

# Gates County Schools Strategic Technology Plan

December 5, 2005

**Public Schools of North Carolina North Carolina Instructional Technology Plan**

State Board of Education  
Howard Lee, Chairman

Department of Public Instruction  
Patricia Willoughby, State Superintendent

REQUIRED SUBSTANTIVE COMPONENTS  
OF THE  
LOCAL SCHOOL DISTRICT TECHNOLOGY PLAN

The local school board has actively involved key stakeholders in the development of a district-wide four-year technology plan that includes the following key components:

- a vision statement consistent with the North Carolina Instructional Technology Plan that reflects the unique qualities and strategic priorities of your local school system;
- the identification of the current situation, goals, objectives and evaluation of the core instructional and administrative components of a technology program that address the five strategic priorities of the ABCs plan for education:
  - High student performance
  - Quality teachers, administrators and staff,
  - Healthy students in safe, orderly and caring schools
  - Strong family, community and business support, and
  - Effective and efficient operations;
- a staff development and training component that reflects a budget of 20 to 30 % of the total cost of the technology program; and
- an infrastructure/connectivity component that meets North Carolina Information Technology Services standards to assure compatibility, connectivity, and cost-effectiveness.

LEA Name: Gates County

LEA Number: 370

Signature: \_\_\_\_\_  
Superintendent

\_\_\_\_\_  
Local Board Chair

Person of Contact: Michael T. Conner

Telephone number: 252-357-1113

## Technology Committee Members

All committee members have been involved in the development of this plan and support its implementation.

Name	Title or Group Represented	Signature	Date
<u>Michael T. Conner</u>	<u>Technology Director</u>		
<u>Loretta Jones</u>	<u>Technology Trainer</u>		
<u>Zenobia Smallwood</u>	<u>Assistant Superintendent</u>		
<u>Linda Hobbs</u>	<u>EC Director</u>		
<u>Wendy Forsman</u>	<u>Finance Officer</u>		
<u>Kerri Albertson</u>	<u>Personnel Director</u>		
<u>C. Don Gregory</u>	<u>Principal</u>		
<u>Linda Brickhouse</u>	<u>Media Coordinator</u>		
<u>Michael Felton</u>	<u>Principal</u>		
<u>Theresa Barrick</u>	<u>Technology Assistant</u>		
<u>Susan Ward</u>	<u>Principal</u>		
<u>Janice Askew</u>	<u>Media Coordinator</u>		
<u>Shirley Vinson</u>	<u>Principal</u>		
<u>Debra Boyce</u>	<u>Testing and Technology Aide</u>		
<u>Charles Mason</u>	<u>Principal</u>		

## Vision Statement

Gates County's Technology Plan has been designed to build upon the State's technology plan and the North Carolina Strategic Plan for Excellent Schools, The ABCs Plus which supports the following priorities: high student achievement, safe and orderly schools, quality teachers, administrators and staff; strong family, community and business support; and effective and efficient operations.

### **High Student Performance**

Technology is a tool that enables teachers and administrators to work more productively, offering solutions for time management, student monitoring and intervention. Technology provides more interesting and effective lessons and classroom activities enabling students to interact with and explore the world, bringing a wealth of information and experience into the classroom. In addition, technology can be used to encourage student creativity and self-direction and to help students develop skills that prepare them for responsible citizenship within the nation and the world. Our vision is that through greater bandwidth, use of new and still to be developed technologies and better use of existing resources, Gates County can foster higher student performance.

### **Healthy Students in Safe, Orderly and Caring Schools**

The advent of technology into site planning and building design has increased the potential for creating a safe environment for teaching and learning. A technology infrastructure that includes integrated security and protection systems, such as telephones in every classroom, warning devices, and monitoring cameras, protects individuals and the facility itself. We believe two way voice communications devices should be available in every classroom. Surveillance devices like security cameras should be used to help meet school safety plan goals. Student network logins should provide students with individual access to unique network resources and storage, allowing administrators to more easily monitor student behaviors and to restrict usage based on instructional and security needs.

### **Quality Teachers, Administrators and Staff**

Technology offers a variety of tools that help decrease the time spent on paperwork, thus increasing time available to spend with students. Access to the Internet offers opportunities for professional development, educational research, and up-to-date curriculum resources. Statewide tools such as NC WISE, CECAS, HRMS, BUD, and NC WISE OWL offer teachers, administrators, and staff access to a variety of information that now and more so in the future will allow them to track individual progress and mastery of skills (and the conditions that might affect that progress) and develop strategies, skills, and policies that assist in that mastery.

### **Strong Family, Community and Business Support**

Technology is an important vehicle for communication with the community and the family. E-mail, telephones in every classroom, and school resources electronically available throughout the community allow and encourage adult participation in a child's education. Student achievement increases when families, schools, and community organizations work together. Parents can increase involvement as time constraints dissolve and education-related interactions occur in the comfortable,

familiar context of home. With the spread of technology across the county, the school and its values of learning and achievement can enter more homes, thus enhancing and ultimately extending teaching and learning to every individual regardless of age or socioeconomic status.

### **Effective and Efficient Operations**

Online student management systems, application software and email allow teachers to focus more on teaching and less on clerical tasks. Online administrative and clerical resources such as North Carolina Window on Student Education (NCWISE), Transportation Information Management System (TIMS), Human Resource Management System (HRMS), Budget Utilization and Development (BUD), and CECAS have the promise of streamlining the reporting and information management process. These statewide resources will allow educators the opportunity to access a broad range of essential information and resources that affect teaching and learning.

