In August 2002, St. Mark Catholic School opened is doors to approximately 230 students in grades K-6. St Mark's Catholic School operates under the Diocese of Raleigh. The Superintendent, Mike Fedewa, is responsible for guiding all the Catholic schools in the Diocese. Within the Diocese of Raleigh there are seven Deanery divisions. St. Mark's Catholic School is located within the boundaries of the Cape Fear Deanery (Appendix A).

St. Marks administers the Iowa Test of Basic Skills, which is used as a benchmark for growth. The State of North Carolina does not require private schools to administer the North Carolina State reading and math tests. However, it does require private schools to pass the North Carolina Test for Computer Competencies in grade 8.

St. Mark's has two to three networked computers in each classroom. There are ten computers in the media center. The school does not have a technology plan nor policies and/or regulations in place for student and teacher to monitor computer use. In addition, opportunities to practice state required technology skills are not provided.

The purpose of the following technology plan is to ensure that students are proficient on the Grade 8 North Carolina Test for Computer Competencies. Phase One of the three-part technology plan includes staff development training for teachers, with a focus on technology literacy and basic operating skills. Likewise, student performance improvement will focus on computer literacy and basic operating skills. The facility will be reorganized to include a computer lab. Furthermore, computer use policies, standards and regulations, including an Acceptable Use Policy for staff and students, will be created and implemented.

Phase Two of the technology plan involves staff development that will concentrate on technology knowledge acquisition and integration especially in the area of North Carolina Computer Competencies. Student performance improvement will focus on knowledge of North Carolina Test for Computer Competencies as well. Software will be purchased to help teach the objectives required to pass the North Carolina Test for Computer Skills.

Phase Three of the proposed change includes additional staff development that will expand to focus on designing and delivering integrated technology lessons. Student performance improvement will focus on application of computer skills in curriculum areas. A full time technology resource teacher will be hired to facilitate the training and to serve as a support system for teachers. Additionally, 19 computers will be purchased to fully equip the computer lab. The computer lab will become the heart for technology at St. Mark Catholic School used for whole class instruction as well as a central location for Staff Development.

VISION

The members of the St. Mark Catholic School envision that all students and teachers will be provided with a technology rich learning environment. In this environment both teachers and students will obtain the skills that will enhance their professional and academic progress to prepare them to be active participants in our technological and global society. Through the utilization and integration of computer-related instructional technologies the quality of teaching and learning at St. Mark Catholic School will be significantly increased.

MISSION

St. Mark Catholic School is committed to creating a Catholic Christian atmosphere that promotes the total development of the students in a faith community. The educational opportunities provided will challenge each student by preparing them as inquisitive learners in our technological society. A technology rich learning environment will foster the growth of the students to meet the challenges in our ever-changing world. Increased student performance will be achieved through the utilization of existing technology resources, the integration of NC Computer Skills/Technology Competencies, and the integration of technology instructional products into daily lessons. Staff development will be a priority in order to provide training in technological resources. The faculty will embrace technology to become excellent facilitators and collaborators for the embedding of technology into the curriculum. In order to accomplish this mission, the network infrastructure will be expanded to adapt to current uses as well as the creation of a focused direction to develop a microcomputer instructional lab, which will establish the enhancement of teaching and learning for students and faculty.

INTRODUCTION

The belief that technology literacy is fundamental to success in the Information Age is the guiding rational behind this plan. Emerging technologies are transforming nearly every aspect of American life and have become an integral part of the global marketplace. Students need to be equipped with the knowledge and skills to compete in the world around them.

St. Marks Catholic School opened its doors in August 2002 to approximately 230 students in grades K-6. In August 2003 –2004 school year, one 6th grade class will be added along with two 7th grade classes. The following school year, 2004 – 2005, two 8th grade classes will be added. At present, the focus on technology is limited. However, the Principal realizes that in two years the administration of the North Carolina Computer Skills Competency test must be administered to the current sixth grade class. The development and implementation of a Technology Plan is imperative for the students attending St. Marks to successfully pass this state mandated test.

