

**Implementation of SAS inSchools Software
New Hanover County School System
Wilmington, North Carolina**

**Prepared for
Vonnie Koonce
Director of Technology
New Hanover County Schools**

**By
Helen Lipka and Addy Long**

Part I

Executive Summary

The New Hanover County School System is a Local Education Agency (LEA) within the North Carolina Department of Public Instruction. The school system is comprised of thirty-seven schools of which twenty-five are Elementary, seven are Middle, and five at the High School level. New Hanover County's Technology Department, which is under the Division of Operations, is responsible for the use of and installation of hardware as well as software for all the schools within the district. The Technology Department also maintains the network, provides technical support, and provides staff development opportunities.

The Technology Department, under the leadership of Vonnie Koonce, was provided with SAS inSchool software in the fall of 2003 – 2004 school year free of charge through funding from the Bank of America Foundation, and in cooperation with the North Carolina Department of Instruction. SAS inSchool is a web-based, interactive resource-learning environment for teachers of English, Social Studies, Science, Math and Spanish. The software program offers Curriculum Pathways, based on the State and National Standards, to all North Carolina's secondary public schools, grades 8 – 12.

One of the main goals of the Technology Department is to integrate technology skills into each core subject area for student success. In this way the Technology Department believes that it is preparing students to be productive citizens in our global and technological society. Teachers will make use of various programs and diverse teaching strategies to increase technology integration in accordance with North Carolina Standard Course of Study.

The goal of the Technology Department is for sixty percent of New Hanover County High School English, Social Studies, Science, Math and Spanish Departments, as well forty percent of the Middle Schools eighth grade teachers, to integrate the use of SAS inSchool software to supplement instruction. At present, only twenty percent of the High Schools and zero percent of the Middle Schools are using this software resource. Training was held by the Technology Department for the Computer Resources Teachers at the secondary school levels in December of 2003. The training provided was not effective based on the above percentages gathered through observations, teacher surveys, interviews and analysis of the computer lab schedules.

It is suspected that that the training, which occurred, focused mainly on a brief overview of the resource and technical aspects of the software. Teachers did not receive training on subject specific integration nor the benefits associated with SAS inSchools software. In order to increase the use of this software the Technology Department must redesign and deliver training to meets its goal.

The recommendation intervention is to develop and deliver training of the integration of the SAS inSchool resource to the lead teachers in the core discipline areas of English, Social Studies, Science, Math and Spanish at the secondary schools in New Hanover County. The training will go beyond the introductory session that was previously offered

to the Computer Resource Teachers. Training times will vary so that the teachers will have options in order to attend a session that best fits their schedules. The Technology Department should provide one day “mini-sabbaticals” for the lead teachers who are the opinion leaders and are interested in designing units that their teams can use in order to increase the use of this software at individual secondary schools. Once teachers have completed the training they will have a packet of resource materials to help guide the process of implementation.

Operating System of New Hanover County Schools

The New Hanover County School System is a Local Education Agency (LEA) within the North Carolina Department of Public Instruction. New Hanover County is located in the southeastern part of the state. The Mission of the New Hanover County School System is to provide a high QUALITY education that prepares all students to be productive and contributing citizens of a global society. The school system is comprised of thirty-seven schools; two pre-k centers, twenty-three elementary schools, seven middle schools, and five high schools. Thirty-three schools follow a traditional calendar and four elementary schools follow a year-round calendar. The school system is comprised of three divisions: Human Resources, Student Support and Operations, each of which report to the Office of the Superintendent. The Technology Department is under the Division of Operations.

The Director of the Technology Department oversees the use of and installation of hardware as well as software for all the schools within the district. The Technology Department also maintains the network, provides technical support, and staff development. The Technology Department's personnel must address both instructional and operational needs in order to support their mission which is; "The Technology Department strives to be a cohesive unit that is dedicated to planning for, implementing, and supporting the technology needs of all members of the New Hanover County School System, students and staff alike, as well as the New Hanover Community at large." The Instructional Technology staff encourages and supports technology integration activities. This support is provided through new program initiatives, staff development strategies, software review and implementation, technical troubleshooting, school technology team development and support, and system-wide communication and collaboration efforts.

The Technology Operations Services includes: a Computer Repair Shop, a Network Shop, an AV/Mechanical Shop, an Administrative Specialist, the district Webmaster and a bond projects manager.

The Communications Specialist and technician are responsible for the installation; maintenance and repair of landline telephone systems, wireless phones, pagers, and handheld radios and fax machines.

The Computer Repair Shop consists of a shop foreman and four area technical coordinators. Their responsibilities include the maintenance and repair of the nearly 9900 computers and 4000 peripherals in all schools and administrative buildings.

A WAN Engineer and 3 network coordinators staff the Network Shop. Their responsibilities include maintenance, setup and repair of network resources, including district and school servers, routers, switches, cabling, data ports, Ethernet cards and devices and the network operating systems.

The AV/Mechanical shop includes a shop foreman, a mechanical repairman and an electronics repairman. They are charged with the maintenance and repair of nearly 6500 electrical and AV devices placed throughout the system.

Development and Delivery System

Directly under the Director of Technology is the position of a Lead Instructional Technology Specialist. Next in line are two Support Service Associates one of which handles work orders while the other is a help desk for computer resource teachers and technology facilitators. The computer resource teachers at the Secondary level report to the 6–12 Technology Coordinator. The technology facilitators at the Elementary schools report to the K-5 Technology Coordinator. The Technology Coordinators are responsible for providing training for new software and hardware that is placed in the school system.

Technology based instruction is designed and managed by the Computer Resource Teachers at the Secondary level or the Technology Facilitators at the Elementary level. The Technology Department through the Computer Resource Teachers and Technology Facilitators assist the county in achieving its goal by providing staff development focused on integrating technology into the state mandated curriculum. Workshops are provided to the employees of New Hanover County to focus on proficiency of software and hardware. Implementing new programs enables the county to fulfill its mission statement by allowing teachers to be more effective in their classrooms. Decisions regarding the implementation of new programs geared towards creating students who will be productive citizens are often based on student test scores.

The Problem

SAS inSchools, a web based, interactive curriculum software resource for both teachers and students is provided free of charge through funding from the Bank of America Foundation, and in cooperation with the North Carolina Department of Instruction. SAS inSchools offers Curriculum Pathways to all North Carolina's secondary public schools, grades 8 – 12. The New Hanover County School district was presented with this software resource opportunity through the Technology Department during the 2003 – 2004 school year. The New Hanover County Technology Department provided training for the Computer Resource Teachers at the Middle and High School levels in December of 2003. Training was not effective based on the percentage of schools implementing the software program. The Technology Department identified that only twenty percent of the High Schools and zero percent of the Middle Schools are currently integrating SAS inSchools. This information is based on lesson plans submitted by academic and computer resource teachers, observations and lab activities by the administration, computer lab schedules, surveys, and interviews of the faculty. The goal of the Technology Department is for sixty percent of New Hanover County High School Math, Science, Social Studies, English and Spanish teachers to integrate the use of this new software and forty percent of the Middle Schools to show integration to supplement instruction. Computer lab schedules, lesson plans, observations by the administration will represent the percentages desired.

Operating System Analysis – Present Status

To determine the present status of the operating system we focused on the Technology Department and the training and communication provided specifically for the Computer Resource Teachers at the secondary school level. We focused on the Computer Resource teachers (CRT's) because they are directly in charge of developing and implementing instruction at their individual schools. Surveys were distributed to the CRT's regarding the knowledge and use of the SAS inSchools interactive software program. The focus of the survey targeted training, usage and the skill level of teachers necessary to have a successful implementation of the new software program. Surveys were also administered to a random sampling of teachers. Informal observations were conducted of teachers who were integrating the SAS inSchools software into their classroom. A formal observation of the training was conducted at two of the High Schools that were providing training workshops for teachers. Analysis of the instructional material used at the training workshops was assessed. We also looked at the computer lab schedules at each of the secondary schools in order to gather information on the frequency of use of the SAS inSchools software program. Principals were interviewed concerning their knowledge of the SAS inSchools software program as well as their goals for training and implementing at their school.

Observation of teachers as well as the results of the interview with the principals at the secondary schools clearly shows that New Hanover County desires to create effective schools in the 21st century. Educators living in this informational society realize that knowledge is essential and that the body of knowledge is expanding faster than we can teach in traditional ways. Effective schools will no longer be isolated institutions of learning, accountable only to themselves. Effective schools must take advantage of all avenues and opportunities for technology integration. The appropriate integration and use of technology with the school district will enable educators to chart the courses that their students will take as they become active, responsible citizens in this century.

The Technology Department focus areas are Instruction, Communication and Collaboration, Evaluation, Resources, and Staff Development. Each of the mentioned goals has clear objectives based on the North Carolina State Technology Plan. The Technology Department strives to be a cohesive unit that is dedicated to planning; implementing and supporting the technology need of all students and staff.

