Wayne Central School District

Technology Plan 2001-2005

June 2001

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Wayne Central School District

Technology Plan

Introduction

The new Technology Plan for 2001-2005 will have the following core requirements. As you read this plan, please keep in mind that the core requirements are blended into the vision statement and the goals and strategies that will guide the outcomes of the Technology Plan.

1. The plan must establish clear goals and a realistic strategy for using telecommunications and information technology to improve education.

2. The plan must have a professional development strategy to ensure that staff know how to use these new technologies to improve education.

3. The plan must include an assessment of the telecommunication services, hardware, software, and other services that will be needed to improve education.

4. The plan must provide for a sufficient budget to acquire and maintain the hardware, software, professional development, and other services that will be needed to implement the strategy.

5. The plan must include an evaluation process that enables the school to monitor progress toward the specified goals and make mid-course corrections in response to new developments and opportunities as they arise.

Forward

In 1995, Wayne Central School District adopted their first five-phase Technology Plan. The Executive Summary stated that

> Students preparing to live in the twenty-first century face many complex but basic challenges:
>
> - In an age when they are bombarded with increasing amounts of information, both text and visual, students need to have the ability to acquire, analyze, and synthesize information, link that information to unifying concepts and apply it to real-world problems.
>
> - Students must become accustomed to and learn to deal with the rapid changes that are occurring in both the work place and the world at large.
>
> - Instant worldwide communication creates increased global interdependence and the need for students to learn to understand and work within a multicultural environment.
>
> - Students who live in a technological society must have the ability to use and view complex technology as a basic skill.
>
> All of these challenges demand the integration of technology into the school curriculum. Students must learn how to use technology to find information, use information to solve problems and make decisions, and effectively communicate electronically with the world outside the classroom. Without such skills, their ability to compete as productive citizens will be sorely limited.
>
> The Technology Planning committee further recommended that the district
>
> - Develop an integrated curriculum to meet the needs of our students in order that they can lead productive lives in the twenty-first century.
>
> - Commit to providing training and support for teachers, staff and administrators in the use and maintenance of technology.
>
> - Monitor the plan on an on-going basis to ensure a successful implementation.
>
> - Ensure a continuing emphasis to meet future technological needs.

Acknowledgements

The Wayne Central Technology Plan 2001-2005 is the result of long hours of work by the following members of the Technology Steering Committee:

Kathleen Green	District Technology Coordinator
Theresa Rowell	Instructional Technology Trainer
Loreen Jorgensen	Library Media Specialist, Ontario Primary School
Russ Harris	Computer Services Assistant, Technology Support Department
Kathleen Uerz	Parent and Community Member

In addition, these members of the District Technology Committee contributed to the final version of the Technology Plan

Debbie Phalen	Teaching Assistant, Freewill Computer Lab
Allison Armstrong	Teaching Assistant, Ontario Elementary Computer Lab
Bob Rose	Technology Teacher, Armstrong Middle School
Sandy Martin	Computer Teacher, Armstrong Middle School
Donna White	Teaching Assistant, Armstrong Middle School Computer Lab

The following people reviewed the Technology Plan and made valuable contributions to the final plan.

Ann Fousse	Computer Services Assistant, Technology Support Department
Barb Heald	Teaching Assistant, Help Desk, Technology Support Department
Coralie TeWinkle	Computer Technician, Technology Support Department
Dave Colburn	Computer Services Assistant, Technology Support Department

Wayne Central School District

Technology Plan

I. Executive Summary 2001

A. District Mission Statement

Based upon the belief that all students can learn, the staff of Wayne Central School District accepts the responsibility to teach all students, regardless of differences, the fundamental skills. We further accept the responsibility to challenge all students to attain higher levels of achievement. Wayne Central will provide the opportunity, environment, and encouragement to meet this goal while developing the whole child physically, emotionally, and culturally.

B. Technology Vision Statement

The Technology Vision of the Wayne Central School District is to improve student content learning through the integration of technology into the curriculum and instructional environment, to enhance communications with community and staff, and to facilitate the management of information by continually assessing the needs of students and staff.

C. Plan Summary

Building on the outcomes of the 1995 Technology Plan, the goal of the new Technology Plan is to identify opportunities, strategies, and resources for the enhancement of technology integration in the Wayne Central School District. To improve education in our schools, it is essential to have seamless communication among administrators, teachers, staff, students, and parents. It is vital for patrons of our school community to be informed of events, policies, and procedures. One goal then is to improve communication through voice, video, web access, and print.

Throughout the development of this plan, the committee kept in mind the following questions to guide formation of the plan.

1. What student learning do we need to improve?
2. What are the best ways to improve student learning?
3. How will technology improve student learning?

Our students are our focus as we develop strategies to improve learning using technology as a tool. Through technology students will be able to demonstrate the application of knowledge they have gained.

A comprehensive technology staff development plan is a cornerstone of effective teaching. Teachers will learn to facilitate use of technology as a tool, to improve student leaning and to demonstrate application of knowledge.

Administratively, technology will be used to maintain and report all information used in the district from transporting students to and from school to keeping comprehensive records of students as long as they are enrolled at Wayne Central School District. It is a goal to assimilate all information so that it is available to the appropriate personnel at any given time. Business functions such as accounting and payroll, student medical records, graduation requirements, and special education records are all part of a complete management system.

The district website will be developed to enable better communication with the community. It will provide students with immediate access to assignments and grades. It will be a venue to present student projects and research. It will be a fundamental part of the district showcase.

The website will also be designed to enable document collaboration among teachers who wish to share curriculum projects. It will become a virtual classroom, office, or school for all of Wayne Central. Teachers, students, and staff will be able to work from home or any location in the school with access to their materials through the web. In addition, the web will provide a means for submitting all kinds of forms electronically, thus reducing the paper flow in the district.

Excellent technical support is required to maintain all functions of the technical operations of the school district. A well-informed technical team is an integral part of keeping a system running and earning users' confidence in the system. There must always be sufficient technical support staff.

With these goals in mind, the Technology Steering Committee has created a comprehensive plan for technology implementation for the next three to five years. The intention of the committee is to create a plan which will enable communication among all district personnel, students, and patrons of the community. The plan will enable students to take charge of their own education using technology as an integral tool for collaboration and research. Finally, the plan provides for a complete information management system for the district to maintain student records and manage its business and information.

II. Information Technology Assessment

A. Summary of existing technology structure

All classrooms are equipped with eight network drops, plus cable TV access and adequate clean power to support at least eight workstations and/or large screen TV/monitor displays. All classrooms have one computer workstation for the teacher, one for students, and at least one shared network printer.

All secondary classrooms are equipped with a multimedia workstation with TV monitor for presentation and one VCR for every two classrooms. In addition, there is at least one computer for student use. Most science, social studies, math, and English classrooms have up to four student workstations. In the Middle School science department there are two rolling locked cabinets each with eight laptop computers and science probeware used for lab work.

All elementary classrooms are equipped with a multimedia workstation with TV monitor for presentation and one VCR for every two classrooms. In addition, there are three to five student workstations in clusters.

All network closets are equipped with adequate network switches to support currently installed hardware in classrooms and computer labs. In addition, there are several network ports set aside for computers in BOCES classrooms in four of our school buildings where BOCES classes are held.

All cables in the district are category 5 or 5E. Multimode fiber connects all wiring closets and each of four campus buildings (HS, MS, OE, OP), the maintenance, and transportation buildings. Freewill Elementary is connected to the district LAN by a dedicated T1 phone line. Inside Freewill Elementary, all rooms are connected by category 5 or 5E cable and closets are connected by multimode fiber.

All classrooms in each school have the capability to receive cable television and internal cable channels. The plan is to be able to originate programming in each building and broadcast to other schools on campus and further to Wayne County cable customers once single mode fiber is installed between buildings.

All schools except Freewill Elementary have access to Cable in the Classroom programming. In addition, some programs are tape recorded for later viewing based on requests by teachers to the Technology Support staff. Freewill has a satellite dish allowing for distance learning and professional development courses to be downloaded. These courses are stored digitally for all educators to view on their computers on demand.

In the High School and Middle School students produce morning announcements daily to all classrooms over schoolwide TV. Students not only report the news, but they are in total control of cameras and other production equipment.

Sporting events, musical programs, and other presentations are videotaped on a limited basis for broadcast on cable access television. Future community events such as school board meetings and PTA programs can also be taped.

Professional development mini-courses will be taped for broadcast over the school television network and will also be made available to any computer on the network as on-demand video programming.

All offices are equipped with computer workstations or laptop computers with docking stations for administrative use. Each office has multiple printers and at least one networked laser printer.

A variety of peripheral equipment is available for all applications in labs, classrooms, and offices. Printers, scanners, digital cameras, and digital video cameras are available to staff and students to facilitate projects. Digital projectors and Elmo type presentation systems can also be used in any classroom. Additional video capture cards, microphones, zip drives, and CD writers can be used when needed. Each music classroom is equipped with electronic keyboards with MIDI interface to computers with appropriate music software.

All libraries are catalogued and accessible over the district computer network using the Follett Automated library system. Currently librarians from any school can access other school library collections by the local area network.

Each school is equipped with an electronic bulletin board system capable of broadcasting school messages to classrooms, offices, and hallways. Announcements of events, public meetings, and services are broadcast throughout each school building.

An open computer lab is available one night a week for students and patrons of the Wayne Central School District to explore the Internet and work on projects or application skills at no cost to the attendee.

In three schools, a teaching assistant assigned to the computer lab is available to assist teachers with lessons using technology either in a lab, the library, or a classroom. Teaching assistants work with classroom teachers to investigate the best lessons to help students achieve curriculum standards.

A staff of trained technical support professionals is employed to install and troubleshoot all technology-related equipment. They maintain the district-wide network, repair printers, computers, and peripherals, teach users how to properly use equipment and software, and design implementation standards for all computer-related equipment. A help desk person accepts and disburses all requests for help or answers questions and gives instruction by phone. The Technology Support department distributes a booklet outlining proper use of technology and instructions for using the district network to all Wayne Central staff.

A list of standard software has been established for use in all classrooms and offices. Included in the list are MS Office Professional, MS Outlook for email,

Command Anti-Virus, and Internet Explorer. In addition, for students we include Inspiration, MS Encarta 2000, Adobe Acrobat Reader, Accelerated Reader and Star Reading, MS FrontPage and MS Publisher. Teachers have additional productivity software for maintaining grades and other classroom activities.

See appendix 1 (Technology Assessment Inventory for Equipment)

B. Current program status

1. Curriculum Integration

Teachers in classrooms from K-12 have created innovative lessons that incorporate technology into their lessons so that technology enhances information gathering and presentation. All lessons are NYS standards-based. Listed below are a few examples of lessons teachers are teaching.

- Grade 5 students do research using Encarta 2000 and the Internet to find information on artists that are being studied.

- Grade 6 -- Claymation Project: In art class, students create clay figures to illustrate a student-written storyline. They use Spin Photo Object to create a movie.

- Grade 6 students use PowerPoint and Portfolio Builder to create a multimedia autobiography.

- Grade 5 students analyze a story, write a new ending, then create a book that they have typed and illustrated using Word and original artwork.

- Primary students use Puzzlemaker at Discovery.com to create word search puzzles for their animal reports.

- Primary students create "I Spy" pictures using Kidpix. They also write riddles to go along with their "I Spy" pictures.

- High School students create a commercial in their communications class using Video Wave IV. They learn to shoot scenes using video cameras, edit their video, use transitions, and add graphics and audio to their commercial.

- Grade 3 students use MS Publisher to create travel brochures for planets they are studying in a solar system unit.

- Grade 7 Home and Careers students explore the NYS Career Zone Job Site on the web to learn about careers and save job information in their portfolios.

- Grade 7 students collect data for math and science projects and make graphs to illustrate their results using Excel.

2. Staffing and training

The Technology Support Department consists of a Technology Coordinator, an Instructional Technology Trainer, Computer Technicians, Computer Services Assistants, a Teaching Assistant assigned to the Help Desk, and Teaching Assistants assigned to the computer labs. In general, each of these people supports teachers, students, and administrators using technology. They provide help with software, hardware, and technology integration. The Technology Support personnel are always available for training/tutoring, inspiration, and technical advice. The role of each of these people is outlined in appendix 5.

The Instructional Technology Trainer is responsible for training all staff using new software and technology devices to integrate technology into the curriculum. In addition, there are three teaching assistants assigned to maintain computer labs in the Middle School, Freewill Elementary, and Ontario Elementary. Computer and technology teachers are employed in the High School and Middle School teaching computer skills and applications.

Many technology-focused in-service courses are offered throughout the year by the Technology Support personnel. Classes are offered before school, after school, and during release time in the school day. Additional online courses are available for teachers through Project Accelerate, a Title III funded program. Teachers take online courses to improve their teaching using technology and access to the Internet.

<u>Technology Skills Basic Training Needs</u>

There is a need for teachers to be proficient in a number of technology areas. Their proficiency will filter down to their students as they model using technology in their teaching. These proficiencies are listed below:

1. Word Processing

All teachers should be able to perform basic skills using a word processing program including creating, saving, printing, and editing basic documents. An ability to store lesson plans and documents on the network should be mastered.

2. Spreadsheet

A simple spreadsheet to manipulate numbers should be mastered by all teachers. This would include a basic ability to create basic formulas such as sum, total, and average, and represent data in graphs.

3. Presentation program

All teachers should have the ability to create a presentation using PowerPoint, Hyperstudio or other presentation program.

4. Efficient Use of Network

All teachers should be able to log on to the district network and save or retrieve files from their personal network folder. They will also be able to access student files from the network.

5. Student Information System

All teachers should be able to take daily attendance, update classes as needed, and access student information when necessary.