The North Carolina Department of Instruction realizes the need to prepare our students, whether they attend public or private schools, with the skills and knowledge of basic computer competencies. The standard that the North Carolina Department of Instruction has set for all students is to require that all 8th graders pass a computer competency test. This test is also a requirement for graduation from High School. St. Marks, operating as a private school, is required to administer North Carolina computer Skills Competency test in the 8th grade. The Diocese of Raleigh, in conjunction with the State of North Carolina, believes that all students must meet the basic computer skills set forth in the Diocese of Raleigh Computer Technology Curriculum Guide (Appendix B).

Student Performance Needs

Current Conditions	Desired Conditions	Data on which They are Based
Lack of student use of technology for learning desktop publishing, spreadsheet, database and multimedia skills	The students will become proficient in word processing , spreadsheets, database and multimedia	Pretest results Student surveys results

After an interview with the Media Center Coordinator, it was determined that, although St. Mark's has two to three networked computers in each classroom and ten computers in the media center, the school does not have a technology plan nor policies and/or regulations in place for student and teacher computer use. Furthermore, the only technology-related opportunity students have is Internet access by way of a firewall called Global Chalk Board. This firewall filters Internet information and allows teachers to create e-lesson plans for student use. However, opportunities for practicing database, word processing and spreadsheet applications are not provided through the service.

The purpose of the Technology Plan is to ensure that students are proficient on the Grade 8 Test for Computer Skills. The Technology Plan set forth includes staff development training, standardization of available technology resources, moving 6 computers from the media center to the room designed as a computer lab along with the creation and implementation of policies and regulations, including an Acceptable Use Policy for staff and students. The main focus is on student achievement and success.

Currently, available technology resources are being used at a minimal level as indicated in the school wide staff survey (Appendix C). The survey indicated that the staff does not feel confident using the existing technology resources. The purpose of the Technology Plan is to train the staff on using existing technology resources, which will increase staff knowledge and skills as well as standardize the use of the resources. Teacher workshops will be conducted on using Windows XP and on the use of test-specific software applications such as spreadsheets, database and word processing. University resources, such as instructional design professors and graduate students will be used to design, deliver and evaluate the training. Although the majority of the training will occur prior to the first day of school, ongoing support will be provided through periodic workshops held throughout the year.

Policies and standard operating procedures will be established and implemented. Such policies include Acceptable Use (Appendix D) for staff and students as well as policies that address theft, vandalism and copyright infringement. Procedures such as reporting malfunctioning equipment will be defined (Appendix E). A progressive school-wide plan will be developed outlining which computer competencies will be taught at each grade level.

The technology plan, strongly suggests moving 6 of the computers located in the Media Center to the room designated and wired for the computer lab in the original design of the school. Currently, this room is being used for the after school care program. The after school care program will be moved to an unoccupied 8th grade room in order to implement this change. Adopting these changes creates for the school a mini computer lab that can be used for small group instruction and staff development.

New software purchases appropriate to specific grade will be used to teach the required competencies for the North Carolina Test of Computer Skills (Appendix F). Currently, only Microsoft Word, Microsoft PowerPoint and Microsoft Excel are available. The software package will be increased to the full Professional version to include Microsoft Excel, Access, Word, PowerPoint, Outlook and Front Page. Subordinate software will be

purchased to meet the needs of the students as they move up in grade level to prepare for the Computer Competency test such as PAWS software for grades 3 - 6 used for keyboarding and word processing techniques. Staff development introducing and utilizing the new software will be provided with continued support throughout the year.

At present, Saint Mark's does not have a Technology Facilitator. The Media Specialist is acting as the technology contact. It is strongly recommended that the school employ a student intern from UNCW during the first and second year to help with the implementation of the Technology Plan. During the third year of the implementation plan, a full time technology resource teacher will be hired. The technology resource teacher will facilitate the training and serve as a support system for teachers. The resource teacher will also assume network responsibilities previously contracted out. An overview of the changes is detailed in Appendix G.

DEMOGRAPHICS

St. Mark's school serves 276 students in grades K-6. There are two classes in each grade, K-5. Sixth grade has one class of twenty-three. Of the 276 students, 124 are male and 152 are female. The enrollment includes two students with learning disabilities and one student with a physical disability. Seventy percent are Caucasian, twenty percent are African American and ten percent are from another ethnic origin as depicted in Table 1 Ethnicity and Gender.

