EXAMINATION OF THE DESIGN AND DEVELOPMENT OF AN INTERNET-BASED INFORMATION FORUM CREATED AS A RESULT OF INTERACTIONS BETWEEN A SUBJECT MATTER EXPERT AND AN EDUCATIONAL TECHNOLOGY CANDIDATE

by

Alice Bicudo

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Signature: _____   9-6-03
            Alice Bicudo, Student   Date

Approvals:

            _____   9/8/03
            Dr. Renee Eggers, Thesis Advisor   Date

            _____   9/9/03
            Dr. Donna McNierney, Committee Member   Date

            _____   9/11/03
            Dr. Susan deBlois, Committee Member   Date

            _____   9/19/03
            Peter J. Kasvinsky, Dean of Graduate Studies   Date

ABSTRACT

The following analysis describes the graduate candidate's experience as a designer of technology applications, when collaborating with a subject matter expert (SME). The application in question involved the design of a descriptive website for the program Clinical Practice to education administration graduate candidates at a midwestern university. The analysis begins with an acknowledgment of the mentors that motivated the graduate candidate in the identification of one's educational philosophy. In chapter one, the graduate candidate starts with an introduction to the thesis in terms of the nature of the capstone project itself, followed by a description of the Bridge Clinical Program with a background analysis, and the professional background of those involved in the website's project. Chapter two consists of a literature review about the website and other technological applications when seen under the guidelines of instructional design and visual literacy. In chapter three the graduate candidate discusses the procedures or steps taken in the creation of the website. Finally, in chapter four the graduate candidate describes the content and the technology features used on the website's pages in addition to a conclusion regarding the lessons learned while creating the website.

To my children, Tina and Sofia, whose future depended on my professional success. To my parents, for their love and constant support. To my mentors, who encouraged and motivated me to become the best educator I could be.

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AKNOWLEDGMENTS

My Mentors

In this part I will discuss the impact of three important people who, as Youngstown State University professors, helped me become an educator in the United States. Dr. Richard McEwing, who taught my first class in education *Introduction to Education*, Dr. Susan deBlois, who taught *Education and Society*, and Dr. Renee Eggers, who taught most of the *Educational Technology* courses.

In order to truly understand the full impact my mentors had and have in my educational career, I must first discuss my personal educational background prior to deciding on becoming a teacher. I first began studying education because I wanted to be a Spanish teacher. I am a Portuguese woman who grew up in the Azores islands and had no experience or knowledge regarding other educational systems beside the one I grew up in. In addition, my mother was a teacher in the Azores, and all my life I was connected and involved with our educational system. For me, to learn another system was, at times, a bit daunting. I wondered whether or not I would ever be able to deal with the variety of conceptual meanings about schools, politics, students' heterogeneous backgrounds, and other issues that are at the core of the educational system in the United States. Yet, I wanted to be a teacher, and I felt that it did not matter which language or country I would be teaching in. However, and in spite of all my fears, I was able to become a Spanish teacher, and I am truly happy that I am teaching in this country's educational system. Still, I couldn't have done this alone; it took exceptional

mentors to guide me and make me reflect about myself and what my role would be as an educator in the United States. My mentors gave me the motivation and the courage to learn more in order to became the best educator I could be. I will forever remember and reflect on all the lessons they taught me.

Dr. Richard McEwing Ph.D.

At the onset of my educational career, I took a class called *Introduction to Education* given by Dr. Richard McEwing. I believe that I made my decision to become an educator during this class. Dr. McEwing explored all of his students' talents, abilities and made us all reflect upon how, as future teachers, we would impact those we taught. I would like to describe the small, yet meaningful exercises given in Dr. McEwing's class that permitted this introspective reflection; however, I decided that I would be cheating others from experiencing this phenomenon themselves. Still, I want to explain what his lessons gave me. In this class, I learned about this country's educational history and its corresponding philosophies, which were concepts that I knew very little about. Understanding these concepts established a sense of direction and the basis for my own educational philosophy. In addition, Dr. McEwing brought to my attention my ability to motivate others and my potential, as an educator, to create exciting learning opportunities for students. Furthermore, I was exposed to a variety of readings and movies, which described the multitude of methods and philosophies present in the American educational system. At the end of my class, I wrote in my

journal, (a class assignment) a narrative about what I had learned. Below is an excerpt of one of my journal entries:

"EDUCATION 501   "The Awakening"

I am glad that I attended this course; it definitely enlightened me .... I now have an idea of how schools are governed in the United States, and I was able to see the specific struggles that reformists went through to see change happen; the one that impressed me most was the work of Horace Mann; it helped enhance my previous belief that change is possible when you put yourself out there. I now have an idea of the importance of the hidden curriculum. I also now realize the political implications of the teaching profession, which saddens me; it definitely puts a different spin into my thoughts".