Telecommunications increases the availability of lifelong learning opportunities through e-learning, including streaming video, online and satellite-delivered courses, and reference and curriculum Web resources. Distance learning, brought into the classroom via the Internet allows students to complete classes that no locally certified teacher could deliver. Modern networks allow business operations to be more efficient by eliminating double entry of orders and ensuring immediate knowledge of budgets. This allows administrators and staff to make informed and timely financial decisions.

# Current Situation Narrative

## High Student Achievement

Students in Gates County Schools currently access technology in a number of ways which support high achievement including, but not limited to, two flexible media center labs (defined as 12 or more computers), three flexible media center mini-labs (defined as less than 12 computers), seven computer labs maintained by technology assistants, two Career and Technical Education computer labs at the secondary level, two internet connected computers available in every classroom at the secondary level, and at least three Internet connected computers available in every classroom at the elementary level. Digital cameras and scanners are available in every school. Three elementary schools have at least one AlphaSmart classroom set. TV's, VCR's, DVD players, LCD projectors, and camcorders are available in limited supply across the county, and many of the computers in individual classrooms offer DVD playback capability. The CTE department at the high school has Palm handhelds, pen tablets, a smartboard and LCD projectors for most teachers. Some computers in the department have voice recognition. The CTE department uses the Career Planning module in NCWISE. Also offered at the high school are video production, computer graphics, Computer Apps 1 and 2 and Information Highway access. Computers are used for Drivers Ed and EC remediation. Nova Net is offered at the alternative school. Even our preschool department is emphasizing technology by utilizing Hatch computers and the Young Explorer program with the children.

The school district places a high emphasis on the use of technology. Therefore it is always in the process of upgrading and replacing computer hardware and software. Last year the district spent \$180,000 for that purpose. Our intent is to replace computers on a five-year rotation. Every classroom and office has internet access and a telephone. All media centers are networked and have computerized online catalogue systems. Every school has wireless access points.

The district tracks student test performance using NCWISE and ABC Tools. As NCWISE deploys and more districts come online, more data will be available along with the tools to mine that data.

Evidence of high student achievement can be seen in the fact that 96% of our 8<sup>th</sup> grade students passed the performance section and 93% passed the multiple choice section of the North Carolina Test of Computer Skills in 2004-05. Gates County Schools has consistently performed above the 90% level on the computer skills test since 2000-01.

The IMPACT Model for Media and Technology is not fully implemented currently. Flexible media center labs are available, but technology facilitators are not. Team teaching with technology and technology related lesson plan collaboration is encouraged but not widely implemented to date. Elementary schools have common planning time at individual grade levels. Classroom teachers plan weekly with P.E., Music, Drama, and Computer teachers through joint meetings and a system of lesson plan exchange to ascertain that the correlation of academics, the arts, and technology is taking place. Every media center has a certified librarian with a masters degree; computers for research and as lookup and checkout stations; and library automation is in place.

Accelerated Reader, available K-8, is our most popular educational software and is used in the elementary and middle schools. Teachers incorporate it as part of their instruction. Accelerated

Math, Orchard and video streaming are used at Buckland. T S Cooper uses Leap Frog in grades K-2. Kidspiration, Kid Pix, Microsoft Office and AppleWorks are used for teaching databases, spreadsheets, and multimedia presentations in grades K-8. Study Island is used in grades K-5. Our middle school uses out2.com to post homework. New keyboarding software will be purchased for the K-5 schools during the 2005-06 school year. World Book is available district wide, but is not being upgraded as Grolier's Encyclopedia is now available via NC Wise Owl. Study Island is used at elementary schools for test preparation.

Students also use computers to access North Carolina resources like NC WISE OWL and Kaleidoscope. SASinSchool is also available and may be used in the future. Students use computer hardware and software to create multimedia essays and hypermedia projects, perform web quests, compose reports and other document types, communicate with experts, and review for tests. The school system does not use DARE, CIS or any similar program.

The Exceptional Children's department utilizes technology extensively. Every EC teacher uses CECAS to maintain student data. Manuals and calendars are maintained on teacher computers for easy reference. Teachers use the internet to search for information to help with challenging cases. Email is used extensively in the department for communication between teachers and the Central Office.

## **High Student Performance: Strategic Technology Plan**

Include at least one strategy or objective that addresses the following: Mathematics/reading scores improvement

1. Classroom use of student resources
2. IMPACT model implementation
3. Computer Skills Test score improvement
4. Computer Skills Curriculum implementation
5. Information Skills Curriculum implementation
6. Technology integration across the curriculum
7. Student distance learning opportunities
8. Assistive technology availability

**Strategic Priority 1: High Student Performance\***

Strategic Goal: (Please check.)