Ethnicity	Percent		Gender	Number
Caucasian	70%		Male	90
African American	20%		Female	80
Other	10%			

Example Network Diagram

LAN Switch

Workgroup Servers
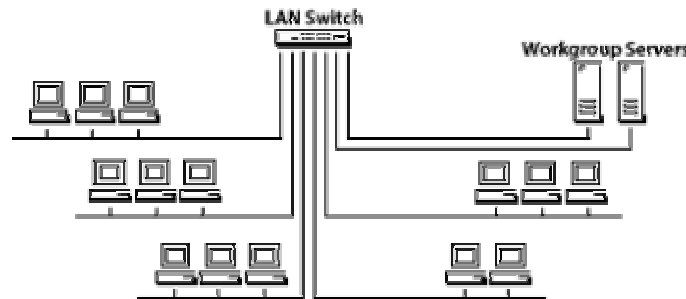
The above picture is an example of the network used at St. Mark's. There are three servers that facilitate St. Mark's LAN (Local Area Network). There is also a server, located in the head-end room that is used for back ups and media retrieval. Yet another server is used for the active manipulation of the workgroup of computers located within the St. Mark LAN, and finally there is a dedicated server that manages Global Chalkboard--the Internet filtering application.

Research has shown that teachers will infuse technology into teaching and learning more readily and enthusiastically if technical support is in place to ensure reliability and a sound knowledge base. The effective implementation of the proposed changes within this section would be impossible without the availability of trained professionals to support this structure.

According to the data obtained from the needs analysis, it was found that the St. Mark Community is not utilizing existing resources to their fullest potential. Staff questionnaires and surveys indicate that teachers are not familiar with nor are they integrating the standard software packages on computers for teaching and learning.

There is a network client serve application for file sharing, yet this is not used to the degree intended. The servers contained in the head-end room are not being utilized well. In fact, according to Chris Bouton, "The scan server doesn't do anything right now." It was also found in our data analysis that St. Mark's maintains both DSL and Cable modem service. This decision is adding unnecessary costs; the results of maintaining both services should be looked into. It is our recommendation that one service be agreed upon.

In Phase I of the technology plan, a Planning Advisory Team will be formed to discuss critical issues of the proposed change--including the need for an instructional computer lab. Phase I begins with setting up a mini computer lab by taking 6 from the Media Center and relocating them to the room designed for a computer lab but is currently used for after-school care. Additionally, at the end of Phase I, software for technology instruction will be

purchased. It is highly recommended that St. Mark purchase a site license for PAWS, a grade 3- 5 desktop publishing software package, along with Tool Factory Workshop spreadsheet, databases, and desktop publishing for grades k - 12.

Changes to the technology infrastructure end in Phase III, as the development of an instructional computer lab comes to an end. Nineteen computers will be purchased along with three presentation devices (Elmo projectors).

Item	Current Status	Proposed Changes
Facility	2750 square feet 1 Head End Room containing all networking hardware, servers, etc. 18 classrooms 1 media center 1 oversized classroom that was designed to be a computer lab, but is not being used as one	None planned. However, a focus group will be formed during phase three to determine if a computer lab is needed in the future **(Phase I)**
Technology Resources	Network and Connection: LAN with switched 10/100 Mbps data connectivity Media retrieval system with backup and data retrieval tools Average of 3 computers in each classroom 10 computers in media center Computer Specifications ▪ 1.5 GHz, Pentium IV ▪ 4 MB RAM ▪ Windows XP Professional ▪ CD/RW Drives ▪ Floppy Software (Standard) Windows XP Professional Office XP: Excel, Word, PowerPoint, Front Page Internet Explorer (Purchased) Telemagic Grade Quick Global Chalk Board	Software: PAWS Took Factory Workshop Microsoft Office (Access, Outlook, Front Page) **(Phase I)**
Computer Lab	Approximately 700 square feet	To establish this room as a computer lab as opposed to its current use. 19 computers will be purchased (Dell Dimension 2350) Projection Equipment will be purchased (LCD Projector). **(Phase II and III)**

The purpose of Phase I is to increase the computer literacy of the students in grades six and seven. Teacher training will focus on computer literacy, the use of existing software, and acceptable use policies. Teacher workshops will be conducted on Windows XP and existing software including spreadsheets, word processing and databases. The training will take place in the computer lab, where six computers will be moved from the media center to accommodate small group training. Although the majority of the training will occur prior to the first day of school, support will be provided throughout the year.