Concluding, I now feel different about the teaching profession but not about teaching itself. I am now better prepared to deal with the different aspects of the profession. When I am ready to find a job, I will now have my own criteria about what type of school I am willing to work in; it will depend greatly on what kind of philosophy they adopt, and most importantly, it really doesn't have to be a financially rich school, but it must be instead rich in ideas and open-minded people. I now have better tools to survive in my profession. I am excited about teaching, but feel that there are areas that I would like my teaching education to focus more; the future will tell how my upper division courses will prepare me. If all my courses can teach me as much as this one has, I will be in good shape to face my profession and my students. "

Dr. Susan deBlois Ph.D.

During my undergraduate degree, I took another magnificent class called *Education and Society* that was taught by Dr. Susan deBlois; this course further expanded my philosophical ideas, particularly in terms of the political and societal implications in the United States' educational systems. This class was an "eye opener" to the present dilemmas in the American school system and our society. It renewed in me my sense of children's true vulnerability, and the need to become a child advocate. One had "no way out" when dealing with mind provoking issues. Topics like child abuse, juveniles tried as adults, and many others left students engaged in debate to the point that when class was over discussions were still happening. Furthermore, we watched, interpreted, and discussed movies; for instance, *American History X, American Beauty,* and others, which were representatives of the inadequacies in this country's society, and the important roles played by educators and others, in these movies, who made a difference in the live's of those they touched. In addition, books like *A Kind and Just Parent* by William Ayers and *A Child Called It* by David Peltzer created and opened doors for lively and interesting discussions. I carried with me the thoughts of my classmates and of the classroom guest speakers who brought unique perspectives on issues that directly or indirectly affect our present educational system.

Dr. Renee Eggers Ph.D.

Another important educator was Dr. Renee Eggers. Dr. Eggers gave me the opportunity and the motivation to learn about educational technology and how to incorporate technology within learning environments. It was this course that later brought me to my masters program in the field of educational technology. This class gave the last "combination number" or the "key" necessary to truly apply and expand upon my concepts on educational philosophy and my approach to different methodologies for creating meaningful learning opportunities. During this class, I created my first webquest, and I remember being truly amazed and excited at the moment when I formed my first "hyperlink."

At the onset of this course, we were given an assignment that involved describing what we thought about computers in the classroom. Below are some excerpts taken from my reflections:

"The idea of having every classroom in America with a computer at each desk for each student is a dream that all those in education fields should try to accomplish. I consider myself to be one of those computer lovers who doesn't quite know how she gets anywhere but keeps on trying to understand more. I would like to be one of those teachers who teaches not only in regular classrooms, but also in virtual ones. I want my classroom to be a hands-on learning center. My field of work is Spanish, and there are incredible possibilities to make a lesson more interesting and easier with the help of the computer. Computers in the classroom will only enhance the curriculum because more can be taught and learned in less time, and most of all, fun and learning can go hand and hand. It's

CHAPTER I

INTRODUCTION AND BACKGROUND

The graduate candidate would like to begin by saying that throughout graduate school a true enjoyment occurred with the experience of learning the field of educational technology; this field has allowed the graduate candidate to apply problem solving techniques, critical thinking abilities, and creative skills to really make an impact in a variety of learning environments. Furthermore, the graduate candidate enjoyed the ability to use an array of multimedia tools to enhance learning for all types of educational environments, which included creating webquests, software, and websites. However, at this point the graduate candidate would like to focus on the last component of this graduate candidate's education, which is a capstone project done in the form of a case study in which the graduate candidate assumes the role of an educational technologist in a real world experience with a thesis written about the experience.