The Technology Department has been actively involved in partnerships for some time. The following partnerships are well established and remain active groups within the community. A list of the partnerships is as follows: Cape regional Partnership Network, CISCO, UNCW-Watson School of Education, Southeast Education Alliances, The learning Network, Assistive Technology Resource Center, and SpinNC (Southeast Public Interest Network of North Carolina). The Technology Department is dedicated to finding new partnerships to enable collaboration with the vision of student success at the

forefront of their decisions. When SAS inSchools was offered, free of charge, the Technology Department welcomed the interactive software program.

Discrepancies Between What Is and What Should Be

The following chart describes the present activities of the New Hanover County School System, "What is". The chart also shows "What Should Be" to help meet the goals of the system. The Gaps are clearly defined and point out the areas in which the NHC system needs to focus on to meets its stated goals.

The chart is divided into the following six areas of concentration:

- a. Real objectives
- b. Present activities
- c. Important side effects
- d. Relevant resources
- e. Fixed constraints
- f. How the system is managed

New Hanover County School System

Area of OS	How is it now?	How should it be?	Gap
Real objectives	Technology integration is encouraged by the Technology Department. Workshops are held on a monthly basis. However, secondary principals' philosophies vary on the importance of integrating technology.	The principal will require the integration of technology in order for students to be successful in our global and technological society.	Secondary schools lack consistency in the importance of integrating technology into the classroom.
	Based on computer lab schedules and teacher survey, technology is used, but core curriculum courses do not use many technological teaching and	Technology is integrated into the core curriculum effectively.	Technology is not being used to its full potential in New Hanover County.

	learning tools.		
	Based on interviews with the media advisory team at the secondary schools, teachers are taking on the role of laggards in adopting new technology and software programs into their classrooms.	Based on New Hanover County's Five Year Technology Plan, teachers will utilize new technologies and software in their classrooms to keep up to date.	Teachers are not utilizing the software programs in their classroom.
	Contact was made via e-mail to the Computer Resource Teachers early in September that this free software based curriculum program was available for use at their school	Computer Resource Teachers should have been informed about the curriculum software program before they received the e-mail from SAS	Communication from the Technology department was lacking
	Information shared by the Director of Technology with the Computer Resource Teachers at the Secondary School level did not provide a direct call for training for the SAS inSchool software.	In addition to sharing information about SAS inSchool software with Computer Resource Teachers at the Secondary School level, the Director of Technology would mandate training for SAS inSchool software at all Secondary Schools.	Training was not mandated by the Director of Technology for Secondary Schools.

	Based on interviews with Computer Resource Teachers, zero percent of Secondary schools used SAS inSchools From 8/2003 – 12/2003.	60% of the High Schools and 40% of the Middle Schools should be using the SAS inSchools software.	Teachers do not use SAS inSchools.
	Two hours of face-to-face introductory training was held for the Secondary Computer Resource Teachers for the SAS inSchools software in early December of 2003	Training should be clear, concise and relevant for all core area teachers as well as provide motivation, on-going skills and knowledge building to encourage teachers to utilize the SAS inSchools software.	Training was inadequate and poorly planned and did not provide motivation to use the software program
	Training was held at 3 of the 5 High Schools	100% of the High School should have held training to key academic teachers	Lack of training workshops at 2 of the HS
	Based on a questionnaire sent to Middle School teachers, it was found that zero percent training was held.	Training by the Computer Resource Teacher to core academic disciplines offered by SAS.	Lack of training

Present Activities	Once the SAS inSchool program was available in the County Aug. 2003, training was held for all Computer Resources Teachers at the Secondary level in December of 2003.	Training of SAS inSchool software should have been held in August or September, 2003 prior to the start of the school year to enable quick adoption of this resource.	Training for SAS inSchools software was not held in a timely fashion.
	Training of the SAS inSchool software was given by a local high school math teacher who discovered this resource at a math convention. She was not an expert user of the software.	Training of the SAS inSchool software needs to be conducted by an expert user of the software, preferably a SAS representative or trainer.	Lack of knowledge of the trainer.
	The math teacher who conducted the SAS inSchool training was poorly prepared, was unable to meet the needs of the learners and did not provide adequate learning materials.	An expert from SAS should provide initial training with professional user friendly materials.	Training and materials were inadequate for the needs of the learners.
Important side effects	In addition to the introduction of SAS inSchool software at the Middle School level, the Director of Secondary Schools required the implementation of a benchmark-testing software program called Light Span. Based on random Computer Resource Teacher interviews	Adequate training and support is provided to Computer Resource Teachers upon the implementation of any new software. Expectations of new software use are made clear by the District.	Priority and support were given for Light Span software, which made SAS inSchool software a secondary concern.

	at the Middle School level, teachers expressed feeling overwhelmed by the introduction of two new software packages at one time.		
Relevant resources	Computers at the Secondary level have appropriate software.	Based on New Hanover County's Five Year Technology Plan, appropriate software has been purchased for each computer.	None.
	Computers at the Secondary schools are replaced annually to keep abreast of current technology changes.	Based on New Hanover County's Five Year Technology Plan computers are purchased annually to replace older models	None.
	New Hanover County School District provides Internet access to all schools.	Based on New Hanover County's Five Year Technology Plan, access to the Internet over high-speed lines is in place at 100% of the schools.	None.
	Staff Development and Training at the New Hanover County Schools focuses on "train the trainer" philosophy.	Based on New Hanover County's Five Year Technology Plan "train the trainer" programs are in place for the integration of multimedia tools, interactive media and software.	None.

	A technology support team is in place at the District level under the Director of Technology. (See chart....)	Based on New Hanover County's Five Year Technology Plan, a technology support team is provided for the District.	None.
	The budget for training and adopting new technology resources is allocated by the Technology Department for district wide training.	Based on New Hanover County's Five Year Technology Plan, monetary support is provided for the District when adopting new software resources.	None
Fixed constraints	Based on the results of questionnaires and interviews with teachers, teachers focus curriculum around state mandated tests and use many traditional teaching methods to do so, not integrating technology.	Teachers should align their curriculum with students required performance and state standards and in turn teach for comprehension and understanding of course material, without feeling the pressure of students' performance on mandated tests. To do so, they also integrate technology into the classroom and lesson plans.	Technology is not being utilized in courses because teachers feel pressured to assure high student performance on state mandated courses.
	Based on analysis of the computer lab schedules and hardware inventories, teachers have limited computer time available to	Teachers should have adequate number of computers for their use to integrate technology.	The number of labs and computers versus number of students at secondary schools is not meeting the needs of teachers.

	them because of the number of labs and computers.		
	Based on the results of random teacher interviews, it was found that teachers were not given time during the school day to complete training for the SAS inSchool software.	Teachers should be provided with adequate time to complete SAS inSchool training during the school day.	Time is not being made available to teachers to complete necessary training to utilize the SAS inSchools software.
	Based on teacher interviews, it was found that there were no incentives being provided for teachers to use personal time to attend SAS inSchool after-school training.	Incentives should be provided in order to motivate teachers to attend after-school SAS inSchool training.	No incentives are available to motivate teachers to use personal time for training.
How is the system managed?	The Director of Technology oversees all training, technical and maintenance support for New Hanover County Schools' computer network.	Based on the organizational hierarchy of the New Hanover County School District, the Director of Technology oversees all training, technical and maintenance support to ensure State guidelines are being met.	None.
	The Secondary Instructional Technology Specialist holds monthly meetings and distributes e-mails which provide information and training for Computer Resource	Based on organizational hierarchy, the Secondary Instructional Technology Specialist should keep Computer Resource Teachers and principals up-	None.

	Teachers and principals.	to-date on all changes and expectations at the District and State level.	
	Based on the Teacher Performance Assessment Instrument (TPAI), principals in New Hanover County Secondary Schools are not focusing on technology integration to assess overall teacher performance.	Principals in New Hanover County Secondary Schools utilize the technology integration section of the TPAI and require teachers to use technology and technology facilities a mandated number of times.	Due to principal focus on the ABCs Accountability, teachers are not integrating technology into their core area.

Probable Causes of the Problem

After a thorough analysis of the New Hanover County School System, focusing on the Technology Department and training of the SAS inSchools software web-based resource, data indicates that there are several problem areas that should be addressed.

Explained below are the probable causes:

- Lack of knowledge

The analysis of the current situation and desired situation as well as the evaluation of training provided to computer resource teachers indicated the lack of specific academic focus. Training was clearly operational in nature and functioned only as a general introduction to the software.

- Too much emphasis and pressure on teachers to have high scores on the end of course tests.

Needs analysis shows that the results of questionnaires and interviews with teachers, found that teachers focus curriculum around state mandated tests and use many traditional teaching methods to do so, not integrating technology. Administrators feel pressure by the above mentioned standards and require their teachers to perform at a high level of proficiency. This creates an environment which is resistant to the integration of new technology. The annual report card that each school receives is a reflection of standardized test scores and end of grade tests scores.