A graduate student intern from the Instructional Technology program at the University of North Carolina at Wilmington will be contracted to design and deliver the training. The Instructional Technology Program Director will evaluate the entire implementation phase. Outcomes, indicators, benchmarks, and measures for students, teachers, and technology resources are identified in Table 1.

Outcome	Indicator	Benchmark	Measure
Teachers			
• Teachers will become more computer literate.	• Faculty of St. Mark's will demonstrate that they can use technology resources such as spreadsheets, desktop publishing, and database, e-mail. • Faculty of St. Mark's will show that they can identify computer hardware parts and define its use.	• By the end of the school year 2003-2004 Teachers will pass a performance test on spreadsheets, databases, and desktop publishing with 85% accuracy. • By the end of the school year 2003-2004 teachers will save 25 % of their lessons on the school network. • By the end of the school year 2003-2004 teachers will download lessons from the network with 90% accuracy.	• Test on the component parts of the computer • Completed Integrated lessons recorded in Notebook • Teacher reflection log • Test on each of the computer programs • Actual Lessons stored on the network • Teacher reflection • Copies of downloaded lessons • Performance test on uploading and downloading lessons
	• The Faculty of St. Mark will show knowledge of policies, ethics, and regulations developed for implementation such as Acceptable Use and Copyright Laws	• By end of the 2003-2004 school year, 100% of faculty will show their knowledge of training provided in the area of policies, standards, and laws through a formal assessment.	• Classroom observations • Results of formal test
Outcome	**Indicator**	**Benchmark**	**Measure**
Students			
• Students in the 6th and 7th grade will display increased computer literacy.	• Students will demonstrate that they can identify and use basic computer operating systems.	• By the end of September 2003, 100% of the 6th and 7th grade students will be able to use and identify major component parts of the computer.	• Student computer/reflection log • Test on the component parts of the computer
	• Students will show that they can use available computer programs (spreadsheet, desktop publishing, and database)	• By the end of the school year 2003 – 2004, 100% of the students will demonstrate how to use computer programs. • By the end of the school year 2004, students will pass a performance test on computer skills with 85% accuracy.	• Student reflection log Computer products, including samples of spreadsheets, databases and desktop publishing. • Tests in the 3 main areas of spreadsheets, databases and word processing.
	• Students will show that they can use to the school network for saving and retrieving files.	• By the end of the school year 2003-2004 students will have saved 25 % of their files on the school network • By the end of the school year 2003-2004 students will retrieve personal files from the network with 90% accuracy.	• Actual files stored on the network • Student reflection log • Performance quiz
	• Students will show knowledge and understanding in policies, ethics, and regulations associated with school computer use.	• By end of the 2003-2004 school year 100% of students will have knowledge and understanding of policies, ethics, and laws.	• Performance quiz
Outcome	**Indicator**	**Benchmark**	**Measure**
Technology			
• Technology infrastructure will be redesigned	• The room designed as a computer lab will begin to function as such	• By the end of September 2003 six computers will be relocated from the media center to the computer lab.	• Formal technology inventory by individual rooms.
Outcome	**Indicator**	**Benchmark**	**Measure**
• Expand software collection	• Purchase of subordinate software for the increased success of student performance	• By June 2004 one hundred percent of necessary subordinate software PAWS	• Purchase order requisitions on file. • Copies of Software Registration

Table 1. Phase One - Outcomes, Indicators, Benchmarks and Measures

The purpose of Phase Two is to increase knowledge of the NC Computer Competency skills for students in grades six, seven, and eight. Students will demonstrate application of technology skills by using desktop publishing, spreadsheets and database applications. The software collection will be expanded to include keyboarding and desktop publishing applications. Staff development will focus on the use of newly purchased software and designing lessons that integrate the NC Computer competencies. The graduate student intern will design and deliver the training. Outcomes, indicators, benchmarks, and measures for students, teachers, and technology resources are identified in Table 2.