At the onset of this experience, the graduate candidate felt the realization that comes at a point in one's life in which discoveries are made about what strengths and weaknesses one has, and the discovery to accept one's own limitations. The graduate candidate discovered areas in which work must be done to improve oneself and areas in which one feels quite able to do what is required of an Educational Technologist. Thus, the graduate candidate would like to take a closer look at the experience itself, in particular, the aspects in which the graduate candidate felt less than prepared to handle appropriately. The graduate candidate hopes that those who read the "trials and tribulations" during this process will gain a deeper knowledge of what is involved and

required in this exciting field when creating learning tools for others. In this chapter, the graduate candidate describes the project and the project analysis in terms of the nature of the project, those involved in it, and the analysis of resources needed to create it.

The Bridge Clinical Program
Website Project

In this section, the graduate candidate discusses the creation of a descriptive website for the program called the *Bridge Clinical Program* (BCP). The BCP consists of a three-course requirement given to graduate students who plan to acquire an administrative license at a particular midwestern university education administration program. The subject matter expert (SME), who is the program's director, expressly wanted the program to be put on a website in order to transmit knowledge about and broaden the scope of the BCP. In addition, the SME, who is also responsible for the instruction of the three-course program requirement, wanted the website to be viewed by school administrators responsible for the administrative candidates throughout their BCP.

Project Description

The BCP is an important component of administrator preparation programs. In addition, the program connects the gap between theory and practice by providing the opportunity for administrative candidates to demonstrate and apply the knowledge and skills needed to become effective leaders in school administrations. The website provides information regarding the most important components of the program. The components

involve an overview about the history of the program, testimonials of recent experiences by graduate administrative candidates and administrative leaders, and survey results about the effectiveness of the BCP. This information is meant to serve as a guide for future administrative candidates and their respective administrative leaders and to provide information to other universities about the BCP.

Project Analysis

At the inception of the project, the graduate candidate created a general analysis of the program in order to examine the different aspects related to the project. This part begins with a complete website visitor analysis which included a review of the visitors' background knowledge and a review of the visitors' similarities and/or differences in terms of how these differences relate to demographical aspects, among other issues. In addition, a professional background assessment was made regarding those involved in the creation of the website, and which resources were needed in order to create the website. For instance, an analysis was done regarding which computers and software were needed in order to create the website. Finally, as part of the analysis, the graduate candidate examined whether or not limitations were present that would limit or hinder the successful completion of the project.

In terms of the characteristics of those who will benefit from using the website, the graduate candidate discovered two types of visitors. However, some characteristics are common to all the visitors; all visitors are adults, both male and female, with different ethnic and racial backgrounds, and all are involved in different areas of education administration. In the first category, the visitors are administrative candidates that have

different educational qualifications in terms of degrees obtained at universities; some visitors are seeking a Masters Degree, while others are seeking an Ed.D. in Education Administration. Still in this category, some visitors have already obtained the degrees mentioned above and now are seeking an administrative license, which can be either a principal or superintendent's license. The second category of visitors are those who have already obtained their administrative licenses and/or degrees and now work in different k-12 school settings in administrative leadership positions, and due to their professional role, these administrative leaders have been asked to participate in the program as guides for the midwestern university's administrative candidates during their field experiences. It is important to note that these visitors, in order to participate in the program, did not need to have graduated from the BCP at the midwestern university. In addition, visitors who are administrative leaders have the responsibility of communicating with the program's director regarding their administrative candidates' performance throughout the administrative candidate's BCP field experience, as part of the requirements set forth by the program.

Another important component, regarding the two categories of visitors, had to do with the knowledge base required in terms of using technology. In regards to the administrative candidates, and according to the SME, all have computers and are familiar with the Internet and email usage. And, according to the SME, all administrative leaders, who work closely with the university, have knowledge and use the computer regularly; they use the Internet and email features to communicate with the program's director about performance and evaluation issues on the different administrative candidates they supervise. However, in the future and in order to view the site, visitors will need to feel

comfortable when using a computer, exploring the internet with Internet Explorer 6.0 or higher, and using email. The email feature allows one simply to ask for information about the program and/or communicate with the webmaster (graduate candidate) regarding navigation issues when browsing through the website.

