009 school years.

Cost: Estimated \$20,000 from staff development budget, Eisenhower funds, special education funds, and Title IID funds.

Evaluation: Needs identified; professional development offerings in place; follow-up training conducted; sharing opportunities in place; training offered in NYS standards and technology applications; and number of teachers and staff attending training.

DESCRIPTION OF OPPORTUNITIES FOR PROFESSIONAL DEVELOPMENT.

"Includes a description of how the Forestville Central School District will provide all teachers employees substantial professional development opportunities directly related to student learning needs as identified in the school report card and other evaluative sources."

Suggestions for staff development topics may originate with any professional or paraprofessional staff member or committee member. The suggestions flow from the individual teacher to the principal, and to the superintendent. All suggestions make their way to the superintendent in collaboration with the District's professional development team, which the decisions are made as to which training is most needed. Depending on the need, the principals and superintendent will attempt to schedule presenters and/or topics. The success of those efforts will be reported back to the committee for adjustment if needed. Input in the area of staff development from staff members is always a high priority.

Forestville Central School District establishes priorities for staff development not only to meet perceived District needs, but also according to the specific campus needs. Many of these needs are also identified through the annual Comprehensive System of Personnel Development (CSPD) plan.

Priority #1 - Curriculum Development. The District's first priority for the upcoming school years in the area of staff development is for Forestville Central School District teachers to develop, refine, and align the curriculum. This has been a staff development priority since 1997; however the schools' curriculum is still not adequately aligned with the New York State higher

learning standards. Developing and aligning curriculum is an ongoing continuous improvement effort aimed at refining the instructional process in order to enhance student achievement.

Priority #2 - Instructional Technology. The second staff development priority is training for selected teaching staff in the area of instructional technology. Instructional staff members should have as a goal to develop the necessary technology skills to be able to use the Internet for instructional application purposes. Great strides have been made in this area in terms of skill development on the part of many Forestville CSD teachers. Our District is fortunate to finally have access to sufficient technology resources in every classroom and work area. The District's challenge in this area is now to train all staff (and students) to use the new technological capabilities appropriately. Each teacher will conduct a self-assessment to help determine types and amounts of additional technology training needed based on personal levels of knowledge and skills. Enhancing one's skills in the use of technology will allow for increased levels of instructional effectiveness and higher academic achievement.

The secondary school teaching staff has made significant strides in this area over recent school years with the introduction of K12 Planet, E-Class electronic gradebook, and in the use of wireless technology. The elementary school staff will now have the same opportunities and challenges during the upcoming school years.

Considerations for Special Needs Students.

The District's technology plan provides supplementary activities and services for meeting the educational needs of our special populations. To promote the goal of inclusion, in regard to technologies and instruction, the District plans to phase out the dual platforms that currently exist in the district. The District is guided by the desire to provide maximum exposure to system technologies that allow flexibility as well as continuity of instruction. By choosing a single technology platform the District will ensure that the limited technology resources and educational funding will be better utilized by allowing all students to share in the technology purchases in every classroom and library throughout the district.

Adult Education.

Forestville CSD will continue to offer computer classes to the community and expand its services to include the newly updated elementary an High School lab. FCSD will increase community awareness through ongoing adult education course offerings. Follow-up surveys of those in attendance will be used to accommodate further community access and involvement.

Budget Projections.

The following are tentative projected budget expenditures to support the technology plan for the next three school years. These projections will be presented to the Board of Education on a year-by-year basis for consideration as the District develops the budget prior to seeking voter approval. There are any number of fiscal constraints that may compete with the need to procure additional hardware and software over time.

2007-2008: \$73,600

Purchase 35 desktop computers for elementary classrooms (\$35,000)

Purchase 16 laptop computers for middle/high school classrooms (\$16,000)

Purchase 2 servers to upgrade staff and student file servers (\$5,000)

Purchase 6 high-volume color printers for middle/high school library and locations throughout middle/high school (\$6,000)

Purchase 6 data projectors to upgrade middle/high school model classrooms (\$6,000)

Purchase 2 visualizers to upgrade middle/high school model classrooms (\$5,600)

2008-2009: \$51,600

Purchase 35 desktop computers for middle/high school classrooms (\$35,000)

Purchase 2 servers to upgrade elementary lab and health office servers (\$5,000)

Purchase 6 data projectors to upgrade middle/high school model classrooms (\$6,000)

Purchase 2 visualizers to upgrade middle/high school model classrooms (\$5,600)

2000-2010: \$61,600

Purchase 20 desktop computers for middle/high school computer lab (\$20,000)

Purchase 20 desktop computers for elementary computer lab (\$20,000)

Purchase 3 servers to upgrade e-mail domain controller servers (\$10,000)

Purchase 6 data projectors to upgrade middle/high school model classrooms (\$6,000)

Purchase 2 visualizers to upgrade middle/high school model classrooms (\$5,600)

Evaluation Scheme.

