

Templated Web Page Training for Teachers Project Proposal

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Templated Web Page Training for Teachers

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Executive Summary

This proposal has been developed for the Technology and Information Systems Department of Pender County Schools, a school system in North Carolina. The system is implementing a web page initiative, requiring its teachers to create and maintain web pages for student and parent use. The purpose of this initiative is to increase student achievement through more effective and frequent parent access to student records and class information.

The Instructional Technology Department has been charged with the training and support of the teachers on how to create and maintain a web page using the Edline system. The teachers have all created a page, but the level of maintenance has been consistently low, leaving many pages out-of-date and useless to parents.

Based on the front-end analysis, this team determined that re-designing the teacher training will best solve the performance problem. A comprehensive training program that includes opportunities for small group instruction, refresher trainings and self-paced instructional modules best suits the needs of the learners.

This proposal includes a statement of the problem, a blueprint of the tasks needed to develop the face-to-face training and self-instructional modules, including a deliverables

package for both types of training. It is intended to be an easy-to-follow outline for the implementation of such a program, including the necessary tasks, staff and budget.

Problem Statement

The Technology and Information Systems Department of Pender County Schools has introduced a new web page system this school year. Due to the mandate by the superintendent that all parents will be able to access a web link to get specific, customized information about their child and up to date information about their child's classes by Spring of 2007, it is essential that all teacher's update their websites on a regular basis. All teachers have an updatable web page template. The problem is that the teachers are not effectively updating and maintaining their pages. After review of the monthly reports of website updates, it appears that only about 30% of the teachers updated their web sites. The goal will be that at least 75% of the county teachers will update once a month as evidenced by the monthly reports of website updates. The goal should be achieved before the spring of 2007.

There is limited research at this point on the specific effects of teacher web pages on a child's school performance, esteem and overall attitude. However, the intensive research done on increasing school-parent communication makes the positive effects of such interaction evident and undeniable. An article by the National PTA Organization reports these positive effects in schools that encourage parent involvement by using reliable, strong communication methods.

PTA National Standards for Parent and Family Involvement

http://www.pta.org/archive_article_details_1118251710359.html

Effects on Students

- Higher grades, test scores, and graduation rates
- Better school attendance
- Increased motivation, better self-esteem
- Lower rates of suspension
- Decreased use of drugs and alcohol

- Fewer instances of violent behavior
- Greater enrollment in postsecondary education

Effects on Teachers

- Greater morale (and self-esteem)
- Teaching effectiveness (proficiency) increases
- Job satisfaction goes up
- Communication/relations with students, parents, families, and communities improves
- Community support of schools increases

Effects on Parents

- Communication/relations with children and teachers improves
- Self-esteem goes up
- Education level/skills increase
- Decision-making skills become stronger
- Attitude toward school and school personnel improves

These positive effects are seen repeatedly within schools that establish a strong link between the parents of their students and the school community as a whole. Interviews with parents indicate that teacher web pages are an excellent way of achieving this communication when updated. Parents also indicate that not having access up to date information frustrates them and makes them feel that the school does not value their involvement.

The front end analysis of this project suggests that by providing the training teachers need to utilize this system well, updating will increase, teacher frustration with the using the Edline system will decrease, parents will be provided with a consistent way of being involved with their child's education success and students will have a greater chance of educational success.

Proposed Solution and Rationale

Our solution is to develop a two-tiered training program. On one side, we will develop face-to-face training modules. On the other side, there will be self-instructional

modules with trainer support. We have decided on these two approaches in order to meet the unique needs of learners in the educational setting.

The face-to-face training program we suggest is an instructor-led, small group training consisting of no more than ten to fifteen participants within a session. Our front-end analysis indicated that the size of the groups be reduced in order to provide for more individualized instruction. There will be two face-to-face trainings developed in this tier of the program; one refresher and one advanced skills training. The refresher training will be a one-hour seminar consisting of interactive opportunities to master skills previously learned. The advanced training will enhance the teachers' skill set to include those abilities needed to create more customized pages with up-to-date information. It is the intention of this advanced training to enhance and expedite the diffusion of this innovation to all potential adopters in the school settings.