Subject Matter Expert

The SME is the creator of the *Bridge Clinical Program*; in addition, the SME is a professor of Educational Leadership with extensive experience in clinical education programs, including interdisciplinary preparation programs for child-serving professionals. The professor/SME earned a juris doctorate degree from a law school at another midwestern university. Subsequently, the SME was employed for over 20 years by that same midwestern law school as an attorney, director of a federally-sponsored center for promoting educational equity in school districts in the six state Great Lakes region, and as an associate professor of educational policy, planning and administration. Since 1992, the SME has served in his present position as professor in the Ed.D. Program in Educational Leadership where the development of the Bridge Clinical Model has taken place. In addition to the SME's research and program development activities in the area of technology-mediated clinical education, the SME pursues an active teaching and research agenda in the area of education law, politics and policymaking, and change in complex social organizations. Furthermore, the development of the BCP has been spurred and enhanced by the contributions of numerous administrative candidates and cooperating administrators in several midwestern states, as well as by several faculty

members who have assisted in implementing the model and who have made numerous suggestions for its improvement.

Website Designer

The graduate candidate is responsible for designing the introduction and orientation to the *Bridge Clinical Program*, which is based on information provided by the SME. This web-based orientation was completed in partial fulfillment of the thesis requirement in a master's degree in Educational Technology at Youngstown State University. The graduate candidate, a native of Portugal who is fluent in four languages, has done many projects evolving the implementation of technology to current classroom curricula. Additionally, the graduate candidate is a Spanish teacher and an instructional technology resource person in a k-12 school district in northeastern Ohio. Moreover, in the past the graduate candidate has been a frequent consultant on instructional technology-related projects for the Department of Education Administration at the midwestern university that houses this project.

Resources and Other Considerations

In terms of technology or other resources, the graduate candidate used a computer with Internet access, a printer, email, and Microsoft Word 2002 for creating word documents. Additionally, the graduate candidate used Microsoft FrontPage 2002 for creating the website and Microsoft Producer as the video editing software.

In regards to time and time lines, the graduate candidate met periodically with the SME to discuss and evaluate the project's design and established time lines for materials

to be made available to the graduate candidate. Regarding limitations and constraints, the graduate candidate identified a limitation concerning the software compatibility between the computer used by the graduate candidate and the computer used by the SME. The graduate candidate used a Windows computer and the SME used a Macintosh computer; limitations occurred because of the time spent in saving and opening files. In addition, the SME did not use the same type of software, FrontPage 2002, in order to view and add content to the website. Subsequently, the graduate candidate had to make CD copies of the website each time changes were made and sent to SME for evaluation.

CHAPTER II

LITERATURE REVIEW

In this section, the graduate candidate looks at specific literature that influenced all aspects involved in designing the website for the BCP. It begins with a discussion on instructional design and its relationship to the procedures in analyzing the visitors for the website. In addition, the graduate candidate examines the concepts regarding adult learning theory and the principles in visual literacy as it relates to the navigational components used to create the website.

The focus of this website project was to transmit the ideas of the *Bridge Clinical Program* (BCP). As mentioned earlier, the website project is descriptive in nature; therefore no instruction was to take place. However, the instructional design systematic procedures helped the graduate candidate in designing the website by relating the processes used in the analysis of learners to the analysis of the visitors for the BCP website. "It is critical that designers consider their target audiences, as this knowledge will be important in designing instruction that is effective and interesting to learners" (Smith & Ragan, 1999 p. 46). In addition, "The most important factor for a designer to consider about the audience is specific prior knowledge" (Smith & Ragan, 1999 p. 55). In this case, the graduate candidate transferred the specific components of analyzing the learners in terms of their prior knowledge and cognitive abilities to the analysis of the same components regarding the website visitors. The website visitors have a specific prior knowledge in common in terms of the subject matter. As it happens, and according to the SME, the visitors are knowledgeable about the varied components of educational

preparation administration programs in addition to sharing knowledge on how to navigate and read information on a website. This aspect simplified the choices made by the graduate candidate in terms of the organization of text presentation. Thus, the graduate candidate, along with the SME made selections regarding how the distribution of information was to take place by taking into account the level of education and cognitive ability visitors have, in addition to the visitors' familiarity with the subject matter; these decisions involved the choices made as to the vocabulary and terminology which dealt with course descriptions and requirements that are commonly observed in midwestern universities in which programs of education administration are given.