- Teachers must use their own time when learning and integrating new technologies.

Based on the results of random teacher interviews, it was found that teachers were not given time during the school day to complete training for the SAS inSchool software. This is problematic because of the expectations and additional demands placed on teachers to integrate technology using the Standard Course of Study.

- There are no incentives from the administration to encourage teachers to use new and innovative software.

Based on the needs analysis of teacher interviews, it was found that there were no incentives being provided for teachers to use personal time to attend SAS inSchool after-school training. This lack of incentives clearly does not motivate teachers, but in turn hinders their desire and willingness to attend workshops and implement the use of new and innovative software.

Possible Solutions

Throughout the analysis of the Technology Department, within the New Hanover County School System, it is clear that support is in place for integration of new software and resources, such as SAS inSchool, into the High School and Middle School curriculum. The Technology Director along with the Lead Instructional Specialists recognizes the importance of providing superior training to aid teachers with the integration of technology. In this way, they are helping meet the County's technology plan objectives of curriculum integration. They also recognize the importance of incorporating new software and resources to address different methods of learning styles and multiple intelligences. With this in mind, there are three possible solutions that the Technology Department could choose to implement to maintain their high standards. They are as follows:

- a. Provide one to two days off for Computer Resource Teachers and the lead teachers in Math, Science, Social Studies, English and Spanish teachers to complete a self instructional module on the SAS inSchool software program.
 - b. Develop and deliver SAS inSchool training for all High and Middle School Computer Resource Teachers and lead teachers in Math, Science, Social Studies, English and Spanish by a representative of the SAS inSchool.
 - c. Send Computer Resource Teachers and the lead teachers of the Math, Science Social Studies, English and Spanish curriculums to a technology conference where SAS inSchool training will be held.
- a. Provide one to two days off for Computer Resource Teachers and the lead teachers in Math, Science, Social Studies, English and Spanish curriculums to self learn the SAS inSchool software program. .

Providing teachers with time off to self learn the SAS inSchool software, will allow teachers the time to explore, comprehend and to develop successful integrated lessons to meet the county, state and national requirements for technology integration based on the Standard Course of Study. Introducing the software resource with a self instructional module would allow teachers to progress at their own pace. The county will pay for the teachers substitute while they are completing the module. Teachers may take one or two days away from the duties in their classroom to successfully master the module. Teachers would not have to use their own time after school or during their planning time to complete the SAS inSchool module.

- b. Develop and deliver SAS inSchool training for all the High and Middle School Computer Resource Teachers and the lead teachers in Math, Science, Social Studies, English and Spanish curriculum by a representative of the SAS inSchool.

A second solution would be training for the Computer Resource Teachers as well as the lead teachers in Math, Science, Social Studies, English and Spanish curriculum at the secondary schools by a representative of the SAS inSchool offered through the Technology Department. The trainer from SAS would deliver a full training presentation on the web-based planning environment. Technical support and navigation through the resource would be available from an expert during the training session.

c. Send Computer Resource Teachers and lead teachers of the Math, Science Social Studies, English and Spanish curriculums at the secondary school level to a technology conference where SAS inSchool training will be held.

A third solution would be to send the Computer Resource Teachers and lead teachers of the Math, Science Social Studies, English and Spanish curriculums at the secondary school level to a technology conference where the SAS inSchool representative will provide training. Lead teachers in their specific discipline would explore the general navigation of the web-based planning environment. Investigation and creation of a web-based lesson under the direction of an expert in the field would take place.

Analysis of Solutions

Possible Solutions	Time	Environmental Consideration	Organizational Change	Space Equipment Requirements	Cost	Benefit and Loss Individual	Benefit and Loss Organizational	Totals
Provide one to two days off for Computer Resource Teachers and the lead teachers in Math, Science, Social Studies, English and Spanish teachers to complete a self instructional module on the SAS inSchool software program.	-	+	-	0	-	0	-	+1
Develop and deliver SAS inSchool training for all the High and Middle School Computer Resource Teachers as well as lead teachers by a representative of the SAS inSchool.	-	+	+	+	0	+	+	+5

Send Computer Resource Teachers and lead teachers of the Math, Science Social Studies, English and Spanish curriculums to a technology conference where SAS inSchool training will be held.	-	0	0	0	-	-	+	+1
---	---	---	---	---	---	---	---	----

Key

+ uses less time and resources

- uses more time and resources

0 uses about the same amount and resource

Analysis of Solutions

Outlined below is a comparison of the possible solutions in terms of their practicality of application as well as effectiveness.

a. Provide one to two days off for Computer Resource Teachers and the lead teachers in Math, Science, Social Studies, English and Spanish teachers to complete a self instructional module on the SAS inSchool software program.

Providing time for teachers to explore and learn how to implement the new SAS inSchool software through a self instructional module would impact the normal classroom routine. Teachers would be away from their class for one or two days depending on their understanding of the new software package. Some teachers who are more tech savvy could complete the training in one day while other teachers who are not as adept with technology may take the two days that has been allotted for this module. The goal for the teachers would be to complete the self instructional module successfully and begin to integrate the SAS inSchool software into their curriculum.

Teachers would go to the Technology Department computer lab to work on this module. There would not be any restructuring of computer equipment because the computer lab at the Technology Department is equipped with all the necessary software. The SAS inSchool software, which is provided free to New Hanover County schools, would be available through the internet at the Technology Department site. The organizational change would be that teachers would be away from their classes and that training would be individual. Support for learning would be available only through e-mail to SAS inSchools.

The Technology Department allots monies to be used for training teachers in new software resources. Therefore the department would pay for substitute teachers to allow the classroom teachers to attend the self instructional training sessions.

Benefits to the Computer Resource Teachers as well as the lead teachers in subject specific areas would rate high based on concentrated information provided. Each teacher would explore their own content area thoroughly as they progress through the module.

b. Develop and deliver SAS inSchool training for all the High and Middle School Computer Resource Teachers and the lead teachers in Math, Science, Social Studies, English and Spanish curriculum by a representative of the SAS inSchool.

A second solution would be training for the Computer Resource Teachers and lead teachers of Math, Science, Social Studies, English and Spanish at the secondary schools by a representative of the SAS inSchool offered through the Technology Department. The trainer from SAS would deliver a full training presentation on the web-based planning environment. Technical support and navigation through the resource would be

available from an expert during the training session. Lead teachers in their specific discipline would explore the general navigation of the web-based planning environment. Investigation and creation of a web-based lesson under the direction of an expert in the field would take place.

This solution would require time for training which would be an effective use of time. Training would be held at a local secondary school in the computer lab. All necessary hardware, internet access and peripherals would already be in place. All Computer Resource Teachers and lead teachers in specific content areas who would attend the training have all necessary prerequisite skills, and would be willing to attend the training. The SAS representative will have all necessary materials; therefore, no development time would be required. A slight change would affect the organizational delivery system of the Technology Department. The Lead Instructional Technology Specialist generally provides the majority of training when new programs are introduced. Due to the nature of the web-based resource, a representative from SAS inSchools would be contracted to provide initial training.

The estimated cost of daily training is \$180.00. Six hours of training would be recommended for this solution. The Technology Department allocates monies for training by a subject matter expert when new and innovative software resources are available to the school system. The SAS inSchool software is provided free of charge to the school system.

c. Send Computer Resource Teachers and lead teachers of the Math, Science Social Studies, English and Spanish curriculums to a technology conference where SAS inSchool training will be held.

A third solution would be for the New Hanover County Technology Department to send all the Computer Resource Teachers and lead teachers of the Math, Science Social Studies, English and Spanish curriculums at the secondary school level to a technology conference where SAS inSchool training will be held.

This solution would require time for teachers to attend the conference to receive training by a SAS inSchool representative. Environmental considerations, organizational change along with space and equipment requirements would not be affected at the county level due to the fact that the training would be held off site.

In order for teachers to attend the conference they would have to take time off from their scheduled classroom responsibilities. The Technology Department allocates money for Technology Conferences generally only for Computer Resources Teachers. The cost to the Technology Department would be greater due to the number of lead teachers in specific disciplines at the secondary schools in the county who would be attending the conference to receive training. In addition, substitute teachers would need to be contacted and paid for by the Technology Department to enable the lead teachers to attend the conference.

Allowing teacher to attend the conference where they will receive expert training by a specialist from SAS inSchools benefits the organization. Teachers can practice new skills, ask questions and receive feedback from a representative from SAS. The benefit of attending a workshop, such as this, allows for clear, concise and consistent training from a subject matter expert.

Recommendation

The recommendation to the New Hanover County School System is to Develop and deliver SAS inSchool training for all the Computer Resource Teachers and lead teachers in Math, Science, Social Studies, English and Spanish at the secondary school level by a representative of the SAS inSchool. The training will go beyond the introductory session that was offered to the Computer Resource Teachers at the secondary schools. Software integration will be the primary objective or goal for the new training. The integration will include materials that each teacher can begin using immediately in their lesson plans.