- Every child ready for school
- Rigorous and relevant academic standards and assessment systems for every student
- Every student masters essential knowledge and skills
- Every student graduates from high school
- Every student a life long learner and ready for work

**Objective 1.1 Increase the percent of teachers who are literate in technology and information systems to 100% by 2009**

Strategy	Resources Needed (Human & Material)	Person(s) Responsible	Budget Needs	Funding Sources	Time-line (Proposed Beginning & Ending dates)
<i>1.1.1 Infuse the (IMPACT Model) use of technology across the curriculum by hiring 1 certified technology coordinator/facilitator to work directly with teachers.</i>	<i>Certified teacher with Masters Degree in Educational Media &amp; Computers</i>	<i>Superintendent Assistant Superintendent for Curriculum and Instruction Technology Director</i>	<i>Salaries + Benefits \$30,000 to \$45,000 Recurring</i>	<i>state</i>	<i>Beginning November 2008 Ending June 2009</i>
<i>1.1.2 Maintain current level of Technology Assistants</i>	<i>4 current Tech Assistants</i>	<i>Principal Technology Director</i>	<i>Salaries + Benefits \$100,000 to \$125,000</i>	<i>Local, state, federal, other</i>	<i>Beginning November 2005 Ending June 2009</i>
<i>1.1.3 Provide professional development to help integrate NCDPI resources like WiseOwl &amp; Kaleidoscope</i>	<i>DPI Teacher on Loan Tech Facilitator</i>	<i>Technology Director Media Coordinator</i>	<i>In-Kind</i>	<i>N/A</i>	<i>Beginning November 2005 Ending June 2009</i>
<i>1.1.4 Increase Elementary Technology Assistants employment from 10 to 10 months, one week</i>	<i>3 weeks of employment</i>	<i>Technology Director Finance Officer</i>	<i>Salaries + Benefits \$2,500 to \$3,000</i>	<i>Local, state, federal, other</i>	<i>Beginning July 2006 Ending June 2009</i>

**Objective 1.2 Improve Student test Scores to meet AYP goals as specified by NCLB**

<i>1.2.1 Purchase Accelerated Math</i>	<i>Accelerated Math Software</i>	<i>Principal</i>	<i>\$17,000</i>	<i>Local, state, federal, other</i>	<i>Beginning November 2006</i>
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<i>and Star Math for all Elementary Students</i>		<i>Technology Director</i>			<i>Ending June 2007</i>
<i>1.2.2 Continue to use Accelerated Reader</i>	<i>Accelerated Reader Software</i>	<i>Technology Director Technology Facilitator</i>	<i>\$1,500</i>	<i>Local, state, federal, other</i>	<i>Beginning January 2006</i>
<i>1.2.3 Continue to provide student distant learning opportunities</i>	<i>Distance learning aide</i>	<i>Technology Director Principal</i>	<i>Salaries + Benefits \$20,000 to \$25,000</i>	<i>Local, state, federal, other</i>	<i>Beginning November 2005 Ending June 2009</i>
<i>1.2.4 Improve K-5 science scores through regional eLearning staff development program</i>	<i>Train teachers in the use of manipulatives and other science materials</i>	<i>Assistant Superintendent for Curriculum and Instruction</i>	<i>Regional Acitivity</i>	<i>Grant</i>	<i>Beginning July 2005 Ending June 2009</i>
<i>1.2.5 Increase the percent of children in grade 8 who pass both sections of the computer skills test by one percent per year.</i>	<i>Appropriate software and hardware to teach the computer skills and information skills curriculum across all subjects and grade levels</i>	<i>Technology Director Technology Aides Teachers</i>	<i>\$1,500</i>	<i>Local, state, federal, other</i>	<i>Beginning November 2005 Ending June 2009</i>
<i>1.2.6 Continue to teach the computer skills and information skills curriculum across all subjects and grade levels</i>	<i>Appropriate software and hardware</i>	<i>Technology Director Technology Aides Teachers</i>	<i>N/A</i>	<i>N/A</i>	<i>Beginning November 2005 Ending June 2009</i>
<i>1.2.7 Keep short-term and long-term suspended students and loss-of-credit students from falling behind their graduating class via</i>	<i>NovaNet (10 connection) subscription. Staff Development provided by NovaNet.</i>	<i>Technology Director Alternative School Principal</i>	<i>\$15,000</i>	<i>Local, state, federal, other</i>	<i>Beginning November 2005 Ending June 2009</i>

<i>a NovaNet NC SCS aligned subscription</i>					
<i>1.2.8 Track student test data to make better decisions. Load student test data into an Excel pivot table</i>	<i>Archived Test Data</i>	<i>Testing Director Technology Director</i>	<i>Minimal</i>	<i>N/A</i>	<i>Beginning January 2006  Ending June 2009</i>
<i>1.2.9 Enrich science and social studies with on-demand video by subscribing to Discovery Channel's United Streaming .com</i>	<i>Internet, Computer, Monitor or Projector and Screen</i>	<i>Technology Director Principals Media Coordinators</i>	<i>\$2,400  Three Schools</i>	<i>Local, state, federal, other</i>	<i>Beginning November 2006  Ending June 2009</i>
<i>1.2.10 Provide and maintain electronic resources that increase Ex. Children's achievement levels.</i>	<i>Alphasmarts, joysticks, touch screens, mice, et al.</i>	<i>EC Director</i>	<i>Dictated by number of students</i>	<i>Local, state, federal, other</i>	<i>Beginning November 2005  Ending June 2009</i>
<i>1.2.11 Provide internet access to More at Four Classes</i>	<i>Cat 5 cabling, computers</i>	<i>EC Director</i>	<i>\$4,000</i>	<i>State</i>	<i>Beginning January 2006  Ending June 2006</i>
<b><i>Objective 1.3 Implement at least one new high school technology program to prepare students for the workplace</i></b>					
<i>1.3.1 Implement CNC technology in Carpentry Classes</i>	<i>Purchase Shopbot CNC routers and associated software</i>	<i>Technology Director  Workforce Development Director</i>	<i>\$12,000</i>	<i>Local, state, federal, other</i>	<i>Beginning August 2006  Ending June 2009</i>

\*Most of the examples in this document are general in nature, it would be expected that more specific information be included in a district or school technology plan. Strategies should begin with verbs and objectives should be measurable.