The visitors' prior knowledge analysis and the decisions made following the analysis provided the graduate candidate with the basis to make appropriate choices in terms of deciding the design for the website. Subsequently, the graduate candidate based the web design choices on the adult learning theory and visual literacy guidelines.

In regards to the navigational structures, the mature audience in question needed to feel in control on how they obtain information. "Adults are autonomous and self-directed. They need to be free to direct themselves" (Lieb, Stephen, 1991, p.1). The graduate candidate used this concept by giving clear descriptions on the home page about the content on each of the websites' main pages thereby, allowing the visitors to freely choose which page contained the information in which the visitors were most interested. "Ensure that the program has the appropriate types and amounts of user control and determine whether advice on its use is necessary" (Alessi & Trollip, 2001, p.427). The authors gave this statement in reference to the type of user control necessary when creating computer programs. However, the graduate candidate felt that this concept could

also be adapted to the creation of a website. Using this concept, the graduate candidate provided some navigational instructions on the home page and used a main menu with links to the most important pages that could be easily accessed at anytime.

In terms of visual literacy principles which are the principles that designers use in order to make visually pleasing and easy to navigate websites or any other technology designs applications; the graduate candidate based the design choices on the principles of repetition, proximity, and the principles regarding color and graphics that are commonly used when designing websites. The first principle to be taken in consideration was the concept of repetition. "The concept of repetition is that throughout a project you repeat certain elements that tie all the disparate parts together, each page in the website should look like it belongs to the same website, the same company, the same concept" (Williams &Tollett, 2000, p.144). This concept gave the graduate candidate the ability to create a more uniform website that would allow the audience to know which page and which website they were looking at. Each of the BCP website's pages contain repetitive elements, in terms of background colors, graphics, text size, font and colors. In addition, "besides unifying the website, the repetitive (consistent) navigation system helps visitors get the most out of your site because they don't have to learn their way around again on every new page." (Williams & Tollett, 2000, p.144).

Another principle in visual literacy involved the proximity of the graphics, text, and pictures within each webpage. In this case, the graduate candidate centered the main repetitive elements (graphics, headings and picture). "The principle of proximity refers to the relationships that items develop when they are close together, in close proximity.

When two items are close, they appear to have a relationship, to belong together"
(Williams & Tollett, 2000, p. 110).

As for color and graphics, the graduate candidate used the color scheme based on
the "tilt" template theme given in FrontPage 2002. "As you create graphics for headings,
subheads, and navigation icons, use the colors from your color scheme as the
predominant colors in your graphics. This helps each page have the same look and feel no
matter how different the content is on each page" (Williams & Tollett, 2000, p. 158).
Another consideration involved the idea of choosing browser safe colors, also called
web-safe colors such that no matter which platform or browser is used by the website
visitor, the appearance of the website maintains the same consistency. "Even though most
monitors can display at least an 8-bit color (256), there are only 216 of these colors that
are common to the browsers and operating systems of different computers. If you use any
other color outside of the common 216-color palette, the browser will convert the odd
color to the closest color it can find in the system's palette, or mix several colors to try to
match the odd one as closely as possible"(Williams & Tollett, 2000, p. 167). As
mentioned earlier, the use of the theme and colors in FrontPage 2002 template "tilt"
allowed the graduate candidate to create a website that can be viewed consistently across
different platforms since the colors available in the FrontPage 2002 website templates
obey the 216-color palette rule.

Concepts and principles from instructional design, adult learning theory and
visual literacy were effectively used to create the website. These concepts and principles
gave the graduate candidate the tools to create an informational website for a mature

audience who has a strong knowledge in both the subject matter involved and the

technological expertise to navigate successfully when viewing the website.

CHAPTER III

PROCEDURE

In this section, the graduate candidate describes each of the steps taken throughout the creation of the website. This description is based on weekly notes taken by the graduate candidate. Below is a narrative of the nine weeks involved in the creation of the website.