Integration of the software should be the focus when designing a new training session. Lead teachers can ask subject specific questions to the “expert” from SAS who will deliver the training as well as explore their specific curriculum area after a brief overview of the operation system. The lead instructional specialist for the county as well as the computer resource teachers at the secondary schools should collaborate with the SAS trainer before, during and after the training. Through the collaboration the SAS trainer will identify the needs of the New Hanover County School System. Collaboration would add components to the training materials and delivery such as lesson plans, successful classroom activities and hands on demonstration of the web-based resources available.

The proposed integration of SAS inSchools training will be designed to give teachers actual lessons so they do not have to spend time creating them. Lead teachers who be trained in the use of the software will be considered as early adopters in the process of integrating SAS inSchools into their academic areas. Lead teachers will then be expected to demonstrate to their co-workers how lessons can be carried out in various classroom situations. The training will be designed to include success stories of how the teachers were able to teach their North Carolina Standard Curriculum by using this software resource. The experiences and hands on activities that will be shared will provide teachers with reassurance that the integration of a web-based software resource can be used and adopted in their own classroom.

Training will be held daily for one week. All secondary Math teachers will meet on one day, Social Studies the next day, etc. until all content specific areas are trained. Training one core subject per day will help the SAS trainer focus exclusively to the needs of the teachers’ content specific curriculum. The instructional program will consist of a printed manual developed by SAS giving a brief overview and navigation on the software resource. A subject specific, detailed manual containing national and state standards, information on performance assessment, project based learning, copyright issues, quiz makers and more will be used.

Training would be held at a local secondary school in the computer lab. All necessary hardware, internet access and peripherals would be in place for the training. All lead teachers in Math, Science, Social Studies, English and Spanish attending the training have necessary prerequisite skills to be successful. Extended support will be provided by the Computer Resource Teacher at each individual secondary school.

**Implementation of SAS inSchools Software
New Hanover County School System
Wilmington, North Carolina**

**Prepared for
Vonnie Koonce
Director of Technology
New Hanover County Schools**

**Prepared by: Helen Lipka, MSIT Graduate Student
Adonica M. Long, MSIT Graduate Student**

Time Frame: June 8, 2004 to October 8, 2004

Submitted: April 30, 2004

TABLE OF CONTENTS

Executive Summary.....2

Problem Statement.....3

Proposed Solution and Rational.....4

Products.....5

Project Description.....6

Appendix A

Appendix B

Appendix C

EXECUTIVE SUMMARY

The New Hanover County School System is a Local Education Agency (LEA) within the North Carolina Department of Public Instruction. The school system is comprised of thirty-seven schools of which twenty-five are Elementary; seven are Middle, and five at the High School level. New Hanover County's Technology Department, which is under the Division of Operations, is responsible for the use of and installation of hardware as well as software for all the schools within the district. The Technology Department also maintains the network, provides technical support, and provides staff development opportunities.

The Technology Department, under the leadership of Vonnie Koonce, was provided with SAS inSchool software in the fall of 2003 – 2004 school year free of charge through funding from the Bank of America Foundation, and in cooperation with the North Carolina Department of Instruction. SAS inSchool is a web-based, interactive resource-learning environment for teachers of English, Social Studies, Science, Math and Spanish. The software program offers Curriculum Pathways, based on the State and National Standards, to all North Carolina's secondary public schools, grades 8 – 12.

Although the New Hanover County Technology Department provided training for the Computer Resource Teachers at the Middle and High School levels in December of 2003, training was not effective based on the percentage of schools implementing the software program. The Technology Department identified that only twenty percent of the High Schools and zero percent of the Middle Schools are currently integrating SAS inSchools. The goal of the Technology Department is for sixty percent of New Hanover County High School Math, Science, Social Studies, English and Spanish teachers to integrate the use of this new software and forty percent of the Middle Schools to show integration to supplement instruction.

To achieve the goal of the Technology Department, several solutions have been proposed. Three main solutions have been proposed: 1.) Postpone the SAS inSchool training, 2.) Develop and deliver SAS inSchool training for all the Secondary Computer Resource Teachers by a representative of SAS, and 3.) Develop and deliver SAS inSchool training for all lead teachers in Math, Science, Social Studies, English and Spanish by a representative of SAS.

The recommendation to the New Hanover County School System is to Develop and deliver SAS inSchool training for all the lead teachers in Math, Science, Social Studies, English and Spanish by a representative of the SAS inSchool. The training will go beyond the introductory session that was offered to the Computer Resource Teachers at the secondary schools. Software integration will be the primary objective or goal for the new training. The integration will include materials that each teacher can begin using immediately in their lesson plans.

This proposal contains four phases that describes the procedures for 1) reviewing, revising and designing the instructional materials, 2) developing the instructional materials, 3) implementing the instruction, and 4) evaluating the instruction. The proposal includes a detailed list of products that must be designed and developed in order to implement the SAS inSchools training program. A staffing plan, timeline and budget are also included.

Funding for the proposal will be provided by the New Hanover County School System and grants which have been applied for. (Please see Appendix C for a full description of the project budget.)

PROBLEM STATEMENT

SAS inSchools, a web based, interactive curriculum software resource for both teachers and students is provided free of charge through funding from the Bank of America Foundation, and in cooperation with the North Carolina Department of Instruction. SAS inSchools offers Curriculum Pathways to all North Carolina's secondary public schools, grades 8 – 12. The New Hanover County School district was presented with this software resource opportunity through the Technology Department during the 2003 – 2004 school year. The New Hanover County Technology Department provided training for the Computer Resource Teachers at the Middle and High School levels in December of 2003. Training was not effective based on the percentage of schools implementing the software program. The Technology Department identified that only twenty percent of the High Schools and zero percent of the Middle Schools are currently integrating SAS inSchools. This information is based on lesson plans submitted by academic and computer resource teachers, observations and lab activities by the administration, computer lab schedules, surveys, and interviews of the faculty. The goal of the Technology Department is for sixty percent of New Hanover County High School Math, Science, Social Studies, English and Spanish teachers to integrate the use of this new software and forty percent of the Middle Schools to show integration to supplement instruction. Computer lab schedules, lesson plans, observations by the administration represents the percentages desired.

The utilization of SAS inSchools software is important to New Hanover County Schools because it provides an interactive, web-based software package based on The North Carolina Standard Course of Study for Math, Science, Social Studies, Language Arts and Spanish. Once training is held, teachers will be able to access complete lesson plans and interactive activities using technology integration which also meets the Standard Course of Study for Technology for North Carolina. The Standard Course of Study is the driving force behind the public education system in North Carolina. SAS inSchools provides a means by which both Standard Course of Studies are blended and in turn meet objectives set forth by both.

Implementing the SAS inSchools software offers teachers a ready-made technology integration resource, which enriches curriculum. Regardless of whether a teacher is technology savvy or a novice user, the software is designed to be user friendly and easily implemented. By using this software resource the lack of technology integration at the Secondary level decreases, therefore, meeting one of the major goals of the New Hanover County Technology Plan.

PROPOSED SOLUTION AND RATIONALE

Recommendation

The recommendation to the New Hanover County School System is to Develop and deliver SAS inSchool training for all the lead teachers in Math, Science, Social Studies, English and Spanish by a representative of the SAS inSchool. The training will go beyond the introductory session that was offered to the Computer Resource Teachers at the secondary schools. Software integration is the primary objective or goal for the new training. The integration includes materials that each teacher can begin using immediately in their lesson plans.

Management

Integration of the software is the focus when designing a new training session. Lead teachers can ask subject specific questions to the “expert” from SAS who will deliver the training as well as explore their specific curriculum area after a brief overview of the operation system. The lead instructional specialist for the county as well as the computer resource teachers at the secondary schools collaborates with the SAS trainer before, during and after the training. Through the collaboration the SAS trainer identifies the needs of the New Hanover County School System. Collaboration adds components to the training materials and delivery such as lesson plans, successful classroom activities and hands on demonstration of the web-based resources available.

Development

The proposed integration of SAS inSchools training will give teachers actual lessons so they do not have to spend time creating them. Lead teachers who are trained in the use of the software are the early adopters in the process of integrating SAS inSchools into their academic areas. Lead teachers then demonstrate to their co-workers how lessons can be carried out in various classroom situations. The training includes success stories of how the teachers were able to teach their North Carolina Standard Curriculum by using this software resource. The experiences and hands on activities that shared provide teachers with reassurance that the integration of a web-based software resource can be used and adopted in their own classroom.

Delivery

Training is held daily for one week. All secondary Math teachers meet on one day, Social Studies the next day, etc. until all content specific areas are trained. Training one core subject per day helps the SAS trainer focus exclusively to the needs of the teachers’ content specific curriculum. The instructional program consists of a printed manual developed by SAS giving a brief overview and navigation on the software resource. A subject specific, detailed manual containing national and state standards, information on performance assessment, project based learning, copyright issues, quiz makers and more are used.