To make this program more flexible, self-paced modules will be developed on the second tier for teachers who prefer that method of delivery. This is to help teachers incorporate the training within their busy schedules. These modules will meet the same objectives as the above face-to-face training, although the delivery will be vastly different. Teachers who encounter problems within the self-instructional modules will be granted access to trainers for needed support. There will be embedded assessment of their learning within the modules in order to validate the acquisition of skills for any credit received.

The purpose of this training is to best equip the teachers with the necessary skills to maintain and update their web pages efficiently and effectively. The front end analysis of this project suggests that lack of these skills has caused the teachers such discomfort with using the Edline webpage system that some are avoiding use of the system completely. In determining why these teachers, who have all undergone previous training, lacked these skills, the front end analysis strongly suggests that class size, limited individualized instruction, time of training and the method of training delivery were significant contributing factors to the performance problem.

The greatest advantage of this package is the flexibility. The adaptability of the varied delivery options allows teachers to learn at their own pace, fit training into their busy schedules, and choose the method of delivery that fits their individual learning style. By offering more training sessions, we effectively address the problem of class size, ensuring that each teacher get the individualized instruction needed to acquire the needed knowledge and skills to update his/her web page.

Thorough training of the teachers is the only solution that will not only achieve the desired contemporary goal of the system but will also lead the teachers to the confidence and competence that they need in order to achieve future goals that will be required of them when the Superintendent mandates the individualization of website sectors to include updated personal information about each student which is accessible to their parents only.

Products

Manuals

Instructor's Training Manual (Refresher and Advanced Course)

The instructor's manual will be divided into three sections: front-end analysis materials, presentation guidance, and reference materials. The front-end materials will consist of a table to contents that includes subheadings for each section in the manual and a "how to use this guide" section that will describe how the manual is setup and how to effectively use the manual. Also, a topic-by-topic section will be included in order to explain the subtopics that are being taught, to offer suggested teaching methods, key points for lectures, and strategies for monitoring activities. In addition, a logistic section will be included to help with classroom space requirements and time requirements. A lesson-by-lesson list of all materials and equipment will be included, along with a section that describes each lesson and how the instructor should teach the overall workshop. A glossary of technology terminology and bibliography will be included in the front-end section to help assist the instructor with the teaching of this course. The presentation section will explain the organization of the course and how the course was

intended to be taught. The lessons will be groups topic and chronologically. Each lesson will list the objectives of the lesson, a list of all the equipment and materials, a detailed description of the lesson procedures, and answer key for any questions, activities, and assessments, and an anticipated time for each lesson. The copies of the PowerPoint presentations and webpage handouts will be provided in this section. The last section in the instructor's guide will be the reference guide. This section will include a copy of the students guide, copies of all the handouts, the background reading on the content of updating web pages, operating the necessary equipment, and Edline system.

Student Training Manual (Refresher and Advanced Course)

The student's manual will be organized into two sections: front-end materials and lesson material. The front-end material section will include a table to contents that includes the lesson titles, a "how to use this guide" section will be included to explain the general layout of the manual. In addition, an overview section will be included to help provide an outline of the course in "student friendly" terms. Also, a glossary will be provided to help assist students with unknown technology terms. A lesson guidance section will be included to help guide students through each lesson. Within this section, students will be provided with the lesson's objectives, a list of materials or equipment, approximated times for each lesson, step-by-step instructions, and embedded questions and activities to help ensure that the learner is engaged and demonstrating proficiency with the objectives of each lesson. Copies of the PowerPoints and other useful handouts will be included in the student's manual.

Trainer Support Manual

The trainer support manual will begin with a table of contents and a "guide for use," this manual will lay out the objectives and approaches that will be used in the self-instructional student manuals. It will also include copies of each activity and strategies for completing each module complete with explanations to the assessment questions. The answers will not be included, but hints and advice for scaffolding the learning of a

struggling student will help the facilitator to understand his/her role. Copies of all activities will be included for the instructor as well.