Outcome	Indicator	Benchmark	Measure
Teachers			
• Teachers will integrate technology into instruction.	• Faculty will show that they can use newly purchased subordinate software (PAWS and Tool Factory Workshop)	• By December 2004, 100% of the faculty will use newly purchased subordinate software.	• Copies of Lesson plans showing integration of new software into their curriculum
	• Faculty will show that they can design integrated technology lessons that address the NC Standard Course of Study Competencies	• Beginning in January 100 % of the teachers will design at least three technology-integrated lessons on a monthly basis.	• Copies of lesson plans • NC Computer Competency objectives checklist
	• Faculty will implement technology integrated lessons	• Beginning in January of 2005, 100% of the 6th, 7th and 8th grade teachers will deliver three technology-integrated lessons per month.	• Peer-to-peer observation evaluations • Individual reflections • Formative observation data analysis instrument
Students			
• Students in the 6th, 7th and 8th grade will demonstrate increased knowledge of technology competencies.	• Students will demonstrate use of desktop publishing, spreadsheets and database applications	• Beginning in January of the 2004-2005 school year all students will select al least one desktop publishing, one database and one spreadsheet product to be placed in a technology portfolio. • 100% of the students show significant growth on the practice NC computer competency tests administered in the fall and spring.	• Rubrics designed to evaluate use of word processing, spreadsheets and databases • Products included in student technology portfolios • Pre and post test results • SPSS score analysis data
Technology			
• Purchasing of computers	• Nineteen computers will be purchased, installed and configured in the computer lab	• In June 2005, 100% of the new computers will be networked and configured	• Copy of the purchase order • Inventory of computer lab • Verification that the new computers are networked and configured by checking the server

Table 2. Phase Two - Outcomes, Indicators, Benchmarks and Measures

The purpose of Phase Three (Table 3) of the proposed change is to further increase knowledge of the NC Computer Competency skills for students in grades six, seven, and eight. Students will demonstrate integration of technology skills by using desktop publishing, spreadsheets and database applications in course assignments. Additionally, nineteen computers will be purchased to complete the computer lab. A full-time technology resource teacher will be hired to design and deliver the staff development training for teachers.

The staff development will focus on designing and delivering integrated technology lessons. Each quarter, teachers will use staff development time to develop lessons that must be taught and reflected upon during the next quarter. Outcomes, indicators, benchmarks, and measures for students, teachers, and technology resources are identified in Table 3.

Phase Three: Computer Resource Teacher Addition, Staff Development, and Facilities

Outcome	Indicator	Benchmark	Measure
Teachers			
• Teachers will continue to develop computer literacy by acquiring deeper knowledge of technology	• Teachers will apply experiences included in staff development opportunities	• Each quarter, teachers will create and deliver at least four lessons using the NC computer Technology Curriculum goals and objectives • By the end of the school year 2005-2006 Teachers will develop and implement three lessons integrating technology to be kept in a "Technology Resource Book" in the Media center.	• Teacher observations by the Technology Resources Teacher • Peer-to-peer observations • Lesson plans
Students			
• Students in grades 6th, 7th and 8th will have an increased understanding of technology competencies	• Students will demonstrate use of technology-rich lessons as delivered by teachers and/or Technology Facilitator.	• Each quarter, students will participate in three lessons delivered in the Computer Lab	• Technology Resource Teacher log or schedule • Analysis of student products as a result of instruction • Mini assessments
Technology			
• Faculty will have increased support and communication.	• Full time technology resource teacher will be hired.	• By the beginning of the 2005-2006 school year, the full-time technology resource teacher will work directly with faculty on a weekly basis.	• Copies of integrated lesson plans • Weekly Planning Sessions (Minutes) • TRT monthly status report concerning the work completed on the above measures.
• Network Infrastructure will be upgraded	• Network infrastructure will be changed with respect to domain services.	• By the beginning of the 2005-2006 school year, domain services will be upgraded to include the saving of electronic information from all computer stations.	• Documentation of specific work completed
• Facilities will be redesigned	• Computer lab with 25 computers will be used for the student instruction and training of staff.	• By the beginning of the 2005-2006 school year, St. Mark will have a fully equipped computer lab.	• Design of room • Inventory of computers • Network infrastructure design blueprint
		• By January 2006, all faculty will have utilized the computer lab at least 4 times.	• Lab schedule • Lab sign up • Teacher lesson plans • Student products • Reports from the Technology Resource Teacher on the assisting of teachers for instruction for technology instruction or integrated instruction.