\*\*Items in italics are only examples and should be removed from your chart.

## Healthy Students in Safe, Orderly and Caring Schools: Current Situation Narrative

Technology is used in many ways to support providing a safe, orderly, and caring school system. Each school implements a Safe Schools Plan. All classrooms now have internal telephone communications between classrooms and the office. Two-way radios are used by administrators and first responders to keep in constant contact. All county yellow buses are equipped with radios that can communicate with the bus garage and the school. Several video cameras are available for use on school buses. These cameras and recording devices are placed on buses as needed. Currently, no school employs the use of a surveillance camera capable of sweeping and zooming in on the activity in the student parking lot, although Buckland School has a camera to monitor people entering and leaving the main entrance. The high school and middle school are equipped with alarm systems which have a callout protocol to school and district personnel and law enforcement. The district utilizes EtherPeek software to monitor network activity but needs a more robust solution to control network bandwidth.

Network servers, workstations and data are protected by an internal firewall appliance. Internet access is filtered. A SonicWall Pro 3060 firewall appliance is used to protect the network. SonicWall also provides Internet content filtering services, which allow us to be in compliance with the Children's Internet Protection Act. In addition, Remote Desktop software allows administrators to monitor computer usage.

Staff ID badges are used countywide. Visitors currently sign in/out with school receptionists. Students at Buckland Elementary have software picture ID's that are used for library checkout and lunchroom meal purchases.

An equivalent full-time school resource officer is employed at the high school. Metal detecting wands and a walk through metal detector are available to district personnel if needed.

Our Child Nutrition Department utilizes software to keep track of the quantity of the food prepared and served in our cafeterias and to help with the ordering process.

Two school nurses currently serve the county. School nurses are provided with access to computers, convenient to the location where they see students. They are encouraged to utilize the nurses' module in NCWISE to track student visits and follow-ups. Each nurse has developed an Emergence Action Plan that is kept on computer and used to document health conditions. The nurses also use NCWISE to find parent contact information and student schedules.

NC WISE is now used to track student discipline incidents. This should result in more detailed record keeping than ever before. This will also allow discipline data to be analyzed more easily.

## **Healthy Students in Safe, Orderly and Caring Schools: Strategic Technology Plan**

Include at least one strategy or objective that addresses the following:

1. School campus security (video, alarms, metal detectors, etc.)
2. School bus security (video, radios, cell phones, etc.)
3. Student and Staff ID systems
4. Student Information/Tracking Systems (SIMS/NCWISE, nutrition, etc.)
5. Internet and email filtering
6. Classroom telephone systems and other communications devices
7. Website use (district, school and classroom)

<b>Strategic Priority 2: Healthy Students in Safe and Orderly and Caring Schools*</b>							
Strategic Goal: (Please check.)							
<input type="checkbox"/> Learning environments inviting and supportive of high student performance <input type="checkbox"/> Schools free of controlled and illegal substances and all harmful behavior <input type="checkbox"/> Mutual respect of students, teachers, administrators, and parents <input type="checkbox"/> Adequate, safe education facilities that support high student performance							
<b>Objective 2.1 Increase student and personnel security</b>							
<b>Strategy</b>	<b>Resources Needed (Human &amp; Material)</b>	<b>Person(s) Responsible</b>	<b>Budget Needs</b>	<b>Funding Sources</b>	<b>Time-line (Proposed Beginning &amp; Ending dates)</b>	<b>Method of Evaluation</b>	<b>Evaluation Results June, 2006</b>
2.1.1 Deploy surveillance cameras in halls, playgrounds, and parking lots.	Cameras and computer equipment and software	Maintenance Director Principal	\$20,000 per site	Capital Outlay	Beginning November 2006 Ending May 2009	Report from Maintenance Director Collect annually in May. Evaluate in June	
2.1.2 Use student network logins to monitor student activity and provide grade specific access to resources systems	Servers With Storage Space OSX Student Accounts	Technology Director Network	\$5,000 per school	Local, state, federal, other	Beginning November 2005 Ending May 2009	Report from Technology Director Collect annually in May. Evaluate in June	
2.1.3 Continue present bus security initiatives	Camera, radios, cell phones, etc	Transportation Director	\$3,000 Recurring	Local, state, federal, other	Beginning November 2005 Ending May 2009	Report from transportation director Collect annually in May. Evaluate in June	
2.1.4 Continue present staff and student ID systems	ID system	Technology Director Principals	\$500 recurring	Local, state, federal, other	Beginning November 2005 Ending May 2009	Report from Technology Director Collect annually in May. Evaluate in June	
2.1.5 Monitor and control computer lab activity by deploying Apple Remote Desktop Software	Apple Remote Desktop Software	Technology Assistants Technology Director	\$1,600 Recurring	Local, state, federal, other	Beginning November 2005 Ending May 2009	Report from Technology Director Collect annually in May. Evaluate in June	
2.1.6 Continue SonicWall Firewall Subscription	Subscription Service	Technology Director	\$1,800	Local, state, federal, other	Beginning November 2005 Ending	Purchase Order Collect annually in May. Evaluate	