Student Self Instructional Manual

The student self-instructional manual will begin with a welcoming statement and an explanation on how to use the manual. This module will be performed while the participant is sitting at his/her own computer workstation. He/she will be able to perform the tasks as they are read. The rest of the manual will follow a similar format as the instructor-led student manual, although, there will be extending activities. Also, there will be embedded assessment items to ensure that all objectives and skills have been learned.

Instructional Materials

Assessment Packet

The assessment packet will be embedded within the training manuals. This will include embedded test items and a final summative assessment which will occur after the training is completed. These assessment items will be developed by the instructional technology coordinator and technical writers. Surveys concerning the overall training will be included in the assessment packet.

PowerPoint Presentation

PowerPoint presentations will be provided alongside the lessons. These presentations will help emphasize the important information that will be covered in the training. These presentations will highlight the set objectives and it will assist visual learners.

Awareness materials

Awareness materials used for this training will consist of school emails. These emails will explain the purpose of the training, training dates, times, and locations. Also, it will explain that CEU credits will be offered to those who participate in the training. In addition to the emails, posters will be placed in each school to advertise the training.

Job Aids

At the end of each student manual, a one-page quick reference guide will be provided in order to help support teachers with these newly acquired skills. These reference guides will be detachable so that they will be readily accessible after the training has concluded.

Project Description (Phases of Project)

Phase One:

Project Planned

June 30, 2006 – July 6, 2006

Steps in Flowchart:

Identify components

Identify delivery system

Identify resources

Identify products

Plan summative evaluation

Resources:

Instructional Designer (Pender County Instructional Technology Coordinator)

Technology Director

Webmaster (SME)

Lead Technology Trainer (Learner and Training Advisor)

Assistant Superintendent (Evaluator)

Guided by the thorough front end analysis done by the instructional designer, a meeting will take place to plan the project. Included in this planning session will be identifying the components to be taught within the program and approval of the appropriate delivery system. After the components are identified, the team will discuss and approve the resources for the project based on the plan guidelines for resources as well as the suggestions of the development team members.

Next, the instructional designer will share his ideas for suggested training products. A discussion of the pros and cons of each product will be discussed and if any additions

or changes need to be made to meet the full potential of this program this will be decided upon at this time.

After the meeting, the instructional designer will create a rough draft of the plan including a list of desired resources, components to be taught, and goals of the program. The instructional designer will forward the program draft to the assistant superintendent and they will decide the best methods of summative evaluation of the program's effectiveness.

Phase Two:

Content Planned

July 6, 2006 – July 27, 2006

Steps in Flowchart:

Generate task analysis

Generate objectives

Determine instructional strategies

Determine assessment items

Product development (prototype outline)

Design outline of manuals

Design written content

Design graphical representations ideas.

Resources:

Instructional designer

Technology Director

Lead Technology Trainer

Webmaster (SME)

Technical Writer 1 (English)

Technical Writer 2 (Computer Science)

Graphic Designer (Art teacher)

Task and Objectives

Phase II begins with a complete task analysis of the procedures involved in webpage design and construction with the Edline system. From this analysis, the design team will generate the objectives of each lesson in the training program. Two days are given to this task in order to allow for conversations with Edline support, and a review of program

information as needed. Once the objectives are in place, the objectives will be divided into basic and advanced categories. All basic training whether face to face or self directed will have the same objectives. The same will apply to both advanced trainings, despite the differences in delivery methods. This will assure that the same objectives are learned by all the teachers in the training program.

Instructional Strategies and Assessments

Once the objectives are decided and categorized, the content planning team will decide upon the best instructional strategies to help the learner master these objectives. Both the instructional designer and the lead technology trainer are experienced teachers, have a personal knowledge of the teachers they are training, and have training experience that make them well suited to decide these strategies. The webmaster will consult on these strategies as the subject matter expert.