Table 3. Phase Three - Outcomes, Indicators, Benchmarks and Measures

On going communication is the key to success during each phase of the implementation process of the Technology Plan. There will be three important teams that will direct the technology plan during its duration. The Planning Advisory Team will act as the guiding force behind the entire communication process. This team will design a plan to implement technology and engage learning methods, defines the mission, goals and creates a blueprint for the implementation of the plan. The makeup of the team is as follows: Diocesan Superintendent, Principal of St. Mark, two teachers, two parents, Media Specialist, Parish Administrator, and Finance Committee Representative from the Parish, Independent Network Contractor, two church members and a UNCW intern.

The Implementation Team will be responsible for designing a plan to implement and engage learning methods into the curriculum. The Implementation team is comprised of the school Principal, Media Specialist, Independent Network Contractor, student intern, as well as two parents.

Finally, the Evaluation Team will look closely at the goals and objectives, review the attitude surveys and criterion referenced test immediately following each staff development workshop, follow the progress of the planning and implementation team, and address issues that can't be dealt with effectively by the project itself.

The method of communication will vary based on the stage of the plan detailed in the chart below.

What is communicated?	Communicated to Whom?	Method of communication	Who is responsible	When?	Comments/ Progress
Objective/Action Plan	Internal and External Groups	PowerPoint and distribution of Action Plan	Planning Advisory Team	Upon creation of the change management team	Must come before needs assessment
Vision	All Stakeholders	Quality tools/post it notes	Planning Advisory Team	Following initial meeting of change management	In this meeting roles of members and tasks will be divided
Assessment of Current Situation	Internal group	Memo Presentation	Planning Advisory Team	Following analysis of all data collected	Assessed: Current hardware, software, and Human Resources
Policies, Laws and Regulations	Internal and External Groups	Presentation Memo	Planning Advisory Team	Following Analysis of all data collected	Assessment and Identification of Specific Diocesan, State and Federal Policies, Laws and Regulations
Planning	Internal Groups And External Group	Presentation (followed by task-oriented meeting, and open forum for questions and answers) Memo	Planning Advisory Team	After change plan phases are developed	External Group will receive an abridged version of the change phase plan; three phases will be presented. Revisions will be made after input is received. Planning documentation is a "work in progress".
Implementation	Internal Groups	Presentation Handouts Electronic Communication Memo	Implementation Team	As phases are initiated/ implemented	Consistent revision is recommended regarding benchmarks of the change plan—e.g. quarterly/monthly meetings. (Planning document is a "work in progress"; this will affect the implementation plan as needed.
Evaluation	Internal and External Group	Presentation And open forum	Evaluation Team	Upon completion of each phase	After each phase is completed, there will be a presentation and open forum to adjust phases. Information from the Implementation results will be used to review and revise the change plan phases.

It is the goal of this staff development plan to integrate appropriate technology enhanced instructional and learning tools into all curricular areas by providing the necessary training and support. Instructional personnel and support staff will master the goals and objectives of North Carolina Basic Technology Competencies.

According to the preliminary assessment given the staff in February of 2003, most reported having *some* computer knowledge and skills. The results indicate the feeling that the staffs are comfortable, yet not proficient with computer operation skills, word processing, and telecommunications. The results of the assessment also indicate weaknesses with regard to skills in networking, multimedia, media communications, databases, and spreadsheets.

Currently, there are not appropriated funds for staff development. This plan recommends that St. Mark's School will collaborate with UNCW's Masters of Instructional Technology Program for establishing basic staff development workshops to be offered in the summer and continue throughout the school year as needed by the teachers. Training is also recommended to be contracted through an outside source concluding the assistance of MIT students. Funds for training should be allocated or obtained for the development of a successful staff development plan. Some possible resources for funding include:

• Parent Teacher Association
• Grants
• Partnerships with local businesses

Professional development training experiences will begin in the 2003-2004 school year. Skill acquisition in basic operating skills will be taught. Other classes included in the training schedule for this year will include standard competencies as required by North Carolina Computer/Technology Skills Curriculum.