Training is held at a local secondary school in the computer lab. All necessary hardware, internet access and peripherals would be in place for the training. All lead teachers in

Math, Science, Social Studies, English and Spanish attending the training have necessary prerequisite skills to be successful. Extended support is provided by the Computer Resource Teacher at each individual secondary school.

PRODUCTS

The instructional design team will strive to review, revise and design materials that are comprehensive while being user friendly.

The following staff members are necessary for the design, development and implementation of this proposal (Please see Appendix B for a full description of the Staffing Plan):

- Project Manager
- Lead Instructional Specialist
- Subject Matter Expert (SAS Representative)
- Graphic Designer
- Printer
- Lead Teachers
- Outside Evaluators
- Computer Resource Teachers
- Psychometrician
- Director of Technology

The following products are developed and implemented during training:

- Assessment Items
Based on objectives and included in student and instructor manuals
- Instructor's Guide
Pamphlet including student manual, references, master copies and answer keys
- Materials for Instructor Use
PowerPoint presentation, overheads
- Formative Evaluation Materials-Instructor Guide Materials
Survey, questionnaires, observation checklist, feedback of training materials
- Awareness Activities Materials
Flyer, newsletter, e-mail, faculty meeting presentation
- Materials for Supporting Implementation
Awareness and training

PROJECT DESCRIPTION

This project is divided into four phases. Each phase will be broken down into the individual tasks, procedures, and timelines. These phases are outlined in the Gantt chart and graphically in the Pert chart (see Appendix A). In each phase the persons responsible for each task and the amount of time that it is expected to take will be listed. Staffing plans are listed in Appendix B. The budget summary can be found in Appendix C.

Phase I: Project Planning June 8, 2004 to July 30, 2004

Phase I of the project will involve extensive planning and analysis of learners and context.

Team members:

- Project Manager who is also an Instructional Technologist
- Lead Instructional Specialist
- Subject Matter Expert (SAS inSchools Representative)
- Lead Teachers
- Computer Resource Teacher
- Psychometrician

Project Planning/Write Goals 6-8-04 to 6-14-04

The Project Manager, Lead Instructional Specialist, Lead Teachers, Computer Resource Teachers and Technology Director will meet to create a rough outline of the SAS inSchool project events and time frames. They will also divide the tasks and decide who will need to be involved in each task. They will discuss and establish goals for the SAS inSchools training at this time.

Obtain existing materials 6-8-04 to 6-15-04

SAS Representative will share existing materials with the project planning team.

Review and revise existing materials for relevance and accuracy 6-9-04 to 6-23-04

The Project Manager, Lead Instructional Specialist, Lead Teachers, Computer Resource Teachers will review and revise materials obtained from the SAS representative for relevance and accuracy.

Meet with SAS inSchool Representative 6-14-04

The Project Manager, Lead Instructional Specialist, Lead Teachers, Computer Resource Teachers and Technology Director will meet with the SAS inSchools Representative who will be serving as the Subject Matter Expert for the project. Project goals and planning for the training will be discussed with the representative at this meeting.

Analyze Learner and Context 6-14-04 to 6-25-04

The Project Manager, Lead Instructional Specialist, Lead Teachers, Computer Resource Teachers will conduct the learner and context analysis. They will do this by observing and interviewing classroom teachers. This will help provide information to the team that is needed to develop the content of the new training.

Conduct Task Analysis 6-15-04 to 6-25-04

After establishing goals and analyzing the learner and context, the Project Manager, Subject Matter Expert and Lead Instructional Specialist will conduct a task analysis for instructional materials. At this point the team members know that a discrepancy exists between what is and what should be. They must determine the content needed to close the gap. The information that they have gathered about the learners will enable them to complete this task.

Contact with SAS Representative 6-24-04

The Project Manager, Lead Instructional Specialist, Lead Teachers, Computer Resource Teachers will meet with the SAS representative to discuss revisions to materials and what added training materials need to be developed.

Secure Outside Evaluator 6-28-04 to 7-2-04

The Project Manager and the Lead Instructional Technology Specialist identifies and contracts the Outside Evaluator to conduct the summative evaluation.

Write Objectives 6-28-04 to 7-9-04

The Project Manager, Subject Matter Expert and Lead Instructional Specialist will meet to review goals and establish objectives for the SAS inSchool training. The objectives will be developed after the task analysis is complete and will be specific and measurable.

Receive final copy of revisions from SAS representative 7-8-04

Project planning team will receive final revisions made by SAS representative.

Develop Assessment Items 7-12-04 to 7-23-04

After the task analysis has been completed and objectives established, the Project Manager, Lead Instructional Specialist, Subject Matter Expert and Psychometrician will develop assessment items for each objective to be used in the training.

Develop Instructional Strategy 7-9-04 to 7-22-04

The Project Manager and Lead Instructional Specialist will develop instructional strategies for the SAS inSchool training based upon the learner and context analysis.

Phase II Developing Learner Materials 7-12-04 to 8-31-04

Team members:

- Project Manager
- Lead Instructional Technologist
- Subject Matter Expert (SAS inSchools Representative)
- Lead Teacher
- Computer Resource Teacher
- Graphic Designer
- Printer

Phase II of the project will involve the development of student materials, instructor materials, awareness materials and formative and summative evaluation materials.

Locate Training Site for Workshop 7-5-04 to 7-16-04

The Technology Director will locate and secure a site location for the SAS inSchool training workshop to be held the week of September 13-18th and for the trial workshop September 1st, 2004.

Organize and Prioritize Test Materials 7-12-04 to 7-23-04

The Project Manager, the Lead Instructional Specialist and Subject Matter Expert will use assessment items generated by the Psychometrician to organize and prioritize test assessments items into pre-tests, post-tests, quizzes and unit tests for student and instructor guides.

Develop Instructors Guide 7-12-04 to 7-23-04

The Project Manager, the Lead Instructional Specialist and Subject Matter Expert will develop the final instructors guide after the revisions made to the SAS information that was shared earlier in the planning process.(6-24-04) The guide will be very detailed and provide all the information needed to conduct the workshop. The Instructors guide will be divided into three sections, front-end materials, instructional methods, and a reference section. The front end materials will include a table of contents, a “how to use this guide?” section, a topic-by topic overview, a lesson list of all the materials and equipment that is needed as well as a bibliography. Included in the guide will be a copy of the student guide, handouts, and assessment materials.

Develop Students Guide 7-12-04 to 7-23-04

The Project Manager, the Lead Instructional Specialist and Subject Matter Expert will develop the final student guide after the revisions made to the SAS information that was shared earlier in the planning process.(6-24-04) The student guide will be divided into the front-end materials: including a table of contents, a “how to use this guide?” section, an overview of the content, expectations and a glossary. The lesson materials: include

objectives, list of materials, time considerations, step-by step instructions, and assessments.

Arrange Hotel Accommodations for SAS inSchools Representative 7-21-04-7-23-04

Lead Instructional Specialist will contact local hotels and secure reservations for SAS inSchool representative for the week of training and the day of the trial training workshop.

Develop Awareness Materials: Create flyer 7-26-04 to 7-30-04

The Project Manager, Lead Instructional Specialist and the Graphic Designer will develop a flyer to inform participants of the upcoming SAS inSchool training workshop.

Develop Awareness Materials: Contact Representatives to present at faculty meetings 7-26-04 to 7-30-04

The Project Manager will contact the Computer Resource Teachers at individual secondary schools who will present information concerning the upcoming SAS inSchools training workshop.

Develop follow-up support materials 7-30-04 to 8-6-04

The Project Manager, the Subject Matter Expert and the Lead Instructional Specialist will develop follow-up support materials to be given to participants after attending the training.

Develop Awareness Materials: Develop e-mail notice 8-2-04 to 8-4-04

The Lead Instructional Specialist will develop an e-mail notice to be sent to all Lead Teachers and Computer Resource Teachers at the secondary school level.

Distribute Awareness Materials: send e-mail notice 8-23-04

The Lead Instructional Specialist will send e-mail notice which has been developed to Lead Teachers and Computer Resource Teachers who will be attending the training workshop.

Distribute Awareness Materials: distribute flyers to schools 8-23-04 to 8-27-04

The Lead Instructional Specialist will distribute flyers to schools to distribution to Lead Teachers and Computer Resource Teachers.

Distribute Awareness Materials: send representatives to schools top faculty meetings 8-25-04

Computer Resource Teachers will present information regarding the SAS inSchools training workshop at faculty meetings.

Develop Formative Evaluation Materials: Create questionnaire for trial workshop 8-20-04 to 8-25-04

The Project Manager, Lead Instructional Specialist and Subject Matter Expert will develop a questionnaire to be completed by participants of trial workshop.

Develop Formative Evaluation Materials: Create rubric for evaluation of instructor materials 8-20-04 to 8-25-04

The Project Manager, Lead Instructional Specialist and Subject Matter Expert will develop a rubric which will be used to formatively evaluate the instructor materials workshop.