6. Grade Book Management

All teachers should be skilled in using Classxp, GradeQuick, Grade Machine, Classmaster, or another grading program to keep records of student progress and report results during the year.

7. E-Mail

Teachers should be able to use email to create and send a message as well as retrieve and print a message. They should understand how to send attachments as well as receive and scan attachments.

8. Internet

Teachers should have basic knowledge of the Internet to include the ability to access and search the Internet for information on a given subject area and print the information.

9. Troubleshooting

Teachers should develop basic troubleshooting skills for first level diagnostics on hardware and software.

10. Automated library system

Teachers should be able to use the library online system in all buildings to search for information or books and retrieve the resulting list of resources.

C. Current budget

1. Equipment and services: The table below itemizes the equipment, software, and other services currently budgeted this year.

Technology Support Department

Equipment, Software, Services Budget	
Hardware	**Cost**
Computer replacements	$120,000
File servers replacement	$4,000
CDRom servers	$16,000
Printer replacements	$20,000
Miscellaneous equipment (DVD drive, CDRW drive, microphone, headphone, VCR, TV monitors)	$5,000
Hardware subtotal	$165,000
Software	
Windows, Office, anti-virus licenses	$35,000
MS Encarta (district license)	$10,000
Accelerated Reader, STAR Reading (4 schools)	$2,000
Grading programs, Teacher utility software	$2,500
Miscellaneous grade level software (all schools)	$60,000
AutoCAD	$5,000
Career Futures	$200
Choices	$800
Network software	$1,000
Software subtotal	**$116,500**
Additional Costs	
Training/ Conferences for Technicians	$10,000
Student Information Management Program (SASI)	$42,000
Video Network	$10,000
Time Warner Digital service	$500
Additional Costs Subtotal	**$62,500**
Annual Operating Costs	
LakeNet Personnel Support, phone lines, application, warranty maintenance, R&D	$32,500
Project coordination base fee	$8,500
Freewill T1 line	$5,600
Technology Support	$17,500
TechNet Subscription	$420
Server maintenance	$9,600

SmartNet Cisco 5500 maintenance	$3,600
Cisco IP/TV server maintenance	$2,150
Total Annual Operating Costs	**$79,870**
Total Budget	**$423,870**

2. Upgrades and maintenance

   Built into the Technology budget are funds to upgrade and repair computers and printers to keep them in working order. Although the warranty on printers is only one year, we can expect to get 2-3 years service from a personal printer. Computers generally have a three-year warranty, but we must expect to keep them in service for five years. It is appropriate to upgrade memory and hard drive space when necessary to keep a computer up to the standards required by application and educational software. Often a monitor will have to be purchased to extend the life of the computer system. When a computer can no longer meet the specifications of the software used in the classroom or office, it must be replaced.

   Peripheral equipment such as scanners, digital projectors, digital cameras, and video cameras will also require updating on a regular basis. Any standard technology equipment used in schools will be replaced if not repairable.

3. Related infrastructure

   All network wiring infrastructure were installed as part of a capital project started in 1997 and ending in 2000. Two to four network wiring closets are installed in each school building. All closets are connected by multimode fiber. All data drops are category 5 or 5E cable homerun from the classrooms and offices to the wiring closet.

4. Technology Staff Training

   Funds are budgeted annually for Technology staff to attend job related conferences and technical training seminars. It is important for the technology staff to keep up to date with changing technologies and instructional standards.

D. Needs assessment

1. Recent developments and current status

   The 1995 Technology Plan was completed as part of the 1997-2000 capital project. As a result, all classrooms are networked, all wiring closets are fully populated, and all classrooms except Freewill Elementary School have access to

cable television and video-on-demand. The new technology plan outlines a scheme for integration of technology into the curriculum including an assessment of teacher technology skills and abilities, a checklist of teacher technology competencies, a staff development training program focusing on improving teacher technology skills and curriculum integration, and further development of technology related projects.

2. Planning process

For the last five years, the district technology plan has undergone regular review. Changes were made to the plan to meet the changing needs of the school district and changes in technology. The District Technology Committee has been the responsible group along with some local building committees who made decisions regarding technology updates.

There is a need for a building level technology committee in each school. These committees should be charged with the responsibility to assess the technology needs of each department or grade level. Once this assessment is done, a priority list should be established and turned over to the Technology Coordinator and District Technology Committee for evaluation. Primary consideration will be given to needs which support student learning and student outcomes and how the priorities fit into the overall district technology plan.

3. Needs assessment for teacher training

To determine the level of technology competency of teachers and staff, a Technology Self-Assessment will be administered as part of the implementation of the technology plan. Based on the results, a teacher will be able to choose a Technology Education Plan suited for them. The Basic and Advanced Teacher Computer Use Rubrics (appendix 6, page 3) will be used as a check list for teachers to self-assess their skill level in thirty different technology skills. From the results of this assessment, they will be able to create their own individual technology improvement plan.

III. Technology Objectives and Plans

The International Society for Technology in Education (ISTE) suggests that all children must be ready for a different world. Our educational system must produce technologically capable kids. To live, learn, and work successfully in an increasingly complex and information-rich society, students must be able to use technology effectively. Within an effective education setting, technology can enable students to become

- Capable information technology users
- Information seekers, analyzers, and evaluators
- Problem solvers and decision makers
- Creative and effective users of productivity tools
- Communicators, collaborators, publishers, and producers
- Informed, responsible, and contributing citizens

These skills prepare students for the world of work or for higher education. Technologically prepared students will be literate and able to reason, communicate, make decisions, and learn.

Plan Goals and Strategies

The Technology Vision of the Wayne Central School District is to improve student content learning through the integration of technology into the curriculum and instructional environment, to enhance communications with community and staff, and to facilitate the management of information by continually assessing the needs of students and staff.

The table below lists the three major goals described in the technology vision statement. Along with the goals are the strategies that we believe will help us meet the goals. Goal 2 (Curriculum Standards) is divided into two parts: a student goal and a teacher goal. The achievement of these goals will improve student content learning through the integration of technology.

Goals	Strategies	Persons Responsible
1. Communications and Community --To integrate and update voice, video and data networks capable of providing improved communications within the school and community.	1. Assess the status of network capabilities to support voice, video and data for communicating within the school district, community and world (e.g.: phone systems, video delivery, distribution and access, data systems, development of internal and external web presence). 2. Survey the level of community communication (phone, newspaper, cable, computer, web, etc.) 3. Develop and distribute guidelines for district-wide networking to support voice, video, and data. 4. Collaborate with agencies and institutions responsible for design and implementation of statewide and national infrastructure to assure compatibility to resources worldwide. 5. Develop a plan for on-going professional development of the technical department and other staff involved. 6. Develop a plan for on-going community technology education. 7. Develop a comprehensive website to provide information to students and parents regarding grades, assignments, and student attendance. 8. Develop a system of on-going evaluation for school-community communication.	1. Technology Coordinator, Network Technicians, Facilities Committee, Technology Committee 2. Same as 1 3. Same as 1 4. Project Engineer, Technology Coordinator 5. Supt. For Instruction, Technology Coordinator, Technology Support Department 6. Technology Committee 7. Webmaster with input from Technology Support Department and Schools 8. Supt. for Instruction, Technology Committee, Technology Coordinator

Goals	Strategies	Person Responsible
2a. Curriculum Standards -- Student goal: To provide technology as a tool to improve student learning and to demonstrate application of knowledge	1. Provide methods for teachers to extend their classroom to students at home and staff at large. 2. Encourage pilot projects to permit students to check out technology equipment for use at home to facilitate student learning. (Integration of Palm Pilot projects, Checkout Dreamwriters for work at home.) (Appendix 8) 3. Explore and provide suitable [assistive] devices for special needs students. 4. Develop technology benchmarks for graduation requirements. 5. Explore and provide suitable portable devices to achieve a better than 4:1 student to computer/device ratio. (Rolling labs, Palm Pilots, Dreamwriters) 6. Implement technology scope and sequence K through 12 and develop benchmarks and assessments. (Appendix 2) 7. Develop benchmarks and assessments to measure student understanding of content learning using technology. 8. Provide student access to assignments and grades through the district website. 9. Develop a system for evaluation of student progress using technology. 10. Increase access to the best curriculum resources for improving achievement on the English/Language Arts assessments. 11. Utilize technology to assist AIS (Academic Intervention Services) students.	1. Instructional Technology Trainer with support from Technology Support Department,Webmaster 2. Building Principals, Technology Committee 3. Teachers, Technology Support Department, Assistive Technology Consultant 4. Curriculum Committees, Supt. For Instruction 5. Technology Coordinator, Technology Committee, Technology Support Department, Instructional Technology Trainer 6. Instructional TechnologyTrainer, Classroom teachers, Technology Support Department 7. Supt. for Instruction, Instructional Technology Trainer, Technology Coordinator 8. Webmaster, Teachers 9. Supt. for Instruction 10. Technology Coordinator 11. Technology Coordinator

Goals	Strategies	Persons Responsible
2b. Curriculum Standard – Teacher goal: Teachers will facilitate use of technology as a tool to improve student learning and to demonstrate application of knowledge.	1. Establish guidelines and specifications for teacher training and classroom integration which include benchmarks and assessments. 2. Develop a plan to offer incentives for each educator who meets benchmarks of staff development in technology and recognize staff who exceed the required standards. 3. Expand employment of educational technology technicians and trainers and update job descriptions of professionals in educational technology. 4. Encourage staff to earn professional technology certifications. 5. Create opportunities for staff to take online staff development courses to improve teaching and technology skills. 6. Maintain records of staff training and assessment results 7. Require teachers to post grades, attendance and assignments in a secure environment in the district web. 8. Develop a system of on-going evaluation for assessment of technology applications, teacher preparation, and training. 9. Provide workshops and training sessions for teachers to integrate technology into all curriculum areas to align with New York State Standards.	1. Supt. for Instruction 2. Technology Committee, Supt. for Instruction 3. Technology Coordinator, Human Resources, Technology Support Department 4. Supt. For Instruction 5. Supt. For Instruction, Technology Coordinator 6. Supt. for Instruction 7. Building Principals 8. District Technology Committee 9. Instructional Technology Trainer, Technology Coordinator

Goals	Strategies	Persons Responsible
3. Information management –Educators and administrators will use technologies that provide for efficient gathering, maintaining, analyzing and reporting of student and administrative data.	1. Provide adequate training and support for all acquisitions of new hardware and software. 2. Develop the process for analyzing and reporting of assessments to improve student learning. 3. Adopt and implement an interoperability framework to facilitate comprehensive student and administrative information management. (e.g.; library, transportation, student and teacher accounts, food service) 4. Explore and provide future incorporation of an elementary classroom management system to interface with other administrative software. 5. Investigate other database management systems for student and administrative information that are more efficient and interoperable. 6. Evaluate all software for cost of ownership. 7. Create a position of webmaster whose responsibility is to develop, maintain, and update the district website. 8. Create and maintain a web-based union catalog of the resources of the five district and two public libraries. 9. Track teacher levels of technology scope and sequence benchmarks.	1. Technology Support Department, Instructional Technology Trainer, Principals 2. Teachers, Instructional Technology Trainer 3. Technology Coordinator, Technology Support Department 4. Principals, Technology Support Department 5. Principals, Technology Support Department 6. Technology Coordinator, Technology Support Department 7. Human Resources 8. Network Technician, District media specialists, Public librarians. 9. Supt. For Instruction, Instructional Technology Trainer, Human Resources

A. Technology Goals and Strategies

1.Grade-appropriate curriculum integration

The educational benefits of a technology rich curriculum include

- Improved higher order thinking research, collaborative and creative skills
- Improved communication with teachers, students, parents, and experts outside of school
- Opportunities to develop and support the evolving 21st century skills and standards defined by SCANS (Secretary's Commission on Achieving Necessary Skills) and ISTE (International Society for Technology in Education) that students will need to succeed in today's educational environment and tomorrow's workplace.
- Student-centered authentic project-based learning
- Opportunities for collaborative learning which allow students to develop teamwork, communication, and problem-solving skills

A computer scope and sequence (appendix 2) has been adopted for grades K-12. Described are nine computer competency goals. Each competency is based on previous learning and is addressed at the appropriate grade level in three stages: Introduction, Development, and Proficiency.

Under the direction of the Instructional Technology Trainer, teachers will learn to incorporate new technology teaching strategies to enhance student content learning through curriculum integration. Resources from the Internet and other technology related software and manuals provide a wealth of technology-rich lessons aligned to curriculum and state learning standards.

All curriculum software will be evaluated by the software selection committee whose representatives include the Technology Coordinator, Technology Support Department, Instructional Technology Trainer, grade level teachers, and representative from content areas at the middle school and high school.

2. Basic technology architecture and infrastructure plan

The installation of all network wiring is complete in all five schools and maintenance and transportation buildings. All data is currently transmitted over a 10/100 MB Ethernet network. During the next three to five years, the closet switches will be upgraded to support gigabit transmission of data.

The plan for video distribution is to be able to originate programming in each school building and broadcast to other schools on campus and further to Wayne County cable customers. This is a provision in the Time Warner contract with Wayne County. Video and cable networking will be upgraded. Older network servers will be replaced. Additional storage devices such as PowerVault servers will be deployed in each school building.

Sporting events, musical programs, and other presentations are videotaped on a limited basis for broadcast on cable access television. Future community events such as school board meetings and PTA programs can also be taped. Eventually, these events will be aired live over cable access television.

B. Equipment and service components

1. Hardware and software

a. All new and current computers will meet minimum memory and disk storage requirements regulated by district-wide software databases (SASI and Follett library system). Up-to-date computer equipment will be readily available to students and teachers to complete tasks and projects both on an individual basis and collaboratively. Using technology where appropriate should be automatic, just as it is in the business world.

b. Telecommunications (hardware)

Single mode fiber will be installed between the four school buildings that comprise the district campus. This will enable future expansion of the video network as well as a new phone system.

c. Other (e.g., satellite receivers) (hardware)

Install satellite receivers on the main campus of the school district to bring in SUNY satellite system programming and other state education satellite broadcasts.