All instructional personnel will have opportunities to become proficient in these skills by 2005. Skills to be acquired through training and other staff development opportunities include:

- Computer Operation Skills
- Setup/configuration, maintenance, and troubleshooting
- Word Processing
- Spreadsheet/graphing
- Database
- Networking
- Multimedia Integration
- Policies, Regulations, and Laws
- Telecommunications

Evaluation of the Professional development plan will be conducted through self-assessment and observation. Staff development self-evaluation and training evaluation forms have been created for use after each training session. Staff members will be required to produce technology-based projects and lesson plans for integration in classroom instruction. Lesson plans and observations by peer evaluators and the Technology Resource Teacher will be used to collect data for evaluation.

This detailed staff development will be completed in phases concurrent with the entire technology plan. The following table outlines the phases, goals, and activities included in the staff development plan:

Phase I (2003-2004) Staff Development - Literacy		
Goals and Benchmarks	**Description of Activities to Achieve Goals and Benchmarks**	**Projected date of Achievement**
The faculty will be trained to: - Identify major component parts of the computer - Use Windows XP - Know policies, standards, and laws regarding computer use	Training workshop for teachers on identification of component parts of the computer, using Windows XP, & on policies, standards, and laws regarding computer use	End of September 2003
The faculty will be trained to use basic desktop publishing and telecommunications techniques. The faculty will be instructed in the use of spreadsheets. The faculty will be instructed in the use of databases.	Training workshop for teachers on basic desktop publishing and telecommunications techniques. Training workshop for teachers on the use of spreadsheets. Training workshop for teachers on the use of databases.	End of December 2003 End of March 2004 End of May 2004

Phase II (2004-2005) Staff Development: Knowledge and Integration		
Goals and Benchmarks	**Description of Activities to Achieve Goals and Benchmarks**	**Projected date of Achievement**
Faculty will use subordinate software (PAWS and Tool Factory) as teaching tools.	Training workshop for teachers on PAWS & Tool Factory	December 2004
Faculty will develop word processing, spreadsheet and database lessons that teach the NC Test of Computer Skills competencies	Training workshop on NC Computer Competency and Diocesan curriculum to integrate word processing, spreadsheet & database lessons	January 2005

Phase III (2005-2006) Staff Development: Technology Integration		
Goals and Benchmarks	**Description of Activities to Achieve Goals and Benchmarks**	**Projected date of Achievement**
The faculty will be trained to develop and deliver technology integrated lessons	Monthly training workshops for teachers to develop content specific lessons that integrate technology	May 2005

During the first two phases of the technology plan support will be provided by a University Intern and an Independent Network Contractor. In the final phase the newly hired Technology Resource Teacher and the Independent Network Contractor will provide the support services. Funds appropriated for Technology Support Services are included in the budget for the proposed change. See budget information for more details.

Infrastructure-Related Services	Support Services
Desktop Hardware/Software • Acquisition/Replacement • Installation • Desktop Repair • Software Installation	Training Teacher/Student Multimedia Classroom Support Assistive Technology Web Development

General Support Services
Hardware Support Services - onsite troubleshooting of all hardware to include:
- keyboards
- mice
- monitors
- hard drives
- CPUs
- speakers
- printers

Software Support Services - telephone and in-person support is provided for all software included on purchased machines. Support can range from simple 'how-to' to problems, and general questions. Needs outside of this support will be provided through research from online resources and collaboration with the UNCW Technology Assistance Center.

Multimedia Services - service to school administration and faculty is provided through the development and production of graphics, video, photography, animation, and websites for the purposes of teaching and learning.

Classroom Support Services - maintaining operational support of technology in classrooms and providing the use of audio/visual equipment for teaching and learning.

Teacher/Student Support Services - Help Desk support is provided through e-mail communication, in-person support, and online resources.

Assistive Technology Services - no assistive technology service support has been anticipated with respect to software or hardware purchases. If this technology is needed, the Technology Resource teacher will research and provide support to necessary individuals in need of such services.