					May 2009	in June	
<b>Objective 2.2 Protect student information and data systems from unauthorized access</b>							
2.2.1 Upgrade firewall appliance and software to include Anti-spyware filtering/Anti-virus protection at the firewall level Continue to use free state services to prevent viruses and SPAM coming in through email	Subscription Service	Technology Director	\$1,200 Annually	Local, state, federal, other	Beginning November 2006  Ending June 2009	Report from Technology Director Collect annually in May. Evaluate in June	
<b>Objective 2.3 Provide student information/tracking systems in all schools</b>							
2.3.1 Continue to use NCWISE for student accounting	NCWISE	Technology Director  NCWISE Director	N/A	N/A	Beginning November 2005  Ending June 2009	Report from NCWISE Director Collect annually in May. Evaluate in June	
<b>Objective 2.4 Provide classroom telephone systems and other communications devises in all schools</b>							
2.4.1 Continue to use classroom telephone systems and other communications devises	Telephones, radios, etc	Technology Director  Principals	N/A	N/A	Beginning November 2005  Ending June 2009	Report from Technology Director Collect annually in May. Evaluate in June	
<b>Objective 2.5 Provide Websites for District, School and Employees</b>							
2.5.1 Continue to provide Website space for District, School and Employees	County Server	Technology Director	N/A	N/A	Beginning November 2005  Ending June 2009	Report from Technology Director Collect annually in May Evaluate in June	

## **Quality Teachers, Administrators and Staff: Current Situation Narrative**

Currently one part-time technology facilitator is employed. The Technology Director provides and oversees some technology integration and staff development opportunities as time permits. Every school has a full-time NCWISE data manager and backup. Every school also has a full-time certified media coordinator with a master's degree.

The train-the-trainer and one-to-many staff development models are used to deliver staff development. The district seldom uses programs such as Kaleidoscope, NCWise Owl, Intel Innovation or eNC in its workshops. Presently, the school district no longer requires training in technology above the state minimums. Computer labs and laptops are used for district and school level workshops. Wireless Internet access and a projector are available in the central office board room for workshops and webex's. Currently, NCWISE is a focus of the county's staff development effort.

Some technology specific staff development is offered. Gates County employees use many North Carolina resources including NCWISE, CECAS, BUD, HRMS, LearnNC, eProcurement, Intranet, and email to operate more efficiently. All teachers and Administrators have email accounts.

Approximately 25%, including in-kind resources, of our technology budget is dedicated to staff development.

The county has developed a web site with links to schools and other technology resources such as DPI and the US Dept. of Education. The site includes information about school menus, employment, contact information, AYP, links to web based email, forms for employees to use, the SEA staff development system, and results of Board meetings.

## **Quality Teachers, Administrators and Staff: Strategic Technology Plan**

Include at least one strategy or objective that addresses the following:

1. Teacher/staff skills assessment
2. Diverse training resources (local and online including DPI resources)
3. Follow-up support
4. Local certification and professional development requirements
5. Ethical and professional standards
6. Evaluation of training

<b>Strategic Priority 3: Quality Teachers, Administrators and Staff*</b>							
Strategic Goal: (Please check.)							
<input type="checkbox"/> Professional preparation aligned with state priorities <input type="checkbox"/> A system to develop, train, and license a BK (birth-kindergarten) professional staff for public schools <input type="checkbox"/> A system to recruit, retain, and compensate a diverse corps of quality teachers, administrators, and staff <input type="checkbox"/> A system to ensure high performance of teachers, administrators, and staff <input type="checkbox"/> A system of continuous learning and professional development to support high performance of all employees <input type="checkbox"/> High ethical and professional standards for all employees							
<b>Objective 3.1 Increase the percent of teachers who are literate in technology and information systems to 100% by 2009</b>							
<b>Strategy</b>	<b>Resources Needed (Human &amp; Material)</b>	<b>Person(s) Responsible</b>	<b>Budget Needs</b>	<b>Funding Sources</b>	<b>Time-line (Proposed Beginning &amp; Ending dates)</b>	<b>Method of Evaluation</b>	<b>Evaluation Results June, 2006</b>
3.1.1 Infuse the (IMPACT Model) use of technology across the curriculum by hiring 1 full time certified technology coordinator/facilitator to work directly with teachers.	Certified teachers with Masters Degree in Educational Media & Computers	Superintendent  Assistant Superintendent for Curriculum and Instruction  Technology Director	Salaries + Benefits  \$30,000 to \$45,000  Recurring	Local, state, federal, other	Beginning November 2008  Ending June 2009	Report from Personnel Director Collect annually in May. Evaluate in June	
3.1.2 Deliver online staff development modules for science in grades K-5 using the new eLearning grant.	Internet, Internet 2	Assistant Superintendent for Curriculum and Instruction  Technology Director	Grant	Grant	Beginning November 2005  Ending June 2009	Report from Assistant Supt. Collect annually in May. Evaluate in June	
3.1.3 Catalog, deliver, evaluate highly qualified staff development via a Web-based staff development registration, tracking, and course maintenance solution called SEA system.	All Web-based	Technology Director  Assistant Superintendent for Curriculum and Instruction	\$1,500 Recurring	Local, state, federal, other	Beginning November 2005  Ending June 2009	Report from Assistant Supt. Collect annually in May. Evaluate in June	
3.1.4 Assess Teacher/staff skills through a Technology Skills Assessment Instrument	Myriad	Tech Director et al	\$2,000 Recurring	Local, state, federal, other	Beginning July 2006  Ending June 2009	Tech Skills Assessment Report Collect in May. Evaluate in	