2. Services

a. Computer and Internet access

Internet access is achieved through LakeNet, a wide area network maintained by the Wayne Finger Lakes Boces. Internet is available on every networked computer in all schools and district offices. Any expansion in this service will be at the discretion of the LakeNet project administrator.

Because we want to provide educationally sound information to our students who access the Internet, we (and LakeNet) employ a content filtering service known as Bess. Bess is an ongoing filtering service that is installed, maintained, updated and completely serviced by the N2H2 Company. Each morning, N2H2 logs onto the LakeNet server and updates Bess with newly found websites that are deemed inappropriate for student access. Material that is blocked may contain nudity, pornography, violence and crime, drug use, tastelessness, language and profanity, and other high-risk sites with no censorship policies. Though not 100% perfect,

Bess provides a good watchdog service by filtering out inappropriate websites that might otherwise be accessed by students.

b. Telecommunications (services)

Our new video network can support collaborative projects between classrooms in any school in the district. There will be initiatives to promote further expansion of the network to reach beyond the walls of Wayne Central School District.

c. Other (e.g., distance learning)

Investigate the possibility of distance learning to meet district goals. Increase the availability of courses for students and staff through satellite programming and point-to-point distance learning classes.

3. Infrastructure

a. Facility construction and/or renovation

Due to the completion of the recent capital project, there are only a few minor needs for facility renovation. The first is a new location for the Technology Support Department. The support personnel are currently housed in the basement of the Middle School in very unattractive surroundings. There are times when exhaust from trucks unloading outside the doors pours into the work area making it difficult to breathe. It is difficult to control the temperature in the work area so the personnel are subjected to stuffy or cold climate. The work area is inefficient for the tasks that must be completed. The current staging area is a conglomeration of tables, carts, and desks pushed together to make up a work area.

The Technology Coordinator has an office in the High School, making it difficult to work closely with the Technology Support Personnel. The Instructional Technology Trainer uses a corner of the High School Gym foyer for an office. The office is far removed from all other personnel in the department, and over the last three years has been relocated in three different schools.

A new work area for all Technology Support Personnel is needed. The area should have closed offices for the Instructional Technology Trainer and the Technology Coordinator. It should also have adequate lighting, wiring, electrical service, telephones, and space for desks as well as storage and a staging area for configuring computers, music keyboards, servers, and network systems. There should also be adequate space to store large shipments of equipment until the equipment can be placed in the schools.

With the installation of the video network, there is need for space for a television studio for taping and broadcasting in the High School and the Middle School. Adequate locked storage for cameras and equipment is essential.

b. Telecommunications and electrical wiring

Wireless mobile carts provide a solution for lack of space to construct another learning lab in the High School and Middle School. The carts can be set up with wireless networked portable computers, a printer using infrared technology and the cart plugged into an existing network port. There is no need for additional electrical or network wiring in any classroom for the mobile carts. Additional wireless transmitter modules will be housed in each mobile cart.

4. Related programs

a. Upgrades and maintenance

Regular hardware and software updates are planned so that hardware supports needed software and software is free of technical bugs or anomalies. The major software packages that are used for business functions, student information systems, and library automation must be kept current to accomplish the work to be done. In some instances, software enhancements exceed the capabilities of the network servers. At this point, the hardware will have to be upgraded to meet the software needs.

b. Security and privacy

All staff and secondary students have their own network login account and password. The Computer Use Agreement states that all users must not share their information with anyone else. At the same time, our network is a closed system denying access from the outside world, thus ensuring a secure working and learning environment.

c. Inter-school initiatives

As teachers and students employ more technology in their learning, new initiatives will be considered to provide collaborative opportunities with other groups outside our school district. Such initiatives might include distance learning, online courses for credit, and web-based collaborative projects. Sufficient funding should be budgeted for future projects.

5. Deployment schedule

A deployment schedule for the full technology plan will be determined as priorities are set by the Technology Steering Committee. A needs assessment will be conducted throughout the district based on the three goals outlined in the plan. A number of strategies in the plan describe surveys, explorations, development processes, and collaborations that will help determine the complete process of plan implementation.

Within the Technology Department, deployment of hardware and software will be determined by an assessment of need and of equipment available. All hardware should meet the recommended requirements for software that is used. In some cases, equipment will be reallocated to meet the needs of a teacher or department. This will reduce the total cost of ownership by matching equipment and software to the needs of the user.

Before a full implementation of new hardware or software is done, a pilot deployment in a test environment, such as a small network, will be conducted. The objective is to minimize the impact on the user, to avoid interfering with a normal user's day-to-day work. Once the test period is complete and all bugs are worked out, a full implementation will be scheduled. At the same time, users will be informed of changes in their new equipment or software and/or training will be planned to coincide with the installation.

C. Staffing and training

1. Technology coordination

The Computer Technology department consists of a Technology Coordinator who oversees the implementation of the technology plan. The Coordinator reports directly to the Superintendent for Instruction as well as indirectly to the School District Superintendent and the Superintendent for Business. The Coordinator chairs the District Technology Committee as well as supervises acquisition and placement of all technology-related equipment including computers, servers, network hardware, and printers. In addition, software, peripheral equipment, and furniture for technology are requested from the Technology Coordinator. See Appendix 5 for further responsibilities of the Technology Coordinator.

2. Support and maintenance

The Technology Support department includes five people who all work as webmasters, network technicians, video technicians, total workstation support technicians and a help desk person. They are responsible for the installation, maintenance, and instruction for using all technology in the district. They either evaluate and make repairs or request repair of all district-owned equipment by outside vendors. They also assist teachers and staff with setup and implementation of classroom projects, curriculum planning and technology integration. In addition, they cooperatively plan purchasing and installing of all equipment and software as well as network design and implementation. The Help Desk person fields and schedules all requests for help regarding maintenance and software concerns. The Help Desk person also is the first line of support for our student information system and performs basic troubleshooting and repair duties for software and hardware problems.

The current civil service job descriptions that we use do not match the current job duties of any of the technicians in the department. All positions should be upgraded to correspond to work that each technician performs. I.e.,

- Computer Technician to Network Technician
- Computer Services Assistant to Computer Technician
- Teaching Assistant assigned to the Help Desk to Computer Services Assistant

We also need a Video Network Technician position to maintain the district-wide video network.

In addition, there is a need for a Webmaster to plan and develop the district website. The vision for the website is to provide immediate and accurate information to the local community as well as provide a system of communication among teachers, students, and parents.

3. Curriculum planning

Technology curriculum planning is the responsibility of the Instructional Technology Trainer. The trainer assesses the needs of staff regarding their own use of computers and peripherals and how they use technology integrated into their curriculum. The trainer coordinates in-service training for teachers as well as presenting both full in-service classes and mini-courses that are taught after school. The trainer also instructs teachers on technology goals during release time in their schools. See Appendix 5 for a complete list of responsibilities and qualifications.

4. Staff Development – Technology Training Plan

The district's main goal is to provide our teaching staff with access to hardware and software and assist them in developing the professional and instructional technology skills that will enable them to use technology as a teaching, learning and management tool. These skills will contribute to the development of lifelong learning in both our students and professional staff.

The model for teacher computer staff development is shown in Appendix 6. This professional growth plan allows for the teacher to select one or two target areas for improvement. Each target should be curriculum centered to enable the teacher to integrate technology into their own lessons. The individual plan is created in collaboration with the principal, curriculum director, department chairperson, technology coordinator, and/or media specialist. The teacher is expected to learn enough to move to level 3 or 4 of their target area and then demonstrate the knowledge and skills they have learned. In addition to the individual professional growth plan, an assessment portfolio will be required which might include

- Descriptions of units taught in their classroom having both information literacy objectives and content objectives.
- Assessment tools used with students on these projects.

- A copy of the district's information literacy curriculum and student performance benchmarks in technology/information literacy
- Personal journal reflections on teaching information literacy skills including observations on what does and does not work well.

See Appendix 6, page 2 for Technology Staff Development Timeline.

Along with any model we implement, we plan to evaluate and track teacher progress which will in turn drive the focus of our staff development, keeping it aligned with the needs of our professional staff and focused on student learning. A database will be created and maintained for this purpose. The results of any assessments will be entered there as well as shared with the individual teacher to facilitate their acquisition of skills.

All new teachers in the district are required to take a ½ day basic computer training as part of their new teacher orientation. They will be instructed on the staff development plan for information technology. They will also learn how to log on to the district network, how to send and receive email, how to do daily attendance using SASI, and how to use the Destination for multimedia presentations. After the first week of school, new teachers will learn the grading program used in their building and how to do progress reports and post grades using SASI.

Network technicians and support staff need Network Software Integration training for future upgrades. They should receive regular outside training to keep up with current installations and projects.

5. Other resources

A District Technology Committee is comprised of teachers, administrators, and media specialists representing all five of our school buildings, as well as technical support personnel. The committee meets monthly to discuss technology issues, solve problems, plan for future technology implementations, and establish guidelines for use of technology in all areas in the district including classrooms, libraries, and offices. The committee is also responsible for the annual evaluation of the implementation of the technology plan.

IV. Plan Administration and Budgeting

A. Current plan approval status

1. Internal

   The Technology Plan is currently being created by staff from all schools with administrative input. In addition, one member of the committee is a parent of students in our district. The plan, once completed, will be approved by the administrative council, and then sent to the Board of Education for approval.

2. Independent review and approval

   The plan will be submitted to the Wayne Finger Lakes BOCES for approval, then to the State Education Department for their approval.

B. Budgeting

A technology budget will be established to provide adequate funding for support of all applications, hardware, and software used in the district.

- Provide sufficient funds to acquire needed equipment to keep up to date with emerging technologies.
- Establish a computer/printer/equipment replacement plan to keep up to date with emerging technologies.
- Provide sufficient funds to replace network servers to keep up with hardware specifications to support existing application software.
- Upgrade and/or repair older equipment when appropriate and cost effective.
- Provide sufficient funds to replace/expand network hardware as needed.

1. Equipment purchases and services schedule

   There is a plan in place to replace approximately 20% of all computers per year including desktop computers, laptops, and multimedia workstations. In addition, to keep up with the changes in software and hardware requirements for administrative programs such as Info-fund, SASI, or Follett library automation, at least one server will be replaced or upgraded each year. At the same time, about 25% of the printers will be replaced annually due to the fact that there is only a one-year warranty on printers and the cost of repairing them can be better spent on a newer, more efficient printer.

2. Annual budgeting and approvals

   Each year a budget is prepared for the following school year. The technology budget is determined by technology needs of each school based on needs assessments and requests by teachers and program. The budget is submitted to the district administration for approval. Once approved, the technology budget becomes part of the general operation budget which is reviewed and approved by the Board of Education and ultimately, the voters.

   See appendix 7 for a three to five year plan for a budget to implement the Technology Plan.

3. Special bond issuance and approvals, if applicable

   Should it become necessary to do a major overhaul of the computer network services, a special technology bond may be proposed. An extensive study will be performed before such a bond issue is requested.

4. Other funding sources

   a. Grants

      Create a grant writing committee comprised of teachers, Technology Coordinator, and the Instructional Technology Trainer. Establish a process for applying for grants that meet the needs of acquiring equipment and integrating technology into the classroom.

   b. E-rate discounts

      Each year we apply for e-rate discount funding for cellular phone services, pagers, cable TV, and long distance phone services. In addition, we receive e-rate discounts for charges for our access to the Internet. All applications for discounts are processed by our BOCES.

C. Ongoing planning and review

1. Plan review and revision plans

   The Wayne Central School District Technology Plan will be reviewed annually by the District Technology Committee. A progress report will be reviewed and the implementation of the next steps of the plan considered. At that time, adjustments and changes to the plan will be recommended. If necessary, the changes will be submitted to administrative council and the Board of Education for approval.

2. Technology program monitoring and evaluation process

   A separate subcommittee of the Technology Committee will be established to collect data and evaluate the progress of the implementation of the plan and assess it compared to technology implementations in similar school districts. The findings of the committee will be submitted to the administrative council for further recommendations. The committee will include teachers and administrators who are not part of the Technology Committee.

   Evaluation of the technology plan should include the following strategies:

   - Simple observation, both positive and negative, by students and teachers who use technology.
   - Interviews
   - Informal meetings with teachers and students.
   - Written survey

   Questions should include

   - How has the implementation of the technology plan impacted student performance?
   - What is the key indicator of success for each component of the plan?
   - How will accountability for implementation be assessed?
   - What is the level of technology proficiency gained by students, teachers, and staff?

3. Technology projects for future consideration

   As Technology infiltrates the classroom and teachers use technology as part of their instruction, new ways of using technology will evolve. A number of projects have been proposed for future investigation. These projects can possibly be implemented through this plan. Only a teacher's imagination and willingness are needed to accomplish any of these projects. They are listed here for future consideration as this technology plan is evaluated and changed.