Web Development - consultation and design support is provided for all faculty web-based services. Other services provided online (for example, the St. Mark homepage) will be maintained by the school webmaster and will be coordinated by the Technology Resource Teacher.

Training - staff and faculty support will be provided with regard to training through staff development workshops. Descriptions of workshops in relation to the proposed change are included in the section on Staff Development.

Networking Services - support will be provided by an Independent Networking Contractor. All other support will be coordinated by the Technology Resource Teacher.

The budget for the three-year plan totals $91,442 and includes salary projections, equipment costs, contract prices and incidental expenditures as outlined in Table 4 below. Overall, the majority of the budget (85%) is for equipment and salary costs. The budget is further detailed in Appendix H.

Direct Costs	2003-2004	2004-2005	2005-2006	Total
Salaries	$2,790	$2,790	$25,000	$30,580
Employment Benefits			$1,500	$1,500
Equipment	$2,800		$43,422	$46,222
Materials/Supplies	$500	$500	$500	$1,500
Consultants/ Contracts	$3,880	$3,380	$2,880	$10,140
Other	$500	$500	$500	$ 1,500
Total Requested	$10,470	$7,170	$73,802	**$91,442**

The evaluation will be conducted by the UNCW intern and the UNCW evaluation specialist. The UNCW intern will compile and index student performance tests, technology products and reflections. The intern will also be responsible for administering tests and attitude surveys following each staff development workshop. Additionally, the intern will document all technology hardware and software changes. The UNCW evaluator will evaluate the transfer of learning for the teachers and students by conducting classroom observations and by evaluating products that are developed. Specific evaluation measures, responsible party and projected completion dates are listed below for each phase.

Phase 1

Evaluator	Specific Measures	Projected Completion Date
Teachers		
UNCW Intern UNCW Evaluator	• Test on the component parts of the computer • Completed Integrated lessons recorded in Notebook • Teacher reflection log • Test on each of the computer programs • Actual Lessons stored on the network • Copies of downloaded lessons • Performance test on uploading and downloading lessons • Results of formal test • Classroom observations (transfer of learning)	June 2004 June 2004
Students		
UNCW Intern	• Student computer/reflection log • Test on the component parts of the computer Computer products, including samples of spreadsheets, databases and desktop publishing. • Tests in the 3 main areas of spreadsheets, databases and word processing. • Actual files stored on the network • Performance quiz	June 2004
Technology		
UNCW Intern	• Formal technology inventory by individual rooms. • Purchase order requisitions on file. • Copies of software registration forms and installation documentation on specific grade level computers.	June 2004

Phase 2

Evaluator	Specific Measures	Projected Completion Date
Teachers		
UNCW Intern	• Copies of Lesson plans showing integration of new software into their curriculum	December 2004
	• Copies of lesson plans • NC Computer Competency objectives checklist	June 2005
	• Peer-to-peer observation evaluations • Individual reflections • Formative observation data analysis instrument	
UNCW Evaluator	• Classroom observations (transfer of learning)	June 2005
Students		
UNCW Intern	• Rubrics designed to evaluate use of word processing, spreadsheets and databases • Products included in student technology portfolios	June 2005
UNCW Evaluator	• Pre and post test computer skills results • SPSS score analysis data • Classroom observations (transfer of learning)	June 2005
Technology		
UNCW Intern	• Copy of the purchase order for new computers • Inventory of computer lab • Verification that the new computers are networked and configured by checking the server	June 2005

Phase 3

Evaluator	Specific Measures	Projected Completion Date
Teachers		
Technology resource teacher UNCW Evaluator	• Teacher observations • Peer-to-peer observations • Technology integrated lesson plans • Classroom observations (transfer of learning)	June 2006
Students		
Technology resource teacher UNCW Evaluator	• Technology Resource Teacher log or schedule • Analysis of student products as a result of instruction • Classroom observations (transfer of learning)	June 2006
Technology		
Technology resource teacher	• Design of room • Inventory of computers • Network infrastructure design blueprint • Lab schedule • Lab sign up • Teacher lesson plans • Student products • Reports from the Technology Resource Teacher on the assisting of teachers for instruction for technology instruction or integrated instruction.	June 2006