Realizing that a dynamic technology plan involves continuous monitoring and frequent review, the District administration will meet at least four times a year with technology personnel to evaluate progress and implement necessary changes that promote continuous learning in the lives of staff, students, and community members.

Review of the District's technology plan will be ongoing and achieved by the following measures:

District-wide Process.

 A yearly needs assessment will be conducted District wide among campuses and staff, including:

*campus evaluations of plan implementation and achievements

*individual competencies for staff members

- *degree of technology usage as part of work responsibilities
- *degree of student progress and competency
- Survey of parents and students as to needs and progress
- Review of technology plan as part of yearly district goal-setting process and campus strategies
- Evaluation of district implementation and in-service professional development activities
- Yearly report by District technology coordinator to the Superintendent and Board of Education

Budget Evaluation.

- A review of campus and District budget commitments and expenditures, including:
 - *district technology coordinator costs
 - *capital equipment costs
 - *technology support services costs
 - *educational and administrative software costs
 - *in-service support costs
 - *funding sources

APPENDIX A

Student Computer Usage Form Internet Filtering and Acceptable Use Policy

The Board of Education considers computers to be a valuable tool for education, and encourages the use of computer-related technology in district classrooms.

Through software applications, online databases, Internet, bulletin boards and electronic mail, computer use will significantly enhance educational experiences and provide statewide, national and global communications opportunities for students and staff.

Internet use is limited to those students who have an approved written agreement on file in the appropriate office. Users of the district's computer equipment shall have **NO expectation of privacy**. The district reserves the right to access all files and monitor all uses of the district's computer technology equipment at its own discretion in order to ensure the equipment is not being used inappropriately.

To the extent practical, the Board directs the Superintendent or designee to:

- Prevent user access over the District computer network to, or transmission of, inappropriate material via Internet, electronic mail, or other forms of direct electronic communications;
- Prevent unauthorized access and other unlawful online activity;
- Prevent unauthorized online disclosure, use, or dissemination of personal identification information of minors; and
- Comply with federal and state laws. To the extent practical, technology protection measures (or "Internet filters") shall be used to block or filter Internet, or other forms of electronic communications, access to:
 - Obscene material
 - Child pornography;
 - Material deemed harmful to minors; or
 - Other information that is determined to be in violation of District policies.

The district prohibits the use of any computer hardware/software in any inappropriate, fraudulent or destructive manner,

including, but not limited to:

- Sending out unauthorized messages
- Giving name, telephone number, or photo to anyone on the Internet
- Entering a code protected file
- "Hacking" computer systems
- Plagiarism
- Altering a software program
- Destruction, modification, or abuse of the system's computer hardware or software in any way
- Using the network for any political or commercial purposes
- Violating laws or participating in any illegal activity
- Playing games NOT directly connected with school curriculum

Users of the District Network will:

- Use the network in such a way that it does not disrupt its use by others
- Maintain the integrity of files and data. Modifying, browsing, or copying personal files/data of other users without the individual's permission is not permitted
- Be ethical and courteous. Defaming, harassing, or obscene mail or discriminatory remarks are not allowed on the network
- Treat information created by others as the private property of the creator. Respect the copyrights at all times
- Use the network to access only educationally relevant material
- Use only your personal password and do not share your password with others. Respect personal privacy!

Each student <u>must</u> sign this agreement and abide by district policy and regulations concerning the use of computers. These agreements shall be kept on file in the Room 115.

Failure to abide by these regulations may result in disciplinary action up to and including suspension from school and / or revocation of computer access and related privileges.

Student Signature	Date

APPENDIX B

E-rate Technology Plan Updates

Due to recent information from the SLD (School Library Division) in charge of technology plan guidelines, each school with a technology plan **must include validation of requested 470 items within their plan.**

This means that if you are applying for items such as Cell Phones, Telephone, PBX, Internet, Hardware specific items, you must refer to those items in your plan to protect your Erate money from being revoked in the future. The suggestion is to add them to the plan where you write about acquiring future technologies.

If you feel you have already addressed these items within your current technology plan please list the page number(s) where they can be found **or revise your plan to include these items**. **Send the revised plan and reference the page numbers where they are found on the form below and send back with any other revisions needed by**March 30.

Without this final form your plan cannot be approved.

470 Requests for Forestville CSD

<u>Item</u>	Validation for use		
Telecommunications Services	Pg <u>. 7,11</u>		
Internet Access	Pg. <u>2-3, 5-6, 10</u>		
LAN and Equipment Maintenance	Pg. <u>N/A</u>		

APPENDIX C