Print Materials 8-23-04 to 8-27-04

Lead Instructional Specialist will deliver items to be printed to the Printer. Lead Instructional Specialist will pick-up materials and bring them to the training site.

Develop Formative Evaluation Materials: Create rubric for evaluation of student materials 8-26-04 to 8-31-04

The Project Manager, Lead Instructional Specialist and Subject Matter Expert will develop a rubric which will be used to formatively evaluate the student materials workshop.

Develop Summative Evaluation Materials: Create rubric for use by outside evaluators 8-30-04 to 9-10-04

The Project Manager, Lead Instructional Specialist and Subject Matter Expert will develop a rubric which will be used to summatively evaluate the workshop by the outside evaluator.

Arrange Workshop Space 9-1-04 and 9-13-04

The Lead Instructional Specialist and local school Computer Resource Teacher will setup any necessary equipment and materials at the training site prior to the trial and final workshops.

Phase III: 9-1-04 to 9-17-04

Phase III of the project will involve implementing the training trial workshop, evaluating and revising materials formatively and finally implementing the full workshop for participants.

Team Members:

- Project Manager
- Lead Instructional Technologist
- Subject Matter Expert (SAS inSchools Representative)
- Lead Teacher
- Computer Resource Teacher

Conduct Trial Workshop 9-1-04

SAS inSchools representative will conduct a trial workshop for select participants for the purpose of formative evaluation.

Conduct formative evaluation of instructor's materials 9-2-04 to 9-6-04

The Project Manager, Lead Instructional Specialist and the Subject Matter Expert will review the instructor's materials from the trial workshop and revise. The team will be looking for errors in the materials as well as instructional problems. The learners will be observed and interviewed throughout the evaluation. The participants in the trial workshop will provide feedback on content and presentation.

Conduct formative evaluation of student's materials 9-2-04 to 9-6-04

The Project Manager, Lead Instructional Specialist and the Subject Matter Expert will review the student's materials from the trial workshop and revise. The team will be looking for errors in the materials as well as instructional problems. The learners will be observed and interviewed throughout the evaluation. The participants in the trial workshop will provide feedback on content and presentation.

Conduct Training Workshop: Conduct Day 1 Training 9-13-04

SAS inSchools representative will conduct the Day 1 workshop for Math Lead Teachers and Computer Resource Teachers.

Conduct Training Workshop: Conduct Day 2 Training 9-14-04

SAS inSchools representative will conduct the Day 1 workshop for Science Lead Teachers and Computer Resource Teachers.

Conduct Training Workshop: Conduct Day 3 Training 9-15-04

SAS inSchools representative will conduct the Day 1 workshop for Language Arts Lead Teachers and Computer Resource Teachers.

Conduct Training Workshop: Conduct Day 4 Training 9-16-04

SAS inSchools representative will conduct the Day 1 workshop for Social Studies Lead Teachers and Computer Resource Teachers.

Conduct Training Workshop: Conduct Day 5 Training 9-17-04

SAS inSchools representative will conduct the Day 5 workshop for Spanish Lead Teachers and Computer Resource Teachers.

Distribute Follow-Up Support Materials 9-13-04 to 9-17-04

The SAS inSchool representative will distribute follow-up support materials to workshop participants upon their completion of the training.

Phase IV: 9-20-04 to 10-8-04

The project will be summatively evaluated in Phase IV by outside evaluators secured in Phase I.

Team Members:

- Project Manager
- Lead Instructional Specialist
- Outside Evaluator

Conduct Summative Evaluation 9-20-04 to 10-8-04

The Outside Evaluator will conduct and complete the summative evaluation.

APPENDICES

Milestone Events and Activities.....A

Staffing Plan.....B

Budget.....C

Appendix A

Milestone Events and Activities

Start Project

Start: 6/8/04 ID: 1
Finish: 6/8/04 Dur: 1 day?
Res:

Plan Project (Phase I)

Start: 6/8/04 ID: 2
Finish: 7/30/04 Dur: 39 days?
Comp: 0%

Meet with SAS in School Rep

Start: 6/14/04 ID: 3
Finish: 6/14/04 Dur: 1 day?
Res:

obtain existing materials

Start: 6/8/04 ID: 4
Finish: 6/15/04 Dur: 6 days?
Res:

review existing materials fro

Start: 6/11/04 ID: 5
Finish: 6/18/04 Dur: 6 days?
Res:

contact with SAS representa

Start: 7/6/04 ID: 8
Finish: 7/6/04 Dur: 1 day?
Res:

receive final copy of revised

Start: 7/16/04 ID: 9
Finish: 7/16/04 Dur: 1 day?
Res:

develop instructional strateg

Start: 7/19/04 ID: 16
Finish: 7/30/04 Dur: 10 days?
Res:

write goals

Start: 6/8/04 ID: 10
Finish: 6/14/04 Dur: 5 days?
Res:

write objectives

Start: 6/15/04 ID: 13
Finish: 6/25/04 Dur: 9 days?
Res:

analyze learner and context

Start: 6/14/04 ID: 11
Finish: 6/25/04 Dur: 10 days?
Res:

task analysis

Start: 6/28/04 ID: 12
Finish: 7/9/04 Dur: 10 days?
Res:

develop assessment items

Start: 7/12/04 ID: 14
Finish: 7/23/04 Dur: 10 days?
Res:

Secure outside evaluators fo

Start: 6/28/04 ID: 15
Finish: 7/2/04 Dur: 5 days?
Res:

Develop learner materials (B

Start: 7/30/04 ID: 17
Finish: 8/13/04 Dur: 11 days?
Comp: 0%

develop follow-up support m

Start: 7/30/04 ID: 18
Finish: 8/6/04 Dur: 6 days?
Res:

develop test materials

Start: 8/2/04 ID: 19
Finish: 8/13/04 Dur: 10 days?
Res:

develop formative evaluation

Start: 8/2/04 ID: 20
Finish: 8/13/04 Dur: 10 days?
Res:

Develop Awareness material:
Start: 7/26/04 ID: 21
Finish: 8/4/04 Dur: 8 days?
Comp: 0%

create flyer
Start: 7/26/04 ID: 22
Finish: 7/30/04 Dur: 5 days?
Res:

contact representative to spe
Start: 7/26/04 ID: 23
Finish: 7/30/04 Dur: 5 days?
Res:

develop e-mail notice
Start: 8/2/04 ID: 24
Finish: 8/4/04 Dur: 3 days?
Res:

Distribute Awareness materi:
Start: 8/16/04 ID: 25
Finish: 8/27/04 Dur: 10 days?
Comp: 0%

send e-mail
Start: 8/23/04 ID: 26
Finish: 8/23/04 Dur: 1 day?
Res:

distribute flyers to schools
Start: 8/23/04 ID: 27
Finish: 8/27/04 Dur: 5 days?
Res:

send representatives to facul
Start: 8/16/04 ID: 28
Finish: 8/27/04 Dur: 10 days?
Res:

Arrange hotel accomodation:
Start: 7/21/04 ID: 29
Finish: 7/23/04 Dur: 3 days?
Res:

Locate Training Site
Start: 7/5/04 ID: 30
Finish: 7/16/04 Dur: 10 days?
Comp: 0%

arrange workshop space and
Start: 7/5/04 ID: 31
Finish: 7/16/04 Dur: 10 days?
Res:

Develop formative evaluation
Start: 8/20/04 ID: 32
Finish: 8/31/04 Dur: 8 days?
Comp: 0%

create questionnaire for trial
Start: 8/20/04 ID: 33
Finish: 8/25/04 Dur: 4 days?
Res:

create rubric for evaluation o
Start: 8/26/04 ID: 35
Finish: 8/31/04 Dur: 4 days?
Res:

create rubric for evaluation fi
Start: 8/20/04 ID: 34
Finish: 8/25/04 Dur: 4 days?
Res:

Develop Summative evaluati
Start: 8/30/04 ID: 36
Finish: 9/10/04 Dur: 10 days?
Res:

create evaluation rubric for u
Start: 8/30/04 ID: 37
Finish: 9/10/04 Dur: 10 days?
Res:

Arrange workshop space and
Start: 9/13/04 ID: 38
Finish: 9/13/04 Dur: 1 day?
Res:

Print Materials
Start: 8/27/04 ID: 39
Finish: 8/27/04 Dur: 1 day?
Res:

Conduct Trial workshop, eva

Start: 9/1/04 ID: 40
Finish: 9/10/04 Dur: 8 days?
Comp: 0%

Conduct Trial Workshop

Start: 9/1/04 ID: 41
Finish: 9/1/04 Dur: 1 day?
Res:

Formative evaluation of work

Start: 9/2/04 ID: 42
Finish: 9/9/04 Dur: 6 days?
Res:

conduct formative evaluator

Start: 9/2/04 ID: 43
Finish: 9/6/04 Dur: 3 days?
Res:

revise instructor materials

Start: 9/7/04 ID: 44
Finish: 9/9/04 Dur: 3 days?
Res:

conduct formative evaluator

Start: 9/2/04 ID: 45
Finish: 9/6/04 Dur: 3 days?
Res:

revise learner materials

Start: 9/7/04 ID: 46
Finish: 9/9/04 Dur: 3 days?
Res:

revise workshop

Start: 9/7/04 ID: 47
Finish: 9/10/04 Dur: 4 days?
Res:

Conduct Training Workshop

Start: 9/13/04 ID: 48
Finish: 9/17/04 Dur: 5 days?
Comp: 0%

Conduct Day 1 Training

Start: 9/13/04 ID: 49
Finish: 9/13/04 Dur: 1 day?
Res:

Conduct Day 2 Training

Start: 9/14/04 ID: 50
Finish: 9/14/04 Dur: 1 day?
Res:

Conduct Day 3 Training

Start: 9/15/04 ID: 51
Finish: 9/15/04 Dur: 1 day?
Res:

Conduct Day 4 Training

Start: 9/16/04 ID: 52
Finish: 9/16/04 Dur: 1 day?
Res:

Conduct Day 5 Training

Start: 9/17/04 ID: 53
Finish: 9/17/04 Dur: 1 day?
Res:

Distribute follow-up support

Start: 9/13/04 ID: 54
Finish: 9/17/04 Dur: 5 days?
Res:

Conduct Summative Evaluati

Start: 9/20/04 ID: 55
Finish: 10/8/04 Dur: 15 days?
Res:

Project: Project1
Date: Fri 4/30/04

Critical
Noncritical



Critical Milestone
Milestone



Critical Summary
Summary



Critical Inserted
Inserted



Critical Marked
Marked



Critical External
External



Project Summary
Highlighted Critical







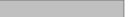





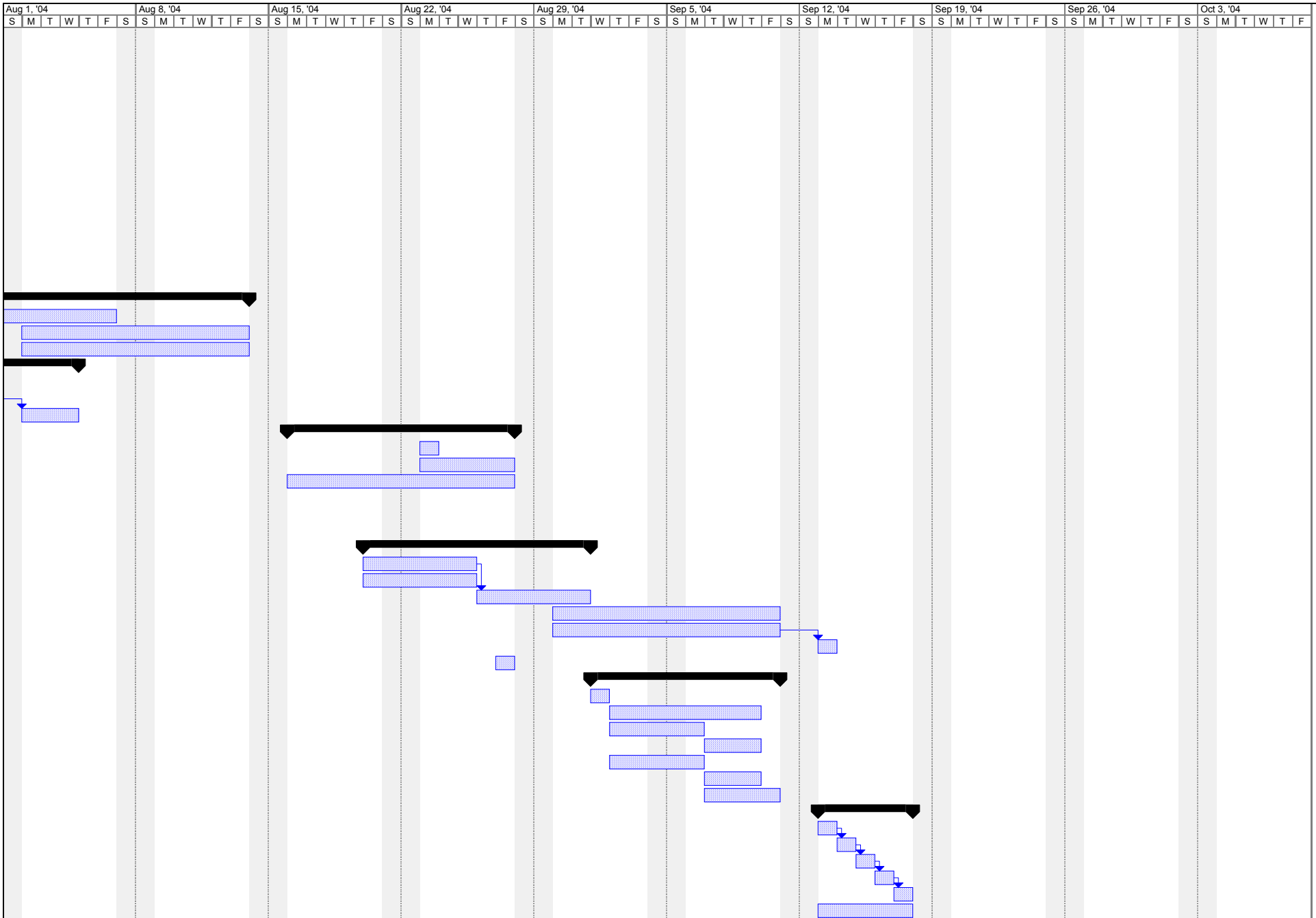
Highlighted Noncritical



ID	Task Name	Duration	Jun 13, '04							Jun 20, '04							Jun 27, '04							Jul 4, '04							Jul 11, '04							Jul 18, '04							Jul 25, '04						
			T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S		
55	Conduct Summative Evaluation	15 days?																																																	

Project: Project1
Date: Fri 4/30/04

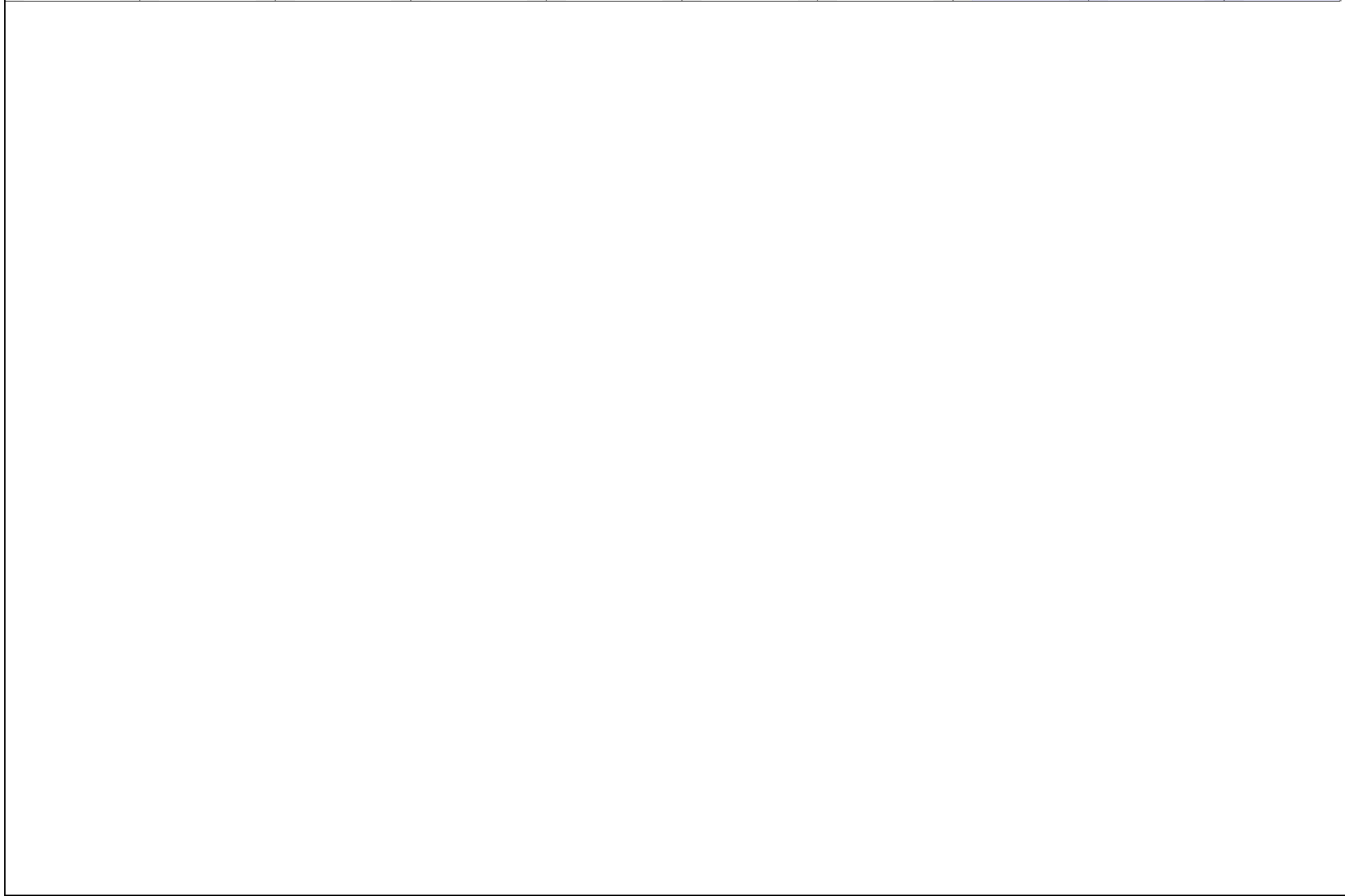
- Task 
- Split 
- Progress 
- Milestone 
- Summary 
- Project Summary 
- External Tasks 
- External Milestone 
- Deadline 
- 