   Ideas for future technology projects

   - Distance Learning
   - Palm Pilot projects
   - Wireless portable labs (Science computer lab with appropriate probes, meters, attachments, and software. English: student writing, senior papers)
   - Professional development online
   - Streaming video

- Security cameras and/or tethered computers
- Homework/parent contact hotline (phone or web-based)
- Teacher/District shared purchase plan for computers and printers
- Voice recognition software— to assist students who have limited handwriting skills.
- Seamless integration of technology, teachers and students use technology as part of their normal routine
- Smart boards for instruction
- 3-year technology course-(Radio, communication)—webcasting, journalism, video, graphic arts
- Computers—A+ or N+ certification courses for HS students
- Library—electronic books (textbooks)
- Re-structure—Computer Teaching Assistants under Instructional Technology Trainer
- Virtual private network—staff can work on school work anywhere on any computer, even at home
- Goal—extinction of paperwork.
- Fiber optic to Freewill—improve network access to all district resources
- Tie-in to Walworth Public Library and Ontario Public library
- Students can link to school network from home or public libraries
- Online forms for maintenance requests, technical support, staff development registration
- Additional satellite receivers on main campus for distance learning

Technology Assessment Inventory

						Planned Future Acquisitions		
	Computer labs	**Classrooms**	**Library or Media Center**	**Admin Office**	**Other Locations**	**Year 1**	**Year 2**	**Year 3**
Computers (list by type)								
A. Desktop 486		36	22					
B. Pentium 100/133/166		214	26	24	10			
C. Pentium 200	110	25		27	7			
D. Pentium 300	75	30	40	12	6			
E. Pentium 400+	52	30			15			
F. Pentium 500+	24	10				67	210	160
G, Dreamwriter portable computer		105						
H. Sun workstations	4							
I. Multimedia presentation stations	8	160	5		7			50
J. Laptop computer		87		19	8	20	20	40
Number of Computers listed above that are Internet ready	all	all	all	all	all			
Number of Computers listed above that are equipped for multimedia	8	160	5		7			

						Planned Future Acquisitions		
	Computer labs	**Classrooms**	**Library or Media Center**	**Admin Office**	**Other Locations**	**Year 1**	**Year 2**	**Year 3**
Peripheral Devices								
A. Printers	27	346	14	36	18	50	50	50
B. Scanners	5	5	5	3	1	5	5	5
C. Modems (below 28.8 Kbps)				2				
D. Modems (28.8 Kbps or above)					100			
E. Assistive/ Adaptive Devices					6			
F. Digital Cameras	5	2	16		1	10	5	5
G. TV Monitors	10	223	5	5	6	50	50	50
H. VCRs/ Laser Disk Players	6	62	5	4	10	40	40	40
I. Projection Devices	8	12	4	2	4	5	5	5
J. Video Cameras	6		4		6	5	5	5
K. Link system	6							
L. Midi Keyboard	4	13						
M. Zip drives	2	10		4				
N. CD writer	4				1	10	5	5
O. CD Towers/Servers					5	5		

						Planned Future Acquisitions		
	Computer labs	**Classrooms**	**Library or Media Center**	**Admin Office**	**Other Locations**	**Year 1**	**Year 2**	**Year 3**
Software (list by type)								
A. Application (MS Office : Word, Excel, Access, PowerPoint, Publisher)	all	all	all	all	all	Upgrades as needed		
B. Productivity Tools	all	all	all	all		Upgrades as needed		
C. Grading package		all				Upgrades as needed		
D. Reading software (Accelerated Reader, STAR)	Primary, Elem, MS	Primary, Elem, MS	Primary, Elem, MS			Upgrades as needed		
E. Listening software (Earobics I & II)		Primary				Upgrades as needed		
F. Music software	Music lab	Music classrooms				Upgrades as needed		
G. Plato (Math)	HS Math	HS Math	HS Math			Upgrades as needed		
H. Encyclopedia	all	all	all		all	Upgrades as needed		
I. Adobe Acrobat Reader	all	all	all	all	all	Upgrades as needed		
J. Internet Explorer	all	all	all	all	all	Upgrades as needed		

						Planned Future Acquisitions		
	Computer labs	**Classrooms**	**Library or Media Center**	**Admin Office**	**Other Locations**	**Year 1**	**Year 2**	**Year 3**
K. Foreign language programs	HS, MS	HS, MS	HS, MS			Upgrades as needed		
L. Hyperstudio	Primary, Elem, MS	Primary, Elem, MS	Primary, Elem, MS			Upgrades as needed		
M. Graphic organizer (Inspiration)	all	all	all			Upgrades as needed		
N. Creativity (Kidpix, Adobe Photoshop, Illustrator, MS Publisher)	all	all	all			Upgrades as needed		
O. Keyboarding	all					Upgrades as needed		
P. Geography, History	HS, MS	HS, MS	HS, MS			Upgrades as needed		
Q. Tenth Planet Math	Primary, Elem.	Primary, Elem.	Primary, Elem.			Upgrades as needed		
R. Anti-Virus	all	all	all	all	all	Upgrades as needed		
S. MS Outlook (Email)	all	all	all	all	all	Upgrades as needed		

						Planned Future Acquisitions		
	Computer labs	**Classrooms**	**Library or Media Center**	**Admin Office**	**Other Locations**	**Year 1**	**Year 2**	**Year 3**
Network Equipment								
A. Hubs					6			
B. Routers					2			
C. Servers	2		2	4	4	1	1	1
D, Switches					87	10	5	5
Telecommunications Links								
A. Full or fractional T1					2			
B. ISDN					0			
C. Dedicated cable/ microwave					1			
D. Satellite Dishes					1			

Student Competency Goals: **1. Computer terminology & use**	**K**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Identify basic computer components: monitor, keyboard, disk drive, printer													
Discuss acceptable behavior guidelines for working near a computer													
Demonstrate proper start-up/shut down procedure													
Explain the different locations of software (disk, CD-ROM, network)													
Demonstrate proper care of diskettes, CD's													
Select appropriate software for a task													
Explain the function of each piece of hardware													
Demonstrate the ability to use information on a screen to operate a program													
Identify computer system components: input, output, memory, processing device													
Demonstrate proper care of hardware and software													
Explain computer terms: network drive, c:/drive, a:/drive, file management													
Demonstrate and explain how/why to create a back-up file													
Select appropriate hardware for a task													
Demonstrate awareness of computer components & how they work													
Student Competency Goals: **2. Social implications**													
Identify the computer as a tool for work & play													
Demonstrate respect for the computer work of others													
Explain the rights of an individual to ownership of his/her work													
Identify the ways technology has changed the lives of people													
Explain the copyright law													
Identify the ways technology has impacted society													
Discuss privacy issues & reasons for security measures (passwords, key locks, copyright laws)													
Explain consequences of breaking copyright laws													
Identify ways telecomputing promotes a global community													
Identify the role of technology in a variety of careers/subject areas													
Identify technological skills required for various careers													
Demonstrate proper computer lab etiquette													

	Introduced (basic components of skill practiced with teacher assistance)
	Developing
	Proficient

Student Competency Goals: **3. Keyboarding**	**K**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Identify & demonstrate: keyboard letters, numbers, space bar, enter key													
Identify & demonstrate: shift, delete and arrow keys													
Identify & demonstrate: period, comma, apostrophe, quotation marks, question mark, and caps lock													
Demonstrate correct hand position over right/left side of the keyboard and home row													
Demonstrate proper reaches for key strokes													
Demonstrate proper body position													
Demonstrate proper finger position													
Demonstrate “eyes on copy” instead of keyboard													
Demonstrate proper touch typing techniques													
Student Competency Goals: **4. Research Skills**													
Demonstrate use of library online catalog to find information													
Demonstrate the ability to search for a given topic and print out information													
Demonstrate the ability to use the Internet as a resource													
Demonstrate the ability to efficiently search for information using a variety of CD-ROMs and the Internet													
Demonstrate the ability to discriminate between reliable sources and opinion sources													
Demonstrate the ability to retrieve information from a variety of sources (CD-ROMs, online-catalogs, Internet) to complete a specific task													

	Introduced (basic components of skill practiced with teacher assistance)
	Developing
	Proficient

Student Competency Goals: **5. Word/Desktop Publishing**	**K**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Define the term “word processing”													
Enter ideas about a topic on the computer													
Define word processing terms: cursor, load, save, print													
Demonstrate proof reading techniques on the computer													
Demonstrate proper spacing (2 spaces after period, 1 space after comma)													
Demonstrate the use of the tab key to mark paragraphs in a document													
Demonstrate “wrap around” procedure and proper use of enter key													
Demonstrate ways to enhance text: bold, underline, italic, font													
Demonstrate effective use of spell check													
Insert meaningful pictures from clip art													
Apply proper rules for spacing and indentation													
Insert graphics from a variety of sources													
Demonstrate the ability to cut, copy, and paste for editing													
Demonstrate the ability to use a “wizard”													
Demonstrate the commands for single and double spacing													
Demonstrate effective use of grammar check													
Demonstrate the ability to use text justification (left, center, right)													
Demonstrate the ability to create, format, edit/revise documents in all subject areas													
Student Competency Goals: **6. Telecommunications**													
Define and identify telecommunication in the community													
Identify examples of telecommunication links (satellites, fax, telephone, modem, network)													
Send and retrieve email in the district													
Send and retrieve global email													
Demonstrate the ability to use the Internet to gather information from various web sites													
Explain the proper use of the Internet (not surfing or chat rooms)													
Explain application procedure for Internet Driver’s license													
Demonstrate the ability to gather and exchange information using email, Internet and other online services													

	Introduced (basic components of skill practiced with teacher assistance)
	Developing
	Proficient

Student Competency Goals: **7. Multimedia/Graphic Applications**	**K**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Show awareness that computers produce pictures and pictures tell a story													
Identify the difference between graphics and text													
Demonstrate the ability to add or create graphics and place text in a document													
Use software to create publications – e.g. newsletters, brochures, flyers, posters													
Use meaningful selection of graphics appropriate to the document													
Demonstrate the ability to apply borders, fonts, and text using publishing software													
Use presentation software to create group slide shows (Kid Pix, PowerPoint)													
Use presentation software to create individual slide shows (PowerPoint, HyperStudio)													
Demonstrate the ability to use digital camera to personalize presentations													
Demonstrate the ability to use a scanner to personalize presentations													
Demonstrate the ability to manipulate and import data using various sources to produce multimedia presentations													
Student Competency Goals: **8. Databases**													
Define database terms: field, sort, arrange, file													
Enter data into a pre-designed database													
Demonstrate the ability to search & sort data using an existing database													
Demonstrate the ability to use existing databases for desired information given 1 or 2 criteria (using “and” “or” when necessary)													
Create and design project-specific databases													
Demonstrate the ability to sort, search, and manipulate data for a specific task													
Demonstrate the ability to create an integrated application (mail merge)													
Student Competency Goals: **9. Spreadsheets**	**K**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Define spreadsheet terms: row, column, cell													
Demonstrate the ability to enter data from a subject area into a pre-designed spreadsheet													
Create graphs using the chart wizard following a handmade visual (bar graph)													
Demonstrate the ability to set-up a spreadsheet													
Demonstrate the ability to incorporate the use of calculations													
Use a spreadsheet to edit data and explain the results of the changes (averages, grades)													
Demonstrate the ability to display data in a variety of charts and graphs													
Demonstrate the ability to graph, calculate, sort, and interpret information independently for a specific task													

	Introduced (basic components of skill practiced with teacher assistance)
	Developing
	Proficient

Wayne Central School District Software Evaluation Form

Instructional software is chosen to support and enhance the instructional process in the classroom. Software which is selected should support district grade level or curriculum objectives and be aligned with New York State standards. Before software is adopted by the district, it should be evaluated by grade level teachers at the elementary level or by curriculum departments at the secondary level.

Follow the process outlined below to make a recommendation for software adoption.

1. Select software that supports and enhances the goals of your curriculum.
2. Obtain a preview copy of the software program. A requisition must be written and approved by the principal and technology coordinator.
3. At least three people from your grade level or department should thoroughly evaluate the software.
4. Each evaluator will fill out the form attached describing the software and its potential educational value. Include hardware specifications and any additional peripheral information.
5. Turn in your recommendation for adoption if the software can meet your needs.
6. The Software Selection Committee will review the recommendations. Software that is approved will be purchased according to the recommendation of the reviewer (i.e. single copy, lab pack, site license, district license).

Fill in form completely:

Teacher's Name _____Date

_____

Subject or grade level _____

Program Title: _____

Catalog Name _____Catalog number _____

Vendor Name _____

Vendor Address:

_____

Vendor Phone: _____ Vendor Fax: _____

Required Hardware: _____3.5" disk _____

Platform: Windows 95 98 2000_____ CD-ROM _____

Required RAM _____ Required Hard Drive Space _____

Is a network version available? _____ Site license? _____ Lab pack? _____

If it is a network version, do you want to share files? Yes / No

District-wide Building-wide Department-wide My classroom only

How many copies needed? _____ Where will the software be installed? _____

Reference the New York State Standard(s) this software will address _____

_____

(Complete evaluation table on reverse side.)

Evaluation questions	Yes	No	N/A
1. Is the documentation thorough and easy to understand?			
2. Are there supporting materials or teachers' guides?			
3. Are navigation prompts clearly displayed?			
4. Are the commands simple to use and consistent?			
5. Are there help screens that are easy to access and clear to use?			
6. Can you exit from every screen?			
7. Can you retrace your steps?			
8. Can you print the results?			
9. Can you pick exactly what you want to print?			
10. Is all program information accurate?			
11. Is the content unique (not in print or otherwise accessible)?			
12. Are the intellectual level and content appropriate for your grade level?			
13. Are there multiple skill levels within the program?			
14. Is the content free of any bias (gender, race, religion, political, etc.)?			
15. Will this support or enhance the curriculum?			
16. Will it be useful in more than one area of the curriculum?			
17. Is this a drill and practice program?			
18. Does this program stimulate the student's imagination and curiosity?			
19. Does this program include an interactive component?			
20. Does it monitor and record student progress?			
21. Are the graphics, color, and sound well done and meaningful?			
22. Does the program have built in Internet links?			

Additional comments:

Evaluator's recommendation to purchase (yes or no) _____

Return this completed form to the Technology Coordinator.