						<i>June</i>	
<i>3.1.5 Provide follow-up support</i>	<i>Myriad</i>	<i>Tech Director et al</i>	<i>N/A</i>	<i>N/A</i>	<i>Beginning July 2006</i>	<i>Follow up Report by Tech Director. Collect in May. Evaluate in June</i>	
<i>3.1.6 Continue local certification and professional development requirements</i>	<i>None</i>	<i>Personnel Director</i>	<i>N/A</i>	<i>N/A</i>	<i>Beginning November 2005</i> <i>Ending June 2009</i>	<i>Report from Personnel Director Collect annually in May. Evaluate in June</i>	
<i>3.1.7 Maintain current ethical and professional standards</i>	<i>None</i>	<i>Personnel Director</i>	<i>N/A</i>	<i>N/A</i>	<i>Beginning November 2005</i> <i>Ending June 2009</i>	<i>Report from Personnel Director Collect annually in May. Evaluate in June</i>	

## **Strong Family, Community and Business Support: Current Situation Narrative**

Email is provided for teachers and other school personnel and is used effectively and often. Outside email is allowed and parents are beginning to communicate more with teachers via email. The district uses email to communicate with community and business organizations.

All classrooms currently have internal telephone communication capability.

Cable is available in many classrooms. A district Web site is provided for employees, students, parents, community members, and businesses. The district uses local media (TV, Radio, and Newspapers) to broadcast information. A calendar is also available on the district site. School nurses are provided with access to computers where they see students and they are encouraged to utilize the nurse's module in NCWISE.

Schools send home information for parents regarding home use of NC WISEOWL, SASinSchool, Study Island, etc. We have partnered with 4-H Extension to extend technology integration opportunities to after school hours; however, we do not have funding to provide access through learning centers to families, community or business after hours. We do allow access to the local Community College to offer instruction after hours at the high school. We do not provide internet or file access to families, community or business organizations.

**Strong Family, Community and Business Support: Strategic Technology Plan**

Include at least one strategy or objective that addresses the following:

1. Email access (staff, students)
2. Public relations (use of local Broadcast Media)
3. School and teacher websites
4. Learning Centers
5. Partnerships
6. Teacher/staff and student Internet and file access

<b>Strategic Priority 4: Strong Family, Community, and Business Support*</b>							
Strategic Goal: (Please check.)							
<input type="checkbox"/> State education priorities responsive to the needs of the family, community, and business customers <input type="checkbox"/> A comprehensive and aligned system of support for the academic success and general well-being of all children that promotes: <input type="checkbox"/> A system to build the capacity of local districts to create, respond to, and sustain meaningful partnerships							
<b>Objective 4.1 Increase the involvement of parents and community members</b>							
<b>Strategy</b>	<b>Resources Needed (Human &amp; Material)</b>	<b>Person(s) Responsible</b>	<b>Budget Needs</b>	<b>Funding Sources</b>	<b>Time-line (Proposed Beginning &amp; Ending dates)</b>	<b>Method of Evaluation</b>	<b>Evaluation Results July, 2006</b>
4.1.1 Create a form requesting parents to submit their email address to teachers. Teachers create parent email groups.	Word processor Paper	Media Coordinator Technology Assistant Principal	N/A	N/A	Beginning November 2005  Ending June 2006	Copy of form Collect in May 2006. Evaluate in June 2006	
4.1.2 Increase the involvement of parents in the everyday ongoing activities of the individual schools.	Web-based Phone Dialing System (NTI Connect-ed)	Superintendent Technology Director NCWISE Director Principals	\$8,000.00 annually	Local, state, federal, other	Beginning October, 2005  Ending July, 2009	Report by NCWISE Director Collect annually in May. Evaluate in June	
4.1.3 Investigate the feasibility of establishing a community learning center in at least one school	Time	Director of Technology  Principals  Superintendent	N/A	N/A	Beginning November 2006  Ending January 2007	Report from Director of Technology Collect in May 2007. Evaluate in June 2007	
<b>Objective 4.2 Provide teachers/staff and students with internet and file access</b>							
4.2.1 Continue to provide internet, email and file access to teachers, staff and students	Internet Access	Technology Director	\$125,000	Local, state, federal, eRate	Beginning November 2005  Ending June 2009	Report from Technology Director Collect annually in May. Evaluate in June	
<b>Objective 4.3 Provide community and parents access to Board policies and decisions</b>							

4.3.1 Continue to use county web site and local newspaper to keep community informed about Board decisions and initiatives.	Web-based applications and local newspaper	Director of Personnel	N/A	N/A	Beginning November 2005  Ending May 2009	Report from Public Information Officer Collect annually in May. Evaluate in June	
4.3.2 Update Board Policies to a Web Based System for community access	North Carolina School Boards Association	Assistant Superintendent for Curriculum and Instruction  Technology Director	\$7500 first year, \$3500 annual	Local, state	Beginning March 2006  Ending July 2009	Report from Ass't Supt. Collect annually in May. Evaluate in June	
<b>Objective 4.4 Establish partnerships with local businesses</b>							
4.3.3 Partner with local nursing home to provide hands on experience in the health occupations course of study.	Medical Technology Tools Electronic Textbooks Curriculum Banks Et cetera	Workforce Development Director	N/A	N/A	Beginning November 2005  Ending May 2009	Report from Workforce Development Director Collect annually in May. Evaluate in June	

## **Effective and Efficient Operation: Current Situation Narrative**

A technology director and a part-time technology facilitator support the instructional and administrative technology needs of the district. In addition, the elementary and high schools have a technology aide available to work with teachers and to help support the technology infrastructure. Additional personnel are needed to implement the NCDPI IMPACT model.