The content planning team will be joined by the assistant superintendent in the development of the test items that will assess whether or not each objective is meant as this is one of his areas of training.

With the objectives established, Technical Writer 2 will be ask to join the content planning team and a basic prototype outline will be created from which all those who are participating in the designing of the manuals can work.

Written Text Drafting Begins

Designing of the manuals will take place in three steps. In the first, our lead technology trainer, webmaster, and the instructional designer will each spend three full working days to draft outlines of written portions of the manuals based on the goals, objectives, instructional and assessment strategies decided upon in the beginning of the content planning phase.

During, the instructional designer will meet with the technical writers to draft written portions of the manuals. After those changes are made, the work will be edited by the tech writers in Phase III.

In the third step, the instructional designer will meet with the graphic designer (art teacher) to discuss the types of graphical representations that will be needed for each manual. Technical Writer II will be asked to participate as well to discuss and decide on any subtext that will need to go under a graphical representation.

Throughout this process the Instructional Designer will be the constant that keeps all of the groups in tune with what the others are doing.

Phase Three:

Development and Drafting of Instructional Products

July 27, 2006 – August 9, 2006

Steps in flowchart:

Workshop Deliverables for Face to Face Trainings

Instructor training Manuals (refresher & advanced)

- *Graphic Designs of Manual*
- *Editing of Manual Content*
- *Typing of Manual Content*
- *Organization of Manuals*

Student training Manuals (refresher & advanced)

- *Graphic Designs of Manual*
- *Editing of Manual Content*
- *Typing of Manual Content*
- *Organization of Manuals*

Workshop Deliverables for Self Directed Training

Trainer Support Manual (How to assist self directed learners)

- *Graphic Designs of Manual*
- *Editing of Manual Content*
- *Typing of Manual Content*
- *Organization of Manuals*

Student training Manuals (Self directed refresher and Advanced)

- *Graphic Designs of Manuals*
- *Editing of Manuals Content*

- *Typing of Manuals Content*
- *Organization of Manuals*

Presentation Materials for Face to Face Trainings

- *Graphic Development for PowerPoints*
- *Typing of PowerPoints text*
- *Editing of PowerPoint Lessons*
- *Posting of Presentation Materials on Website*

Resources:

Graphic Designer

Technical Writer 1 and 2

Secretary

Webmaster

Lead Technology Trainer

Instructional Designer

This phase is the “construction” stage of the project. It will include the creation of two (2) instructor manuals, two (2) student manuals, a self-directed student support manual for facilitators of the self-instructional modules, two (2) student self-instructional manuals, and presentation materials for two (2) different workshops. One of the workshops will be a refresher course and the other an advanced course.

The teams creating the manuals will be the same for both groups of tasks. The content for the manuals will have been created in previous planning meetings, so this construction will be concentrated on organization and writing of scripts, explanations and editing of the previously planned content. The Technical Writers will take the lead in drafting the written content, while the Graphic Designer focuses on creating charts, graphical representations and pictures for inclusion. The creation of the student manuals will follow the same steps as the creation of the instructor guides, although the content will be limited to explanations and activities, instead of instructor outlines and scripts.

Instructor Manuals for Face-to-Face Trainings

The team will begin by developing the instructor manuals for both the refresher and advanced trainings. The instructor manuals will begin with a table of contents and a

“how to” guide for using the manual. Included in this section will be an outline of the objectives for the lesson and a timeline that describes how the workshop will progress. It will then be divided into sections based on the objectives of the workshop. Each section will include a script that follows a PowerPoint presentation, a glossary, a guided activity and a self-guided activity that the students will perform. This self-guided activity will serve as the assessment for each objective of the lesson. This organization will occur in the trainer manuals for both the refresher training and the advanced training.