Wayne Central School District
Ontario Center, New York 14520
Terms and Conditions for Use of Internet and Networked Resources

Please read the following carefully before signing this document.

Internet access is now available to students, teachers, and other personnel in the Wayne Central School District (WCSD). We are very pleased to bring this access to Wayne Central and believe the Internet offers vast, diverse and unique resources to both students and teachers. Our goal in providing this service to teachers, students and other personnel is to promote educational excellence in the Wayne Central Schools by facilitating resource sharing, innovation and communication.

The Internet is an electronic highway connecting thousands of computers all over the world and millions of individual subscribers. Students, teachers and other personnel have access to

- Electronic mail communication with people all over the world
- Information and news resources from many research institutions including National Aeronautics and Space Administration (NASA), colleges, and universities
- Public domain software and shareware of all types
- Discussion groups on a plethora of topics ranging from Chinese culture to the environment to music to politics
- Many university library catalogs, the Library of congress, Colorado Alliance of Research Libraries (CARL), Library Information Bridge for the Rochester Area (LIBRA) and Educational Resources Information Center (ERIC), etc.

With access to computers and people all over the world also comes the availability of material that may not be considered to be of educational value in the context of the school setting. Communications on the Internet are not censored by the Wayne Central School District. A user may be able to gain access to services which the District has not authorized for education purposes. Because of these factors, it is possible that students will read, view, and hear material on the Internet that they or their parents find inappropriate, offensive or controversial. We firmly believe that the valuable information and interaction available on this worldwide network far outweighs the possibility that users may procure material that is not consistent with the educational goals of this school district.

Internet access is coordinated through a complex association of government agencies and regional and state networks. In addition, the smooth operation of the network relies upon the proper conduct of the end users who must adhere to strict guidelines. These guidelines are provided here so that you are aware of the responsibilities you are about to acquire. In general, this requires efficient, ethical, and legal utilization of the network resources. If a WCSD user violates any of these provisions, his or her account will be terminated and future access could possible be denied. The signature(s) at the end of this document is (are) legally binding and indicate(s) the party (parties) who signed has (have) read the terms and conditions carefully and understand(s) their significance.

INTERNET – Terms and conditions

1) Acceptable Use – The purpose of National Science Foundation network (NSFNET), which is the backbone network of the Internet, is to support research and education in and

among academic institutions in the U.S. by providing access to unique resources and the opportunity for collaborative work. The use of each account must be in support of education and research and consistent with the educational objectives of the Wayne Central School District. Use of other organization's networks or computing resources must comply with the rules appropriate for that network. Transmission of any material in violation of any US or state regulation is prohibited. This includes, but is not limited to: copyrighted material, threatening or obscene material, or material protected by trade secret. Use for commercial activities by educational institutions is generally not acceptable. Use for product advertisement or political lobbying is also prohibited.

2) Privileges – The use of Internet is a privilege, not a right, and inappropriate use will result in cancellation of these privileges. (Each student who receives an account will be part of a discussion with a WCSD faculty member pertaining to the proper use of the network.) The Assistant Superintendent for Instruction, the appropriate building principal and the Technology Coordinator (the "system administrators") will deem what is inappropriate use and their decision is final. Also, the system administrators may close an account at any time as required. The administration, faculty, and staff of WCSD may request the system administrator to deny, revoke, or suspend specific user accounts.

3) Netiquette – Each user is expected to abide by the generally accepted rules of network etiquette. These include (but are not limited to) the following:

    a. Be polite. Do not get abusive in messages to others.
    b. Use appropriate language. Do not swear, use vulgarities or any other inappropriate language. Illegal activities are strictly forbidden.
    c. Do not reveal personal addresses or phone numbers of students or colleagues.
    d. Note that electronic mail (e-mail) is not guaranteed to be private. People who operate the system do have access to mail. Messages relating to or in support of illegal activities may be reported to the authorities.
    e. Do not use the network in such a way that would disrupt the use of the network by other users.
    f. All communications and information accessible via the network should be assumed to be private property (i.e., copyrighted).

4) No guarantees – WCSD makes no warranties of any kind, whether expressed or implied, for the service it is providing. ECSD will not be responsible for any damages suffered by users. This includes loss of data resulting from delays, nondeliveries, misdeliveries, or service interruptions caused by negligence or user errors or omissions. Use of any information obtained via WCSD is at the user's own risk. WCSD specifically denies any responsibility for the accuracy or quality of information obtained through its services.

5) Security – Security on any computer system is a high priority, especially when the system involves many users. Anyone who identifies a security problem on the Internet must notify the Assistant Superintendent for Instruction, the building principal or the Technology Coordinator at once. Do not demonstrate the problem to other users. Do not use another individual's account without prior written permission from that individual. Attempts to login to the Internet as a system administrator will result in cancellation of user privileges. Any user identified as a security risk or having a history of problems with other computer systems may be denied access to the Internet.

6) Vandalism – Vandalism will result in cancellation of privileges. Vandalism is defined as any malicious attempt to harm or destroy real property, data of another user, Internet, or any of the above listed agencies or other network s that are connected to the NSFNET Internet backbone. This includes, but is not limited to, the uploading or creation of computer viruses.

7) Updating of user Information – WCSD will occasionally require new registration and account information from users to continue the service. This will typically be done whenever a student begins his/her enrollment in another district building. A user must notify WCSD of any changes in account information (address, etc.). Currently, there are no user fees for this service.

8) Exception of Terms and Condition – All terms and conditions as stated in this document are applicable to the Wayne Central School District in addition to NSFNET. These terms and conditions reflect the entire agreement of the parties and supersede all prior oral or written agreements and understandings of the parties. These terms and conditions shall be governed and interpreted in accordance with the laws of the state of New York, and the United States of America.

Revised: 5/21/97

APPLICATION FOR COMPUTER USE

User's Name (please print:)_____

Home Address: _____

Home Phone:_____ Parent/Guardian Name(s):_____

Check one:
I am a _____ WCSD student and will graduate in_____.
_____ WCSD teacher, teaching _____ in grade _____ at _____.
_____ WCSD staff working as a _____ at _____.
_____ WCSD Community member.

I understand that my computer privileges will be revoked if I violate any of the regulations listed below. Should I commit any such violation, I also know that school disciplinary action and/or legal action may be taken.

I understand that my computer privileges may be revoked if I:
1) Vandalize the equipment or computer data in any way.
2) Alter computer desktops, files and/or network organization.
3) Create documents containing inappropriate language or obscene material.
4) Attempt to log on as someone other than self or "student."
5) Demonstrate any other inappropriate computer use as deemed by the supervising adult.

User Signature:_____ Date:_____

Parent Signature:_____ Date:_____

INTERNET USE

As a parent or guardian of this student, I understand that Internet access is designated for educational purposes, but I realize that it is possible that a student will read, view, and hear material on the internet that may be inappropriate. There is a filtering program, which will block students from inappropriate sites. However, this is not a perfect system and the ultimate responsibility must fall on the user.

<u>As a student, I understand that my Internet privileges may be revoked if</u>:
1. Proper "netiquette" is not used.*
2. Access to inappropriate sites is not reported immediately.

User Signature:_____ Date:_____

Parent Signature:_____ Date:_____

*more information regarding "netiquette" and the terms and conditions of using computers and the Internet at Wayne Central School District is in the "Computer Network and Internet Use" document in the Student Handbook.

Revised: May 11, 1999

Technology Department Job Descriptions

Technology Coordinator

The District Technology Coordinator reports to the Assistant Superintendent for Instruction. The duties of the position include implementation and revision of the District Technology Plan, coordination of staff development related to technology, and infusion of technology into the instructional and management functions of the district. In addition, the Coordinator will supervise the technician and help-desk assistant in the acquisition, installation, maintenance and repair of hardware and software.

Specific duties and responsibilities:

A. Serves as chairperson on the District Technology committee and as such works with the committee to implement and evaluate the plan and recommend revisions as necessary.
B. Collaborates with the Assistant Superintendent for Instruction and other instructional staff to ensure that technology is appropriately used within the existing curriculum.
C. Analyzes potential problems and take corrective action using problem solving techniques when appropriate.
D. Promotes the use of technology and facilities to the members of the community and local businesses with the Superintendent of Schools.
E. Assists in the communication of the District Technology Plan.
F. Works with the Instructional Technology Trainer to coordinate staff training activities in the use of hardware, software, integration, and the network.
G. Acts as a trainer and coordinates other trainers within the district to provide staff development activities both during the school day and evenings.
H. Serves as a resource and troubleshooter to district personnel.
I. Assesses current hardware and software for further use within the District Technology Plan, reallocating and/or making recommendations for surplusing when appropriate.
J. Overseas the development and maintenance of an inventory of all current and future district technology equipment and software, and provides for their secure and appropriate placement.
K. Recommends for acquisition specific types of hardware and software to meet curricular and management needs while staying current with the latest applications and research regarding uses of technology.
L. Shares in the duties of systems administrator for the district network. Establishes and maintains security standards and protection for all hardware and software.
M. Develops and maintains the technology budget with the Assistant Superintendent for Business.
N. Serves as a liaison between the district and BOCES and/or other outside vendors.

Qualifications:

Exhibits and maintains good communication and human relation skills; has the ability to analyze, direct, organize and manage people and systems; holds or is eligible for NYS teacher or school district administrator certification or has comparable successful administrative training and experience in a business, technical or industrial setting; has a working general knowledge of curriculum; understand the importance of the interface between technology and curriculum; has experience using technology in a classroom or similar setting; has knowledge and experience with computer hardware, software and networks.

Instructional Technology Trainer

The Instructional Technology Trainer is an 11-month employee who focuses on the staff development needs of the faculty in the area of integration of technology into the instructional program of the district. This individual reports to the Assistant Superintendent for Instruction.

Specific Duties:

1. Works with individual teachers in their classrooms on the full integration of technology into the instructional plan. This includes lesson planning, problem-solving, modeling of instructional strategies, and instructional coaching related to technology.
2. Teaches in-service courses to faculty on a wide range of topics.
3. Disseminates research and literature to faculty on instructional technology.
4. Publishes regular newsletters on instructional technology.
5. Works with the full technology team in the district to assure proper maximization of learning through the technology infrastructure.
6. Remains current in the field by reading research and literature, attending conferences and workshops, and networking.
7. Conducts annual staff development needs assessment related to instructional technology and develops technology staff development plan with Technology Coordinator and the Assistant Superintendent for Instruction.
8. Serve on the district technology committee.
9. Works with administrative and instructional teams to effectively infuse technology into the instructional program.
10. Other duties as assigned by the Assistant Superintendent for Instruction.

Qualifications:

Instructional experience, knowledge of wide range of software solutions, adept at using a variety of technology hardware and peripherals, and experience with presenting to adult audiences.

Teaching Assistant assigned to the Computer Lab

The Teaching Assistant assigned to the computer lab maintains the computer lab in a school. The assistant assists all students a faculty with computer equipment and software program. The assistant answers questions, provides one-on-one computer instruction, supports teachers working with students using computers. The assistant works with teachers and administrators to integrate computers into their curriculum. They assist teachers in finding appropriate software to support teacher instruction.

Typical Work Activities:

1. Keep and clean and inviting lab environment.
2. Establish lab rules
3. Oversee that lab rules are being followed at all times.
4. Establish correct procedures for operating the computers, printers, and software.
5. Establish and maintain a schedule for classes and/or teachers to use the lab.

6. Keep schedules flexible to accommodate whole class lessons as well as small groups and individuals.
7. Ensure that the lab runs smoothly during and after school hours.
8. Promote the use of the computer lab by faculty and students.
9. Collaborate with and assist teachers with lessons in the lab.
10. Research appropriate Internet sites for student use.
11. Encourage a productive and fun work environment for all staff and students.
12. Teach short mini courses according to staff needs.

Qualifications:

Extensive experience with computers; ability to install software on computers; ability to troubleshoot problems with computers and printers; ability to follow instructions by phone to install or repair computer problems; ability to train teachers and students to use software; ability to research resources on the Internet; experience with computer networks is a plus!

Technology Support Department

Each of the positions in the Technology Support Department is classified as a Civil Service job.

Computer Technician

The Computer Technician is responsible for designing, administering and participating in the maintenance, repair, and operation of computer networks. Work involves the installation of the network equipment and analyzing hardware and software network problems. The employee works under the general supervision of the Technology Coordinator. The employee may supervise a team or team project.

Typical Duties:

1. Assists in planning, installing, and maintaining local area networks.
2. Installs, configures and maintains network file servers.
3. Maintains web and email servers.
4. Installs network software on servers and configures network clients.
5. Analyzes and takes corrective action to resolve network problems involving computers and data communications hardware and software using appropriate analyzing tools.
6. Tests new computer hardware and software.
7. Consults with users and technical staff regarding the purchase of computer hardware, software, network servers, and network hardware.
8. Maintains up-to-date knowledge of new trends and technology for computer hardware, software, and networking.
9. Researches, evaluates and documents solutions to technology needs.
10. Informs and trains users and technical staff.

Qualifications:

Thorough knowledge of personal computers; good knowledge of logical operations of computer and data communication devices; working knowledge of data processing methodology and techniques; ability to define and recommend computer hardware and software; ability to detect and resolve severe computer breakdowns and problems; good knowledge of file servers, routers, and switches; ability to create and implement network design and installation of all hardware and software; ability to work with users; dependability and good judgment; ability to work as part of a team and assume a leadership role.

Computer Services Assistant

The Computer Services Assistant is responsible for diagnosing and repairing problems associated with hardware, software, and network connectivity. The Technician develops and implements preventative maintenance for equipment and installs hardware and software. Other duties involve the coordination of any repairs that are done by others and the coordination and maintenance of other related equipment.