As state and federal technology funds dwindle, more and more local funds must be spent just to maintain current technology levels. Growth is not being funded at the state or federal level. State technology demands continue to increase, but state funding continues to decline. Local funds have spared the technology department to some degree, but if those funds have to be utilized in other areas, we could fall behind technologically very quickly. Among the funds currently used to support technology are state PRC's 15, 61, 31, 19, 34, 32, 14 and Federal PRC's 50, 59, 107, 50, 60, and 17. In addition, local and capital outlay are also used to support technology.

Currently, the district has a T-1 line to the internet. Each school also has a T-1 line to a network cloud which connects to the internet. Utilization of the T-1 line to the internet consistently runs between 70 and 100 percent. This causes lost connections and slow access to the internet on a regular basis. Programs such as Study Island are difficult to use because of this. A high priority is to increase bandwidth and manage existing bandwidth more effectively. Even with the network constraints, the network is secure for student use. Policies are in place to guide oversight of the network. Adequate hardware is available in the schools for ongoing use of computers for instruction.

## **Effective and Efficient Operation: Strategic Technology Plan**

Include at least one strategy or objective that addresses the following:

1. Policy
2. Budget
3. Personnel
4. Security
5. Administrative Applications
6. Hardware
7. Infrastructure-School Local Area Networks and District Wide Area Networks

<b>Goal 5: Effective and Efficient Operations*</b>							
Strategic Goal: (Please check.)							
<input type="checkbox"/> Components of the education system aligned to achieve high performance <input type="checkbox"/> Decision making authority and control at the most appropriate level closest to the classroom <input type="checkbox"/> Information and accountability systems capable of reporting strategic and operational results <input type="checkbox"/> A funding system that provides adequate and aligned financial and personnel resources to maximize educational achievement							
<b>Objective 5.1 Increase the efficiency of running the school system</b>							
<b>Strategy</b>	<b>Resources Needed (Human &amp; Material)</b>	<b>Person(s) Responsible</b>	<b>Budget Needs</b>	<b>Funding Sources</b>	<b>Time-line (Proposed Beginning &amp; Ending dates)</b>	<b>Method of Evaluation</b>	<b>Evaluation Results July, 2006</b>
<i>5.1.1 Implement a wireless backbone between LAN locations to facilitate student access to online resources, to allow staff access to data files across the WAN, to allow backups across the WAN, to allow disaster recovery across the WAN, etc.</i>	<i>Towers, Radios  Installation  Service Fees</i>	<i>Superintendent  Technology Director</i>	<i>\$100,000</i>	<i>State Local</i>	<i>Beginning July 2005  Ending February 2006</i>	<i>Report from Technology Director Collect in May 2006. Evaluate in June 2006</i>	
<i>5.1.2 Implement Direct Deposit for all employees</i>	<i>AS400</i>	<i>Finance Officer  Technology Director</i>	<i>N/A</i>	<i>N/A</i>	<i>Beginning July 2005  Ending June 2006</i>	<i>Report from Finance Officer Collect in May 2006. Evaluate in June 2006</i>	
<i>5.1.3 Automate inventory of Macintosh Computer Systems</i>	<i>Apple Remote Desktop Software on Central Office Server</i>	<i>Technology Director</i>	<i>\$300</i>	<i>Local</i>	<i>Beginning November 2005  Ending June 2006</i>	<i>Inventory Report Collect in May 2006. Evaluate in June 2006</i>	
<i>5.1.4 Update Board Policies to a Web Based System</i>	<i>North Carolina School Boards Association</i>	<i>Assistant Superintendent for Curriculum and Instruction  Technology</i>	<i>\$7500 first year, \$3500 annual</i>	<i>Local, state</i>	<i>Beginning March 2006  Ending June 2009</i>	<i>Report from Ass't Supt. Collect annually in May. Evaluate in June</i>	

		<i>Director</i>					
<i>5.1.5 Evaluate and revise network security on the AS400</i>	<i>Outsource to Cook Consulting</i>	<i>Technology Director</i>	<i>\$3,000</i>	<i>Local</i>	<i>Beginning November 2005 Ending June 2006</i>	<i>Report from Finance Officer Collect in May 2006 Evaluate in June 2006</i>	
<i>5.1.6 Upgrade AS400 system every 3 years</i>	<i>Lease agreement</i>	<i>Technology Director</i>	<i>\$15,000/yr lease</i>	<i>Local</i>	<i>Beginning November 2005 Ending June 2009</i>	<i>Report from Finance Officer Collect annually in May. Evaluate in June</i>	
<i>5.1.7 Provide at least 100 MB Broadband Internet access across the WAN</i>	<i>ISP</i>	<i>Technology Director</i>	<i>\$80,000 Recurring</i>	<i>e-Rate - 75% Local, state, federal, eLearning Grant</i>	<i>Beginning July 2006 Ending June 2009</i>	<i>Report from Technology Director Collect annually in May. Evaluate in June</i>	
<i>5.1.8 Provide Telecommunications Services to LEA</i>	<i>Sprint U.S. Cellular</i>	<i>Technology Director</i>	<i>\$35,000 Recurring</i>	<i>e-Rate - 75% Local, state, federal, other</i>	<i>Beginning November 2005 Ending June 2009</i>	<i>Report from Technology Director Collect annually in May. Evaluate in June</i>	
<i>5.1.9 Maximize budget efficiency for technology expenditures</i>	<i>State Purchasing Office, eProcurement</i>	<i>Technology Director, Finance Officer</i>	<i>N/A</i>	<i>N/A</i>	<i>Beginning July 2006 Ending June 2009</i>	<i>Report from Technology Director</i>	
<b><i>Objective 5.2 Update computers, other technology devices and administrative applications on a 5 yr life cycle</i></b>							
<i>5.2.1 Keep administrative applications up-to-date and elementary and secondary computers up-to-date using a 5yr life cycle</i>	<i>Hardware &amp; Software</i>	<i>Technology Director</i>	<i>\$900 per machine Or Lease</i>	<i>Local, state, federal, other</i>	<i>Beginning November 2005 Ending June 2009</i>	<i>AMTR Collect annually in May. Evaluate in June</i>	
<i>5.2.2 Keep cafeteria computers up-to-</i>	<i>Purchase machines on</i>	<i>Child Nutrition</i>	<i>\$900 per machine</i>	<i>Child Nutrition</i>	<i>Beginning November</i>	<i>Report from Child</i>	