Student Manuals for Face-to-Face Trainings

The student manuals will be similar to the trainer manual in organization, but will not include the instructional information. The first part of the student guide will be front-end material. It will include a table of contents and a “how to use this manual” section to describe to the student the objectives of the training and the purpose of the manual. There will also be a quick reference page in the back of the manual that will serve as a job aid, containing quick commands for teachers who wish to post them on their workstation in their classrooms. The heart, or center of the manual will consist of the lesson, divided by objective. Each objective will contain one guided lesson that will be performed with the instructor and one activity that will serve as the assessment. At the end of each section, there will be extending activities that can be used as practice at a later date, encouraging teachers to use the manuals as a method of scaffolding their learning.

Trainer Support Manual for Self-Instructional Training

After the student and trainer manuals have been completed, the team will utilize the two documents in creating the self-instructional guides for the self-directed trainings. Three documents will be created for these trainings. The first document will be the “Trainer Support Manual.” Beginning with a table of contents and a “guide for use,” this manual will lay out, in brief format, the objectives and approaches that will be used in the self-instructional student manuals. It will also include copies of each activity and strategies for completing each module complete with explanations to the assessment questions. The answers will not be included, but hints and advice for scaffolding the learning of a

struggling student will help the facilitator to understand his/her role. Copies of all activities will be included for the instructor as well.

Student Self-Instructional Manual

The student self-instructional manual will begin with a statement welcoming the student to the module and explaining how to use the manual. This module will be performed while the participant is sitting at his/her own computer workstation. He/she will be able to perform the tasks as they are read. The introduction will describe the structure of each lesson – a statement of objectives, a short description of what is to occur, a guided lesson that the student will perform while reading and an assessment activity with questions that will measure the student's performance. The guided lesson will contain graphical representations of the activities to be performed, complete with screenshots of the web page so that the student will be able to match the task with their computer screen. The manual will be divided into lessons based on the number of objectives and will have an assessment activity that will coincide with each. The back of the manual will contain a glossary of key terminology, a page that can be cut out and used as a job aid and a certificate that will be signed by a supervisor indicating completion of the course.

Construction and Organization of Instructional Materials

All of the information will then be handed over to the Secretary, who will type and organize as parts of the manual come to completion.

After the student and instructor guides have been created for both trainings, the team will develop the PowerPoint presentations that will be used for both the introductions to each objective and the guided lesson. The PowerPoint presentations will contain screenshots and graphics, showing the teachers, step-by-step, how to perform the desired skills. The Graphic Designer, Instructional Designer, Lead Technology Trainer and the Webmaster will collaborate on this instructional material and post the presentations on the county website.

Phase Four:

Formative Evaluation & Revision of Instructional Products

August 9, 2006 – August 29, 2006

Steps in Flow Chart:

Formative Evaluation of Instructional Package

Revise Manuals

- *Revisions of Instructors Manual*
- *Typing of Manual revisions*
- *Revision of Student Manuals*
- *Typing of Manual Revisions*
- *Organization of Instructor & Student Manuals for Distribution*

Manuals Completed

Revise Presentation Materials

Presentation Materials Completed

Resources:

Technology Trainer 1

Technology Trainer 2

Technology Trainer 3

Technology Trainer 4

Lead Technology Trainer

Technical Writer 1 and 2

Instructional Designer

Secretary

Webmaster

Lead Technology Trainer

Evaluator/Asst. Superintendent for Instruction

There will be three steps in the formative evaluation process. The first two steps will take place shortly after the construction of the manual drafts. The first review will take place in the form of a one-on-one interview with the Webmaster while he is performing the tasks in the individual modules. The Instructional Designer will ask a series of questions which were designed earlier about the accuracy of the information, the quality of the writing and ease of understanding. He will also identify any problems with the objectives, assessment items and other areas of the module.

The second step will involve the Technology Trainers. One trainer will take the instructor-led refresher course, taught by the Lead Technology Trainer and another will train with the Instructional Designer in the advanced module. The remaining two will

perform the self-instructional modules. All participants will answer an extensive survey about the instruction and complete the embedded assessment. The survey will evaluate the modules for user-friendliness, appropriateness of objectives, effectiveness of activities and support offered through the manual script, PowerPoint presentations and job aids. This information will then be given to the Evaluator.