Typical Work Activities:

1. Maintains all hardware and peripheral equipment, including PC's, printers, network, and cabling.
2. Installs and configures hardware/software as per departmental requirements
3. Maintains accurate inventory records on all equipment
4. Explains revisions in software packages
5. Designs network cable plans for network installation and/or modifications
6. Installs cables
7. Diagnoses and repairs problems associated with hardware, software and/or the network
8. Develops and implements schedules to provide preventative maintenance
9. Cleans and inspects equipment.
10. Analyzes potential problems and takes corrective action.
11. Serves as a resource and troubleshooter to departmental personnel.

Qualifications

Good knowledge of the use and operations of computers and technology systems and related peripheral equipment; good knowledge of the application of computer and technology systems; ability to install, adapt, and maintain software to existing applications; ability to diagnose, evaluate, troubleshoot, and repair problems and take proper action; ability to work well with others.

Teaching Assistant Assigned to the Help Desk

The Teaching Assistant assigned to the Help Desk is the initial contact for information technology users seeking technical support by answering questions, resolving routine hardware and software problems and performing a variety of other activities related to user support. The work is performed under the general supervision of the Technology Coordinator and Computer Technician. The Help Desk Assistant may provide training and/or tutoring to network users on network software applications.

Typical Work Activities:

1. Answers incoming help desk calls and provides assistance by phone if possible.
2. Determines whether problems are caused by hardware, software, communication devices, or user error.
3. Instruct users on proper methods for data manipulation. Software applications or hardware operation.
4. Refers problems that cannot be resolved to technical staff and tracks service requests to completion.
5. Takes requests for assistance or hardware malfunction reports and posts them on a task list for computer technicians.
6. Answers questions about how to use different types of software and hardware.
7. Sets up new user login accounts and email accounts
8. Follows up on calls and reports on the status of calls.
9. Conducts in-service training for staff in the use of software.
10. Posts new equipment inventory to database and updates as needed.

Qualifications:

Good knowledge of operation of computer hardware, software, peripheral and communication devices; good knowledge of software testing procedures and debugging techniques; ability to carry out oral and written instructions; ability to read, understand, and interpret technical and procedural manuals; ability to explain the use and capability of computer hardware, software, peripherals and communication devices; ability to instruct users in software and hardware operations; ability to establish and maintain effective working relationships; ability to positively react to calls for computer software and hardware assistance.

Technology Staff Development –Training Plan

One of the district's goals is to provide our teaching staff the opportunity to develop the professional and instructional technology skills that will enable them to use technology as a teaching, learning and management tool with access to hardware and software. These skills will contribute to the development of lifelong learning in both our students and professional staff.

Our professional growth plan allows for the teacher to select one or two target areas for improvement. Each target should be curriculum centered, enabling the teacher to integrate technology into his or her own lessons. The individual growth plan is created in collaboration with the principal, curriculum director, department chairperson, technology coordinator, and/or media specialist. The teacher is expected to learn enough to move to level 3 or 4 of their target area and then demonstrate the knowledge and skills they have learned. During the year-end evaluation, teachers will provide evidence of success through an assessment portfolio, which may include:

- Descriptions of units taught in your classroom having both technology objectives and content objectives.
- Assessment tools used with students on these projects.
- Personal journal reflections including observations on what does and does not work well.

Some skilled teachers may choose to be peer educators instead of or in addition to working on an improvement goal and teach classes on specific technology skills. Others may volunteer to be peer mentors working closely with teachers when asked while still working on their own goal.

Training sessions will occur during the summer, after school, evenings, Saturdays, during release time, and on staff development days during the year. In all, teachers should spend enough time during the year to improve their technology integration skills to reach level 3 or 4 of the goal they have selected.

We also plan to evaluate and track teacher progress which will in turn drive the focus of our staff development, keeping it aligned with the needs of our professional staff and focused on student learning. A database will be created and maintained for this purpose. The results of all technology assessments will be entered there as well as shared with the individual teacher to facilitate their acquisition of skills.

Technology Staff Development Timeline

In an effort to clarify the needs for staff development in technology, the District Technology Committee has created the following timeline for implementation of the staff development portion of the district technology plan. The execution of the timeline begins in late spring and repeats each year thereafter.

Time	***Task***	***Responsible person(s)***
Spring	Create technology staff development survey based on teacher technology skills rubrics	Instructional Technology Trainer
	Create database to store results of survey	Instructional Technology Trainer, Technology Coordinator
	Administer survey prior to year-end teacher evaluation	Instructional Technology Trainer
	Interpret results. Give results back to teacher before year-end evaluation.	Instructional Technology Trainer, Technology Coordinator
Year-end evaluation	1. Teacher plans what they want to accomplish, consults with staff/expert and writes goal for technology improvement for next school year. 2. Teacher sends goal to Instructional Technology Trainer. 3. Teacher writes a growth plan including some or all of the following steps: • Attend class • Work with experienced teacher • Visit other classes • Write plan for lesson integrating technology • Teach the lesson • Show evidence of success	Teacher
	Goal is added to technology staff development database.	Instructional Technology Trainer
Summer/Fall/Winter	Teacher works on improving technology skills in chosen goal.	Teacher
Mid-year	Teacher meets with mentor, team leader, or department chair for progress report	Teacher and mentor/team leader/department chair
Early Spring	Plan for next year. Conduct new survey. Compile new survey results. Repeat steps starting at top of this chart.	Instructional Technology Trainer
Year-end evaluation	Evaluation by demonstration or portfolio of teacher's instructional technology goal success. Report sent to Instructional Technology Trainer.	Principal

Technology Skills

Basic Computer Operation Skills:

I. Basic computer operation
II. File management
III. Word processing
IV. Spreadsheet use
V. Database use
VI. Graphics use
VII. Multimedia use
VIII. Network use
IX. Student Assessment
X. Ethical use understanding
XI. Internet Basics
XII. Email and electronic mailing lists
XIII. The World Wide Web
XIV. Search tools
XV. Netiquette, on-line ethics, and current issues surrounding use in K-12 schools

Technology Integration Skills:

I. Instructional software use
II. Using technology to improve student writing
III. Information literacy skills using secondary sources
IV. Information literacy skills using primary sources
V. Modification of instructional delivery
VI. Assessment of student performance
VII. Individualization of instruction and educational program
VIII. Adaptive technologies
IX. Professional growth and communication
X. Research and evaluation of technology use
XI. Video Techniques
XII. File Management – Obtaining, decompressing and using files
XIII. Multimedia – Real-Time and push technologies
XIV. Web page & web site construction
XV. Learning opportunities using the Internet

Basic Computer Operation Skills Rubrics

I. Basic computer operation

Level 1:	I do not use a computer.
Level 2:	I can use the computer to run a few specific, preloaded programs. It has little effect on either my work or home life. I am somewhat anxious I might damage the machine or its programs.
Level 3:	I can set-up my computer and some peripheral devices, load software, print, and use most of the operating system tools like the Windows Explorer, the Find command, and the Recycling bin. I can format a floppy disk. I know when it is appropriate to use right click and keyboard short cuts. I can use CTRL-ALT-DELETE to un-freeze a computer. I know how to properly shut down a computer.
Level 4:	I can run two programs simultaneously, and have several windows open at the same time. I can customize the look and sounds of my computer. I use techniques like shift-clicking to work with multiple files. I look for programs and techniques to maximize my operating system. I feel confident enough to teach others some basic operations.

II. File Management

Level 1:	I do not save any documents I create using the computer.
Level 2:	I save documents I've created but I cannot choose where they are saved. I do not back-up my files.
Level 3:	I save documents I've created to a floppy disk or my hard drive. I have a filing system for organizing my files, and can locate files quickly and reliably. I back-up my files to floppy disk or other storage device on a regular basis.
Level 4:	I save documents I've created to my network drive. I have a filing system for organizing my files, and can locate files quickly and reliably. I back-up my files to floppy disk or other storage device on a regular basis.

III. Word Processing

Level 1:	I do not use a word processor, nor can I identify any uses or features it might have which would benefit the way I work.
Level 2:	I occasionally use the word processor for simple documents that I know I will modify and use again. I generally find it easier to hand write or type most written work I do.
Level 3:	I use the word processor for nearly all my written professional work: memos, tests, worksheets, and home communication. I can edit, spell check, and change the format of a document. I can preview and print my work. I feel my work looks professional.
Level 4:	I use the word processor not only for my work, but have used it with students to help them improve their own communication skills.

IV. Spreadsheet Use

Level 1:	I do not use a spreadsheet, nor can I identify any uses or features it might have which would benefit the way I work.
Level 2:	I understand the use of a spreadsheet and can navigate within one. I can create a simple spreadsheet which adds a column of numbers.
Level 3:	I use a spreadsheet for several applications. These spreadsheets use labels, formulas and cell references. I can change the format of the spreadsheets by changing column widths and text style. I can use the spreadsheet to make a simple graph or chart.
Level 4:	I use the spreadsheet not only for my work, but have used it with students to help them improve their own data keeping and analysis skills.

V. Database use

Level 1:	I do not use a database, nor can I identify any uses or features it might have which would benefit the way I work.
Level 2:	I understand the use of a database and can locate information within one that has been pre-made. I can add or delete data in a database.
Level 3:	I use databases for personal application. I can create an original database - defining fields and creating layouts. I can find, sort and print information in layouts that are clear and useful to me.
Level 4:	I can use formulas with my database to create summaries of numerical data. I can use database information to mail merge in a word processing document. I use the database not only for my work, but have used it with students to help them improve their own data keeping and analysis skills.

VI. Graphics use

Level 1:	I do not use graphics in my word processing or presentations, nor can I identify any uses or features they might have which would benefit the way I work.
Level 2:	I can open and create simple pictures with the painting and drawing programs. I can use programs like *Microsoft Paint, Image Composer,* or *PhotoDraw* .
Level 3:	I use both pre-made clip art and simple original graphics in my word-processed documents and presentation. I can edit clip art, change its size, and place it on a page. I can purposefully use most of the drawing tools, and can group and un-group objects. I can use the clipboard to take graphics from one application for use in another. The use of graphics in my work helps clarify or amplify my message.
Level 4:	I use graphics not only for my work, but have used it with students to help them improve their own communications. I can use graphics and the word processor to create professional looking documents.

VII. Multimedia use

Level 1:	I do not use multimedia (PowerPoint, HyperStudio), nor can I identify any uses or features it might have which would benefit the way I work.
Level 2:	I can navigate through a pre-made multimedia program.
Level 3:	I can create my own multimedia presentations for information presentation. These presentations include navigation buttons, sounds, transitions, animations, graphics, and text fields. I can use an LCD projection device or a Gateway Destination Computer to display the presentation to a class.
Level 4:	I use multimedia with students who are making their own presentations.

VIII. Network use

Level 1:	I do not understand how networks work, nor can I identify any personal or professional uses for networks.
Level 2:	I understand that there is a large amount of information available to me as a teacher that can be accessed through networks, including the Internet. With help, I can use the resources on the network in our building
Level 3:	I use the networks to access professional and personal information from a variety of sources including networked CD-ROM reference materials, on-line library catalogs, the ERIC database, and the World Wide Web. I have an e-mail account that I use on a regular basis.
Level 4:	Using telecommunications, I can download files and programs from remote computers. I use telecommunications with my students.

IX. Student assessment

Level 1:	I do not use the computer for student assessment.
Level 2:	I understand that there are ways I can keep track of student progress using the computer. I keep some student produced materials on the computer, and write evaluations of student work and notes to parents with the word processor.
Level 3:	I effectively use an electronic grade book to keep track of student data and/or I keep portfolios of student produced materials on the computer. I use the electronic data during parent/teacher conferences.
Level 4:	I rely on the computer to keep track of outcomes and objectives individual students have mastered. I use that information in determining assignments, teaching strategies, and groupings.

X. Ethical use understanding

Level 1:	I am not aware of any ethical issues surrounding computer use.
Level 2:	I know that some copyright restrictions apply to computer software. I know that I must protect my password, and should restrict access by others to my account.
Level 3:	I clearly understand the difference between freeware, shareware, and commercial software and the fees involved in the use of each. I know the programs for which the district or my building holds a site license. I understand the school board policy on the use of copyrighted materials. I demonstrate ethical usage of all software and let my students know my personal stand on legal and moral issues involving technology. I know and enforce the school's technology policies and guidelines, including its Computer and Internet Acceptable Use Policy. I have a personal philosophy I can articulate regarding the use of technology in education.
Level 4:	I am aware of other controversial aspects of technology use including data privacy, equitable access, and free speech issues. I can speak to a variety of technology issues at my professional association meetings, to parent groups, and to the general community.

XI. Internet basics

Level 1:	I do not understand how the Internet works, nor can I identify any personal or professional uses for the Internet.
Level 2:	I can identify some personal or professional uses for networks, and understand they have a value to my students and me. I've read some articles about the Internet in the popular press. I can directly use network access to a library catalog or CD-ROM.
Level 3:	I can describe the Internet and how it can be useful personally and professionally. I can describe the history of the Internet, recognize its international character, and know to a degree the extent of its resources. I have personal access to the Internet that allows me to receive and send email, download files, and access the World Wide Web.
Level 4:	I use networks on a daily basis to access and communicate information. I can serve as an active participant in a school or organizational planning group, giving advice and providing information about networks. I can recommend several ways of obtaining Internet access to others.

XII. Email and electronic mailing lists

Level 1:	I do not use email.
Level 2:	I understand the concept of email and can explain some administrative and educational uses for it.
Level 3:	I use email regularly and can: • read and delete messages • send, forward and reply to messages to • send and receive attachments • use electronic mailing lists and understand the professional uses of them • enroll in professional electronic mailing lists
Level 4:	I can send group mailings. I use activities that require email in my teaching.