Project: Project1
Date: Fri 4/30/04

Task		Progress		Summary		External Tasks		Deadline
Split		Milestone		Project Summary		External Milestone		

Aug 1, '04					Aug 8, '04					Aug 15, '04					Aug 22, '04					Aug 29, '04					Sep 5, '04					Sep 12, '04					Sep 19, '04					Sep 26, '04					Oct 3, '04																								
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S



Project: Project1 Date: Fri 4/30/04	Task		Progress		Summary		External Tasks		Deadline
	Split		Milestone		Project Summary		External Milestone		

Appendix B
Staff Planning

Staffing Plan

Below is a description of the team members that will be working on the SAS inSchool project. Some team members will be used for the entirety of the design, development and implementation of the project. Other team members will be used on a limited basis depending on the task.

Project Manager - responsible for leading the project: managing its technical development; developing and implementing new services; collaboration with the team members; and managing the overall project.

Lead Instructional Specialist – coordinates staff development for software application for the districts secondary schools and technology integration curriculum. They also disseminate information on students and teachers learning opportunities. The Lead Instructional Specialist will review and revise the training package along with the SAS inSchool trainer. Other responsibilities will be to evaluate the training materials as well as coordinate and analyze relevant data and statistics.

Subject Matter Expert – expert in the field of implementing new instructional technology software into school systems. They will be involved in the entire project planning, design, revisions and implementation of the project.

Graphics Designer –will produce visual solutions to the communication needs of the training materials, using a mix of creative skills and commercial awareness. They will have a working knowledge of the latest computer packages and an understanding of

material costs and time limits, all of which can impact the design. Appropriate medium and styles are selected in conjunction with the client's requirements.

Printer- Provides digital printing, large format printing, and typesetting. Operates and maintains printing and related equipment in proper operating condition. Orders paper and supplies; operates desktop publishing systems; performs some design work; and typesets documents.

Lead Teachers – will assist in the development of the goals and objectives. Their involvement is crucial to the success of the implementation of the SAS inSchools software resource. They will give valuable insight into the development of materials. It is imperative that they have input as well as feel comfortable with the training that will be provided. Lead teachers will be among the first trained.

Outside Evaluator – independent contractor who will be hired part-time to conduct the summative evaluation. The main focus of their contribution to the team will be to collect information and produce a report as to the effectiveness of the training.

Computer Resource Teachers – full time employees of the New Hanover County school system. Their function on the team will be to offer technical support when the training is in process. After the training their main function will be to offer staff development workshops in SAS inSchools at their individual schools. They will also assist with the formative evaluation.

Psychometrician - will conduct psychometric work including test analysis and equating for SAS inSchool computerized testing programs. Their part-time function is to write and evaluate assessment items.

Director of Technology – will work as a member of the team in the planning stages and help to guide the goals and objectives for the over all project. They will also be instrumental in organizing and scheduling the training site that will be used.

Major Event	Activity	Project Manager	Lead Instructional Specialist	Subject Matter Expert (SAS Rep.)	Graphic Designer	Printer	Lead Teachers	Outside Evaluator	CRT's	Psychometrician	Director of Technology
Project Planning	Plan	X	X	X			X		X		X
	Do	X	X	X			X		X		X
	Check	X	X	X			X		X		X
Write Goals	Plan	X	X	X			X		X		X
	Do		X	X							
	Check	X	X	X					X		
Analyze Learners and Context	Plan	X	X	X			X		X		
	Do		X	X							
	Check	X	X	X							
Task Analysis	Plan	X	X	X							
	Do		X	X							
	Check	X	X	X							
Write Objectives	Plan	X	X	X							
	Do		X								
	Check	X	X	X							
Develop Test Items	Plan	X	X	X						X	
	Do									X	
	Check	X	X	X			X		X	X	
Develop Instructional Strategy	Plan	X	X								
	Do		X								
	Check	X	X	X							
Review existing materials from SAS	Plan	X	X	X							
	Do		X				X		X		

	Check	X	X	X			X		X		
Revise existing materials from SAS	Plan	X	X	X							
	Do		X				X		X		
	Check	X	X	X			X		X		
Develop Formative Evaluation Materials	Plan		X	X							
	Do		X								
	Check	X	X	X							
Develop Summative Evaluation Materials	Plan	X	X	X							
	Do							X			
	Check	X	X	X				X			
Develop Learner Materials	Plan	X	X	X			X		X		
	Do		X								
	Check	X	X	X			X		X		
Develop Instructor Materials	Plan	X	X	X			X		X		
	Do		X	X							
	Check	X	X	X			X		X		
Conduct Formative Evaluation on Instructor Materials	Plan		X	X							
	Do		X	X							
	Check	X	X	X							
Revise Instructor Materials	Plan		X	X							
	Do		X	X							
	Check	X	X	X							
Develop Learner Materials	Plan	X	X	X			X		X		
	Do		X	X	X						
	Check	X	X	X			X		X		
Conduct Formative Evaluation on Learner Materials	Plan		X	X							
	Do		X				X		X		
	Check	X	X	X			X		X		

Revise Learner Materials	Plan		X	X						
	Do		X	X	X					
	Check	X	X	X			X		X	
Develop Awareness Materials	Plan	X	X		X					
	Do				X					
	Check	X	X	X	X					
Develop Awareness Materials	Plan	X	X	X						
	Do									
	Check									
Arrange Hotel Accommodations for SAS Representative	Plan		X							
	Do		X							
	Check	X	X							
Locate Training Site	Plan	X	X						X	X
	Do		X						X	
	Check	X	X						X	
Arrange Workshop Space and Equipment	Plan		X						X	
	Do		X						X	
	Check	X	X						X	
Print Materials	Plan		X	X						
	Do					X				
	Check	X	X	X						
Conduct Trial Workshop	Plan	X	X	X						
	Do		X	X			X		X	
	Check	X	X	X			X		X	
Conduct Formative Evaluation of Trial Workshop	Plan	X	X	X						
	Do		X	X			X		X	
	Check	X	X	X						
Revise Workshop	Plan		X	X						
	Do		X	X						

	Check	X	X	X							
Conduct Day 1 Training	Plan			X							
	Do			X							
	Check	X	X	X							
Conduct Day 2 Training	Plan			X							
	Do			X							
	Check	X	X	X							
Conduct Day 3 Training	Plan			X							
	Do			X							
	Check	X	X	X							
Conduct Day 4 Training	Plan			X							
	Do			X							
	Check	X	X	X							
Conduct Day 5 Training	Plan			X							
	Do			X							
	Check	X	X	X							
Distribute Follow-Up Support Materials	Plan	X	X	X			X		X		
	Do		X		X						
	Check	X	X	X			X		X		
Conduct Summative Evaluation	Plan		X								
	Do							X			
	Check	X	X								

Appendix C

Budget

Project Budget

Budget for designing, developing and implementing training of the SAS inSchool software resource.

Personnel

Employee	Hourly Rate	Hours on Project	Total
Project Manager	\$30.00	120	\$3600.00
Lead Instructional Specialist	\$26.00	120	\$3120.00
Subject Matter Expert	\$60.00	120	\$7200.00
Graphics Designer	\$16.00	40	\$640.00
Printer	\$13.00	25	\$325.00
Lead Teachers	\$18.00	40	\$720.00
Outside Evaluator	\$75.00	10	\$750.00
CRT's	\$18.00	60	\$1080.00
Psychometrician	\$30.00	18	\$540.00
Director of Technology	\$30.00	6	\$180.00
		Total	\$17255.00

Materials

Materials	Unit Cost	Quantity	Total
Instructors Manual – pamphlet, handouts and printing	\$10.00	35	\$350.00
Student Manual - pamphlet, handouts and printing	\$8.50	90	\$765.00
Instructional Materials	\$1.00	35	\$35.00
Flyers	\$.50	35	\$17.50
		Total	\$1167.50