The findings by the Evaluator will then be relayed to the Instructional Designer who will charge the Technical Writers with making the necessary revisions to both the instructor and student manuals. These changes will be passed to the Secretary, who will make any necessary corrections to the main document, and will pass these documents on to be printed and organized for distribution. The Instructional Designer, Webmaster and Lead Technology Trainer will then make any necessary changes to the presentation materials.

Phase Five:

Preparation of Physical Environment and Awareness Activities

August 24, 2006 – August 29, 2006

Steps in Flow Chart:

Post Presentation Materials to Web Site

Prepare Awareness Documents

Posting of Awareness Documents

Select Workshop Venue

Arrange Workshop Space

Arrange Presenter Equipment

Resources:

Webmaster

Instructional Designer

Instructional Technology Coordinator

Lead Technology Trainer

The presentation materials that have been created for the training sessions have been revised. The webmaster will be responsible for posting these PowerPoint presentations to the web site.

The instructional designer and instructional technology coordinator will be responsible for creating a mass email that will explain the purpose of the training, training dates, times, and locations. Also, it will include an explanation of the CEU credits that will be offered to those who participate in the training. In addition to the emails, handouts will be sent through the interschool postal service, providing an overview of the training.

Initial training for technology trainers will be held at a local high school. Because of the technological needs for the training, the training will be held in the computer lab; therefore, setup for the training will be minimal. The lead instructor trainer and webmaster will be responsible for setting up the needed presenter equipment and ensuring that the computers and internet within the computer lab are working properly. Any equipment that is not working properly will need to be removed and sent for repair in order to ensure that every student has a computer to use for the training.

The training that the trainers will implement will be conducted at their individual schools. Therefore, the trainers will be responsible for reserving their computer lab for the workshop date and time. Also, they will be responsible for setting up the needed presenter equipment and ensuring the computers and the Internet are working properly for their trainees.

Phase Six:

Training of Trainers and Workshops

August 25, 2006 – September 1, 2006

Steps in Flow Chart:

Conduct Trainer Workshop I (Refresher courses)

Conduct Trainer Workshop (Advanced courses)

Assessments of Trainer Workshop Results Summary

Trainers will implement workshops at individual schools

Assessment of Student Workshops Results Summary

Resources:

Instructional Designer

Instructional Technology Coordinator

Webmaster

Evaluator/Asst. Superintendent for Instruction

Lead Technology Trainer

Technology Trainer 1, Technology Trainer 2, Technology Trainer 3, Technology Trainer 4, Technology Trainer 5, Technology Trainer 6, Technology Trainer 7, Technology Trainer 8, Technology Trainer 9, Technology Trainer 10, Technology Trainer 11, Technology Trainer 12, Technology Trainer 13, Technology Trainer 14, Technology Trainer 15

At the training the trainers' workshops, the instructional technology coordinator will use the instructional materials that were designed and developed earlier in this proposal to instruct the trainers. This will enable the technology trainers to return to their own schools and conduct the individual school workshops. After this initial training has been conducted, the technology trainers from each school will have the capability to efficiently train their teachers and provide on-going technology support. Also, if there are new employees who enter a school, these trainers can provide technology training for these newly hired employees.

Phase Seven:

Summative Evaluation

September 4, 2006 – October 3, 2006

Steps in Flow Chart:

Summative Evaluation Conducted

Summative Evaluation Compiled

Summative Evaluation Submitted

Summative Evaluation Reviewed

Write Reports

Resources:

Instructional Designer

Instructional Technology Coordinator

Evaluator/Asst. Superintendent for Instruction Technology Director

Within this phase of the proposal, the summative evaluation will be conducted. The instructional designer and technology coordinator will conduct and compile the summative evaluation while the technology trainers are implementing the training using the developed deliverables. After the summative evaluation has been compiled and submitted, the Assistant Superintendent of Instruction will review the summative

evaluation. The Assistant Superintendent and the instructional designer will write the final report which will review the results from the summative evaluation.