<i>date using a 5yr life cycle</i>	<i>a 5yr Life Cycle Hardware &amp; Software</i>	<i>Director</i>			<i>2005</i> <i>Ending June 2009</i>	<i>Nutrition Director Collect annually in May. Evaluate in June</i>	
<i>5.2.3 Keep administrative computers up-to-date using a 5yr life cycle</i>	<i>Hardware &amp; Software</i>	<i>Technology Director</i>	<i>\$1500 per machine</i> <i>Or Lease</i>	<i>Local, state, federal, other</i>	<i>Beginning November 2005</i> <i>Ending June 2009</i>	<i>AMTR Collect annually in May. Evaluate in June</i>	
<i>5.2.4 Keep projectors printers, etc. up-to-date using a 5yr life cycle</i>	<i>Hardware</i>	<i>Technology Director</i>	<i>\$1200 per machine average</i>	<i>Local, state, federal, other</i>	<i>Beginning November 2005</i> <i>Ending June 2009</i>	<i>AMTR Collect annually in May. Evaluate in June</i>	
<b><i>Objective 5.3 Provide technical support for 500+ computers and 2500+ users.</i></b>							
<i>5.3.1 Maintain current technology support which includes: NCWISE Director Tech Director, 4 technology aides and computer lab teachers</i>	<i>N/A</i>	<i>Technology Director</i>	<i>Salary + Benefits \$400,000 to \$500,000 Recurring</i>	<i>Local, state, federal, other</i>	<i>Beginning April 2006</i> <i>Ending June 2009</i>	<i>Report from Technology Director Collect annually in May. Evaluate in June</i>	
<b><i>Objective 5.4 Maintain up-to-date disaster recovery and business continuity systems and plans.</i></b>							
<i>5.3.2 Continue to backup and archive critical data such as payroll, financial, library automation systems, etc and maintain off site backups. Develop plans to keep payroll systems running during a disaster</i>	<i>Backup systems and generators</i>	<i>Technology Director Maintenance Director</i>	<i>\$15,000.</i>	<i>State and Local</i>	<i>Beginning March 2006</i> <i>Ending June 2009</i>	<i>Report from Technology Director Collect annually in May. Evaluate in June</i>	

Appendix A

Local Education Agency (LEA) Technology Plan  
**Policy, Procedure, & Guidelines Implementation Chart**

<b>Policies, Procedures, &amp; Guidelines</b> (Policies should be translated into predominant languages of students and parents)	<b>LEA Policy Code or Procedure</b>	<b>LEA Date of Adoption, Implementation or Revision</b>
<b>Policies Required</b>		
A. Materials Selection Policy (GS §115c-98(b))	IIAB-IIAC	02/03/1986
B. Disposal of Equipment / Replacement of Obsolete Equipment (GS §115c-518)	DN,DNA	08/05/1985
C. Hardware and Software Procurement (GS § 115c-522, 115c-522.1)	EHA	11/07/2005
D. Copyright Policy (PL §94-553, 90 Stat. 2541)	EGAA,EGA A-R	06/01/1992
E. Acceptable Use Policy (PL §106-554)	IIBH,IIBHA	11/07/2005
F. Equipment/Materials Donation Policy (GS §115C-518)	KH	11/07/2005
G. Data Privacy Policy (20 U.S.C. § 1232g; 34 CFR Part 99 (FERPA))	JO	05/02/1988
H. Inventory Control Policy (GS §115c-539, 115c-102.6A-C(5))	DID	11/07/2005
I. Access to Services Policy (GS §115c-106)	JB	03/01/2004
J. Student Discipline and Liability Policy (GS § 115C-391, 115C-398)	JG	01/03/1994
K. Remote Access Policy (GS §147-33.111)	EHA	11/07/2005
L. Virus Protection Policy (GS §147-33.111)	EHA	11/07/2005
M. NC WISE ID and Password Workstation Policy (GS § 147-33.111)	EHA	11/07/2005
N. Security Awareness Policy (GS §147-33.111)	EHAA	11/07/2005
O. Network Security Policy (SBE EEO-C-018, SB 991, 2004)	EHA	11/07/2005
P. Advertising and Commercialism Policy (GS §115c-98)	KJ	04/14/1986
<b>Procedures</b>		
A. Hardware and Software Deployment		
B. Equipment maintenance and repairs		
C. Outdated Resources and Equipment Replacement		
D. Disaster Recovery of Data and Hardware		
E. Administration of Online Courses		
F. Other(s) (as needed by LEA)		
<b>Guidelines</b>		
A. Policy Translation		
B. Web Site Development		
C. Instructional Use of Videos		
D. Development of Online Resources		
E. Other(s) (as needed by LEA)		

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