XIII. The World Wide Web

Level 1:	I do not use the World Wide Web.
Level 2:	I am aware that the World Wide Web is a means of sharing information on the Internet. I can browse the Web for recreational purposes.
Level 3:	I can use a Web browser like Microsoft Internet Explorer or Netscape Navigator to find information on the World Wide Web, and can list some of the Web's unique features. I can explain the terms: hypertext, URL, http, and html. I can write URLs to share information locations with others. I can use Web search engines to locate subject specific information and can create bookmarks to Web sites of educational value.
Level 4:	I can configure my web browser with a variety of helper applications. I can speak to the security issues of on-line commerce and data privacy.

XIV. Search tools

Level 1:	I cannot locate any information on the Internet.
Level 2:	I can occasionally locate useful information on the Internet by browsing or through remembered sources.
Level 3:	I can conduct an efficient search of Internet resources using directories like Yahoo or search engines like Alta Vista, Excite, Lycos, or Infoseek. I can use advanced search commands to specify and limit the number of hits I get. I can state some guidelines for evaluating the information I find on the Internet and can write a bibliographic citation for information found.
Level 4:	I use Internet search tools not only for my work, but have used it with students to help them improve their own research skills.

XV. Netiquette, on-line ethics, and current issues surrounding use in K-12 schools

Level 1:	I am not aware of any ethics or proprieties regarding the Internet nor am I aware of any issues dealing with Internet use in a school setting.
Level 2:	I understand a few rules that my students and I should follow when using the Internet. I understand that the Internet is sometimes a controversial resource which many educators and parents do not understand.
Level 3:	I am aware that electronic communication is a new communications medium that may require new sensitivities. I can identify print and on-line resources that speak to current Internet issues like: • censorship/site blocking software • copyright • legal and illegal uses • data privacy • security I can list some of the critical components of a good Acceptable Use Policy and know and use our district's.
Level 4:	I can use my knowledge of the Internet to write good school policies and activities that help students develop good judgment and good information skills.

Technology Integration Skills Rubrics

I. Instructional Software Use

Level 1:	I do not use instructional software as a part of my instructional program, and I am not aware of any titles that might help my students meet their learning goals.
Level 2:	I use a few computer programs as an instructional supplement, as a reward, or with children with special needs.
Level 3:	I use several programs (e.g., drill and practice, simulations, and tutorials) chosen by my department or grade level to help all my students meet specific learning objectives. The software allows me to teach and/or reinforce concepts more effectively than traditional methods. When it is available, I use the software's management system to help assess individual student performance. I use the school's integrated learning system in a purposeful way.
Level 4:	I seek out new programs for evaluation and adoption. I know sources of software reviews and keep current on developments in computer technologies through professional reading and conference attendance. I share my findings with other professionals

II. Using technology to improve student writing

Level 1:	I am not familiar with any technologies that would allow me to help my students improve their writing skills.
Level 2:	I ask that the final draft of some student writing assignments be word-processed. I do not expect or encourage my students to compose or edit using the computer.
Level 3:	I help students use the computer in all phases of the writing process from brainstorming to concept mapping to editing. This includes the use of idea generators, portable computers, outlining tools, spelling and grammar checkers, and desktop publishing tools. I use technology to help students share their work with a wide reading audience.
Level 4:	I store portfolios of my students' work electronically. I share successful units with others through print and electronic publishing and through conference presentations and workshops. I look for specific technology tools to help my students improve their writing skills.

III. Information literacy skills using secondary sources

Level 1:	I am not familiar with the term *information literacy*, and I do not know why such skills are important.
Level 2:	As a part of my curriculum, I have library research projects, and I support the library skills taught by the media specialist. I am aware that electronic resources are available to my students.
Level 3:	My curriculum includes at least two information literacy projects, team-taught with the media specialist. I understand the Big6™ (www.big6.com) information literacy process or a similar information literacy process, and I design student projects so that they require higher-level thinking skills, use and cite electronic information sources, require the use of computer productivity software, and are authentically assessed.
Level 4:	I am actively involved in curriculum planning teams and advocate for multidisciplinary units and activities that require information literacy skills. I share successful units with others through print and electronic publishing and through conference presentations and workshops.

IV. Information literacy skills using primary sources

Level 1:	When asking students to do research, I expect them to only use secondary resources such as books, magazines, or reference materials.
Level 2:	As part of my curriculum, I have some units that require the collection and use of original data. I generally can predict the outcome of such experiments.
Level 3:	My curriculum includes at least two information literacy projects that require the collection of original data to answer a genuine question. I may use tools to collect data (e.g., computerized probes and sensors, online surveys, interviews, or digitized sources of historical records) and tools to record, organize, and communicate the data (e.g., databases and spreadsheets).
Level 4:	I am actively involved in curriculum planning teams and advocate for multidisciplinary units and activities that require information literacy skills. I share successful units through print, electronic publishing, conference presentations, and workshops.

V. Modification of instructional delivery

Level 1:	I have one or two effective methods of delivering content to my students. I do not use technology that requires that I change my instructional methodology.
Level 2:	I have tried units or projects that have a technology component, but I primarily use teacher-directed, whole group instruction.
Level 3:	I use a variety of instructional delivery methods and student grouping strategies routinely throughout the year. I can design activities and approaches that both best fit the learning objectives and the technology available to me. I can use small groups working cooperatively or in rotation to take advantage of student-to-equipment ratios of greater than one to one.
Level 4:	I continuously try new approaches suggested by research or observation to discover the most effective means of using technology to engage my students and meet curricular goals. I work with a team of fellow teachers either face to face or online to create, modify, and improve my practices in instructional delivery.

VI. Assessment of student performance

Level 1:	I evaluate my students using objective tests only.
Level 2:	I evaluate some student performances or projects using subjective criteria. I save some student work for cumulative folders and parent conferences. I print copies of electronic work such as word processed documents, graphics, and presentations for cumulative folders and parent conferences.
Level 3:	I use a wide range of assessments to evaluate student projects and performances. I can use technology to help create assessment tools such as checklists, rubrics, and benchmarks that help students assess their own performances and allow me to objectively determine the quality of student work. I ask students to keep both a physical and electronic portfolio of their work. I have a computerized means of aggregating performance data for my class that I use to modify my teaching activities and strategies.
Level 4:	I continuously try new approaches suggested by research or observation to discover the most effective means of using technology to help assess student learning. I work with a team of fellow teachers in person or virtually to create, modify, and improve my assessment practices.

VII. Individualization of instruction and educational program

Level 1:	I modify my curriculum or instructional methods only for students with identified special needs.
Level 2:	I occasionally give students the choice of assignments in my class, but all class members (unless they are in special education) must meet the same learning objectives within the same time frame. Skill remediation is done during summer school or informally during or after school.
Level 3:	With the assistance of the student, parents, and appropriate specialists, I create a learning plan for each of my students. I track the accomplishment of learning goals in the plan using a computerized tool. I use this tool during parent conferences and for school or state reporting.
Level 4:	I provide suggestions about the content and design of the individualized computerized planning and report tools.

VIII. Adaptive technologies

Level 1:	I am not aware of how technology can help students with physical or mental limitations.
Level 2:	I work with students who may bring with them special devices that allow them to work and communicate in the classroom.
Level 3:	I use technology when appropriate to help students with special learning needs. This includes detailed IEPs and specialized communications devices.
Level 4:	I provide professional growth opportunities for other teachers in the use of adaptive technologies.

IX. Professional growth and communication

Level 1:	I do not use electronic resources for professional growth or communication.
Level 2:	I can find lesson plans and some research in online databases. I correspond with parents and other teachers using e-mail.
Level 3:	I use the Internet and other online resources to obtain research, teaching materials, and information related to the content of my classes. I read electronic newsletters and journals to keep current on educational practices. I participate in electronic discussion groups and chat rooms related to my area of education. I use a computerized presentation program when giving workshops or speaking at conferences. I take part in distance learning opportunities using technology.
Level 4:	I organize professional growth opportunities for other teachers and feel comfortable teaching other staff members how to use technology.

X. Research and evaluation of technology use

Level 1:	I have not attempted to determine whether the use of instructional technology has made a difference in my students' learning or classroom climate.
Level 2:	I gather, use, and share with other teachers in my building anecdotal information and observations about student use of technology in my classroom.
Level 3:	I use action research and aggregated data to accurately determine whether the technology and methodology I am using affects how well my students learn and the school climate.
Level 4:	I participate in formal studies of the effects of technology on student learning conducted by professional groups and academics. I have designed such studies as part of my own professional education. I report electronically and in print the findings of my research to other professionals.

XI. Video technologies

Level 1:	I have no knowledge of video technologies.
Level 2:	I know that there are a variety of video resources available to me, but I seldom access them in my classroom.
Level 3:	I am aware of Cable in the Classroom programming and have obtained programming and support materials to use in my classroom. I use educational videos in VHS and/or DVD format when appropriate. With help, I can access video files and video-on-demand programming for use in my classroom.
Level 4:	I know how to find, collect, and use video technology. I use these resources with my students to improve their communication skills.

XII. File Management – Obtaining, decompressing and using files

Level 1:	I cannot retrieve files from remote computers.
Level 2:	I know that documents and computer programs that are useful to my students and me are stored on computers throughout the world. I cannot retrieve these files.
Level 3:	I can transfer files and programs from remote locations to my computer, and can use programs or plug-ins that help me do this. I can extract compressed files, and know some utilities that help me view graphics and play sounds and movies. I understand the nature and danger of computer viruses, and know how to minimize my risk of contracting a computer virus.
Level 4:	I use information I have retrieved as a resource for and with my students. I understand the concept of a network server, and the functions it can serve in an organization. I can use an ftp client to upload files to a server.

XIII. Multimedia – Real-Time and push technologies

Level 1:	I use only static documents and files I retrieve from the Internet.
Level 2:	I have some information sent to me on a regular basis through e-mail and I check some sites on a regular basis for information.
Level 3:	I use chat-rooms and customized news and information feeds. I can listen to audio streamed from the web. I know the hardware and software requirements for web-based videoconferencing.
Level 4:	I can use real-time applications to design a "virtual" classroom or interactive learning experience. My students use videoconferencing for communication with experts and project collaboration with other students.

XIV. Web page & web site construction

Level 1:	I cannot create a page that can be viewed with a web browser.
Level 2:	I know how to save text I've created as an html file with a command in my word processor. I know a few, simple html commands.
Level 3:	Using hand-coded html or a web page authoring tool, I can: • view web pages as a source documents • create a formatted web page that uses background color, font styles and alignment, graphics, and tables • include links to other parts of my document or other Internet sites in my page • know basic guidelines for good web page construction and the district's web policies
Level 4:	I can use the web as an interface to databases. When appropriate, I can register my pages with search engine sites. I can help write web creation policies for design, content, and use.

XV. Learning opportunities using the Internet

Level 1:	I am not aware of any ways the Internet can be used with students in my classroom.
Level 2:	I occasionally allow my students to use the Internet to find information.
Level 3:	I know a variety of projects and activities that effectively use the Internet to instruct and involve students. I know a source for collaborative projects, can direct students to on-line tutorials and learning resources, and encourage a variety of key-pal activities.
Level 4:	I can design and implement an Internet project or maintain an educational Internet site.

Teacher Growth Plan for Instructional Technology

Teacher: Building: Start Date:

Goal(s): End Date:
1.

2.

Consultants: ☐ Principal ☐ Department Chair ☐ Technology Coordinator

☐ Instructional Technology Trainer ☐ Media Specialist ☐ Other: Staff Dev Committee

The teacher developed this growth plan with consultation from the above named persons. Each growth plan is individual in nature but should include the following: training, assessment of student learning, instructional unit with application of educational technology, evaluation, research and background. The teacher may also wish to include any of the following activities to help them reach their goal: personal journal entries, attend classes/workshops, work with an experienced teacher, visit other classrooms, etc.

Strategy 1:	
Strategy 2:	
Strategy 3:	
Strategy 4:	
Strategy 5:	

_____ _____
Teacher Date

_____ _____
Administrator Date

Instructional Technology Growth Portfolio and Assessment

Teacher: Building: Start Date: _____

End Date: _____

Your portfolio might include:

- Descriptions of units taught in your classroom having both technology objectives and content objectives.
- Assessment tools used with students on these projects.
- Personal journal reflections including observations on what does and does not work well.

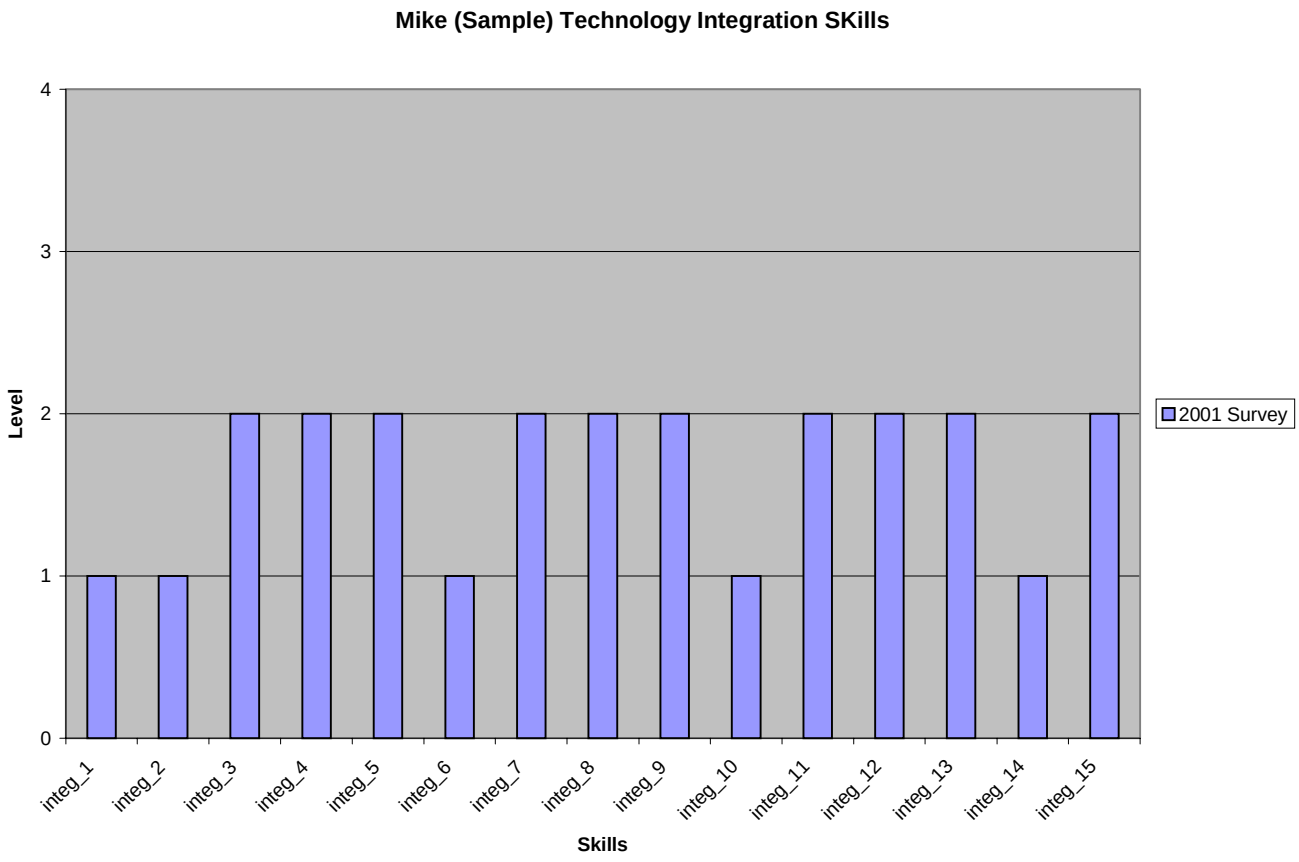
Evidence of Growth Checklist: (To be determined by the teacher and consultants)

Technology Growth Plan Checklist for Administrators

Building: **Year:** **Administrator:**

Date	Teacher's name	Goal(s)	Classes needed:

** Please return this completed form to the Instructional Technology Trainer.



Technology Integration Skills:

1. Instructional software use
2. Using technology to improve student writing
3. Information literacy skills using secondary sources
4. Information literacy skills using primary sources
5. Modification of instructional delivery
6. Assessment of student performance
7. Individualization of instruction and educational program
8. Adaptive technologies
9. Professional growth and communication
10. Research and evaluation of technology use
11. Video Techniques
12. File Management – Obtaining, decompressing and using files
13. Multimedia – Real-Time and push technologies
14. Web page & web site construction
15. Learning opportunities using the Internet

Teacher Growth Plan for Instructional Technology

Teacher: Mike Building: MS Start Date: 9/00

Goal(s): End Date: 6/01

1. To improve student writing

2.

Consultants: ☐ Principal X Department Chair ☐ Technology Coordinator

☐ Instructional Technology Trainer ☐ Media Specialist X Other: Staff Dev Committee

The teacher developed this growth plan with consultation from the above named persons. Each growth plan is individual in nature but should include the following: training, assessment of student learning, instructional unit with application of educational technology, evaluation, research and background. The teacher may also wish to include any of the following activities to help them reach their goal: personal journal entries, attend classes/workshops, work with an experienced teacher, visit other classrooms, etc.

Strategy 1:	Review current literature and interview one of the state's best practices experts on process writing and technology use.
Strategy 2:	Attend a technology conference or workshop to see demonstrations of writing software.
Strategy 3:	Take a class in and experiment with prewriting software (e.g., Inspiration®) on two student writing assignments.
Strategy 4:	Use individual portable computers (e.g., Dreamwriters) on two student writing assignments.
Strategy 5:	Compare the results of the technology-enhanced writing products with those using standard writing practices.

_____ _____

Teacher Date

_____ _____

Administrator Date

Instructional Technology Growth Portfolio and Assessment

Teacher: Mike Building: MS Start Date: _____

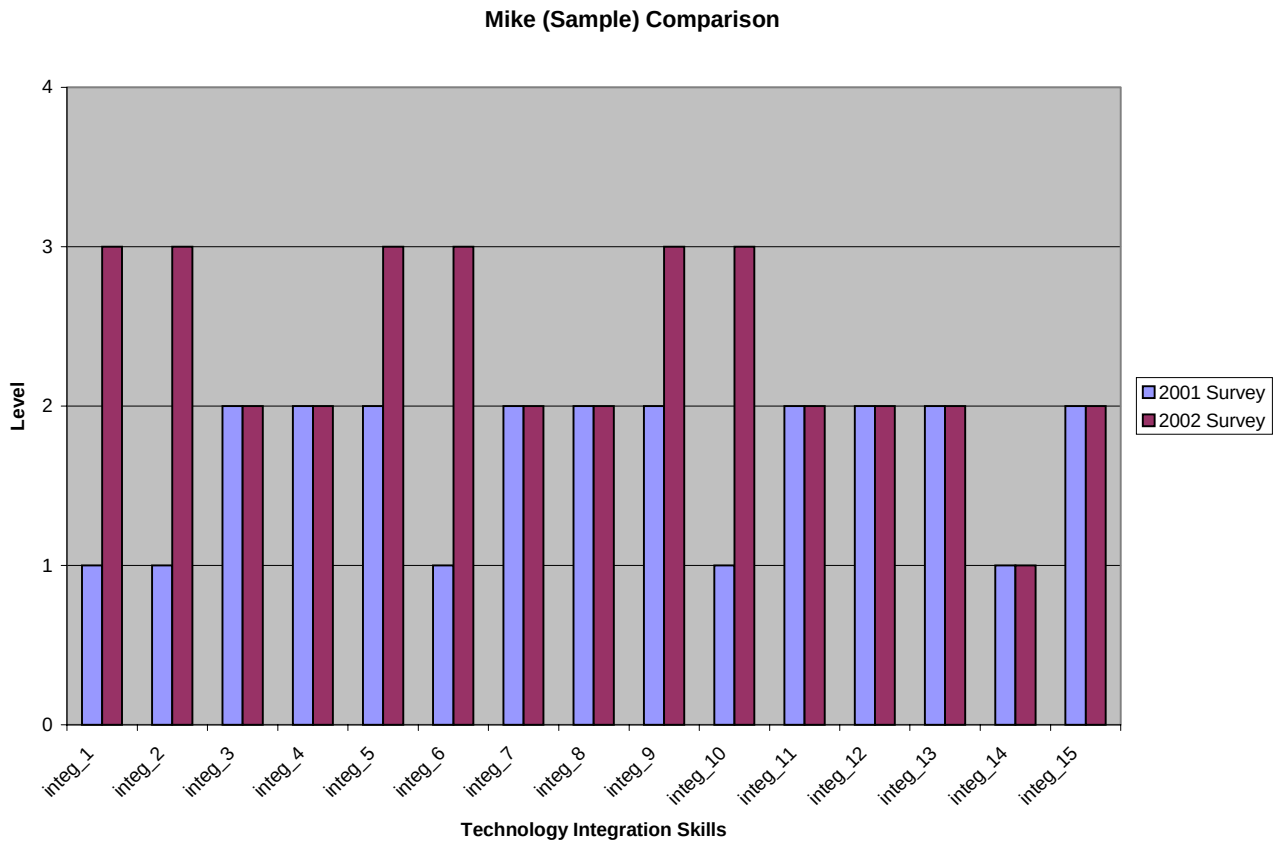
End Date: _____

Your portfolio might include:

- Descriptions of units taught in your classroom having both information literacy objectives and content objectives.
- Assessment tools used with students on these projects.
- Personal journal reflections on teaching information literacy skills including observations on what does and does not work well.

Evidence of Growth Checklist: (To be determined by the teacher and consultants)

Printouts of three articles summarizing current uses of technology.
Sample concept maps generated by students in my classes as a part of prewriting assignments.
Writing samples of individual students showing differences between handwritten work and word-processed work.
A brief summary of my observations on using technology as part of the writing process.



Technology Integration Skills:

1. Instructional software use
2. Using technology to improve student writing
3. Information literacy skills using secondary sources
4. Information literacy skills using primary sources
5. Modification of instructional delivery
6. Assessment of student performance
7. Individualization of instruction and educational program
8. Adaptive technologies
9. Professional growth and communication
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11. Video Techniques
12. File Management – Obtaining, decompressing and using files
13. Multimedia – Real-Time and push technologies
14. Web page & web site construction
15. Learning opportunities using the Internet

Budget plan for 2001-2005: The following budget table represents spending over a five year implementation of the Technology Plan. If the plan is implemented over three or four years, the total costs can be reduced.

	Cost per unit	Number of units	Number of years	Total Cost	Notes
Hardware					
Computers (replacements)	$1,500	210	5	$1,575,000	
File servers (replacement)	4000	2	5	$40,000	
CDRom servers (new)	3800	5	1	$19,000	
Inkjet Printers (replacements)	400	40	5	$80,000	
Laser printers (replacement)	3000	10	5	$150,000	
Miscellaneous equipment					
(DVD drive, CDRW drive, microphone, headphone, VCR, TV monitors)	4000	1	5	$20,000	
Additional 24 port switches to support video distribution and IP phones	2800	15	1	$42,000	
Hardware subtotal				***$1,926,000***	
Software					
Office license	43	1100	2.5	$118,250	Note: 2.5 years represents the cost of upgrading or renewing licenses every two years
Command anti-virus	7	1100	2.5	$19,250	
Command anti-virus server license	99	10	2.5	$2,475	
Command anti-virus exchange license	6	350	2.5	$5,250	
MS Encarta	10	900	2.5	$22,500	
MS Windows	35	1100	2.5	$96,250	
Accelerated Reader (4 schools) upgrade	250	4	5	$5,000	Represents four school site licenses
Star Reading upgrade	250	4	5	$5,000	Annual maintenance fee
GradeQuick	1000	2	1	$2,000	Represents two school site licenses (OE, FE)

	Cost per unit	Number of units	Number of years	Total Cost	Notes
Grade Machine	1000	1	1	$1,000	Annual maintenance fee
Classmaster	100	1	5	$500	Annual maintenance fee
Miscellaneous grade level software	118000	1	5	$590,000	
AutoCAD	5000	1	5	$25,000	Annual maintenance fee
Future Choices (Middle School)	175	1	5	$875	Annual maintenance fee
Choices (High School)	815	1	5	$4,075	Annual maintenance fee
Software subtotal				***$897,425***	
System Software					
MS Server 2000 licenses	89	2	5	$890	
Server 2000 Client licenses	4.7	1200	2.5	$14,100	
System Software Subtotal				***$14,990***	
Additional Costs					
Training (Instructional Technology Trainer)	52500	1	5	$262,500	Includes all Technology staff development salaries
Student Information Management Program (SASI) software and support (five schools)	45000	1	5	$225,000	
Video Network	12000	5	1	$60,000	Broadcast server, one for each building, video conferencing
SchoolCast upgrades	1000	5	5	$25,000	
Time Warner Digital service	180	5	5	$4,500	
Annual repair costs	33000	1	5	$165,000	Parts, mainentance, service
Conferences, mileage	10000	1	5	$50,000	
Additional Costs Subtotal				***$792,000***	
One-time Operating Costs					
Fiber cable from high school to Freewill	200000	1	1	$200,000	
Total one-time costs Subtotal				***$200,000***	

	Cost per unit	Number of units	Number of years	Total Cost	Notes
Annual Operating Costs					
Lakenet Personnel Support	5648	1	5	$28,240	required
LakeNet Phone lines	20932	1	5	$104,660	required
LakeNet Application Support	4476	1	5	$22,380	required
Lakenet Warranty Maintenance	1830	1	5	$9,150	required
Instructional Lakenet R&D	3546	1	5	$17,730	required
Project coordination base fee	703	1	5	$3,515	required
Freewill T1 line	6000	1	5	$30,000	If fiber is installed, this fee disappears.
Training (Tech Support)	6000	1	5	$30,000	
Tech Support (salaries)	250000	1	5	$1,250,000	
TechNet Subscription	450	1	5	$2,250	
Server maintenance	960	10	5	$48,000	
SmartNet Cisco 5500 maintenance	3600	1	5	$18,000	
Cisco IP/TV server	2160	1	5	$10,800	
Time Warner cable connection	150	1	5	$750	
Total Annual Operating Costs Subtotal				***$1,575,475***	
Total Budget				***$5,405,890***	

Wayne Central School District
6200 Ontario Center Road
Ontario Center, NY 14520
Phone: 315-524-2811

Loan Agreement for School-Owned Computer Equipment

Student's Name: _____

The above named student requests to borrow a school-owned Computer for the following reason:

_____

_____

The computer may be borrowed provided

1. A copy of this loan agreement is signed by a parent and returned to school to be kept on file.
2. Student and/or parent receives proper pre-instruction on use of the computer.
3. Parent agrees to return the computer when requested if the student does not use it or no longer requires it as part of his educational plan.
4. Parent understands that they are fully liable for damage or loss of the school-owned computer while in the student's care.

Date _____ Parent Signature _____

Address _____

Town _____ Zip _____

This form can be returned by the student to school or mailed to the following address:

Wayne HS, MS, Freewill, Ontario Elementary, Ontario Primary

---------- To Be Completed By Instructor ----------

EquipmentBarcode: _____ Serial Number: _____

Condition: _____ Case/ Power supply _____

Date of pre-instruction: _____

Date issued: ___/___/___ Instructor's Signature _____

Returned: ___/___/___