Once the decision was made regarding the topic for the project, the graduate candidate met with the SME to review which information was to be put on the website. At that time, the SME gave the graduate candidate a written manual about the BCP, which was authored by the SME. The SME wanted the graduate candidate to read and review the manual in order to become acquainted with the program. After reviewing the manual, the graduate candidate met with the SME to choose the most important ideas in the written manual that needed to be used to create the webpages for the website.

By the time the main points of information for the website were decided upon, the graduate candidate began the organizational process for the project itself. Two large manila folders were created. The first manila folder labeled "SME written manual" contained each of the parts (A through F) of the written manual, and each part was put into individual folders inside the manila folder. Part A had information about the BCP's background, description, goals and objectives, and part B described the BCP's clinical processes and the academic requirements in technology. In part C, there was information about one of the clinical projects called "The Integrated Project," and in part D, there was information about the guidelines for the planning and the implementation of the clinical

experience. Finally, part E discussed information about the roles and responsibilities of the cooperating administrators, and part F offered suggestions for the cooperating administrators. The second manila folder labeled "website project" contained three folders; the first folder had information about the previously chosen pages in the written manual that were to be made into webpages for the website, the second folder had information about the research done throughout the creation of the website, and the third folder had information about the thesis requirements and contact information for both the university thesis supervisor and the SME.

After finishing the organizational components, the graduate candidate began putting together an analysis for the project. The project analysis (Chapter I, p. 4-8) contained an initial description of what was needed to create the website in terms of the website visitors and what resources were available to create it. Afterwards, the graduate candidate began creating blank website pages in order to form the html files with the titles corresponding to each of the parts of the written manual; an index page and six main webpages were created.

During the next two weeks, the graduate candidate presented the first project analysis to the thesis supervisor, Dr. Renee Eggers. After an informal evaluation the graduate candidate began writing the second/revised project analysis and subsequently presented it to the thesis supervisor for another evaluation and comments. Once again the graduate candidate made the appropriate corrections.

During the third week, the graduate candidate met with the thesis supervisor to present the revised project analysis and to discuss how the project was progressing. At this time, the thesis supervisor counseled the graduate candidate to require a signature

and a date when all the content information (written manual Word files) for the website would be delivered to the graduate candidate. Later, the graduate candidate met with the SME to establish a deadline for when all materials would be delivered; the deadline was set for June 15th 2003. During this time, the graduate candidate continued to work on the website in terms of deciding on text appearance and template (headings, font type and colors). At that time, decisions were made regarding what type and style of navigation buttons were to be chosen from the options within the template. Finally, the graduate candidate decided to use the theme in FrontPage 2002 called "Tilt" (Appendix B, fig. 1) with all its components and colors.

For the duration of week four, the graduate candidate met with the SME and restated the necessity to have the files with the content for the website. At the meeting, both the graduate candidate and the SME discussed the overall organization of the website and discussed, with more detail, the actual content for each of the main pages in the website. The details involved looking at specific headings and content on the written pages and selecting which information was most important to be put onto the webpages. Additionally, the graduate candidate pressed the SME to organize and collect information from previous administrative candidates such that video taped interviews could be made and edited; these video interviews were to be testimonials of successful past field experiences such that website visitors could have a more personable experience when reading about program. At the end of this meeting, the graduate candidate set up a meeting for the following week to collect the files.

The fifth week in the project proved to be the most challenging, in part, due to constraints identified regarding Windows and Macintosh computer file incompatibility

problems. At is happens, the SME gave a disk to the graduate candidate, which supposedly contained all the files needed for the website's content; however, once the graduate candidate started to open the files, a multitude of error messages showed up and most of the files could not be opened. In addition, some of the files that were opened did not correspond to the actual pages in the manual. Still, the graduate candidate used the files that could be opened and used the information to insert content into the previously created blank webpages. At this point, each of the website's pages had an introductory paragraph with explanations, and a page title was displayed on each of the page's banner. Links were created, and the whole website began to look organized.

Later in the same week, the graduate candidate met with the SME for a first informal evaluation. At this point, the SME had positive comments on the appearance of the site in terms of navigation, colors and banners, but decided that the entire content and its organization were not what the SME had in mind, even though this original design and distribution of the content had been previously selected and accepted by the SME (Please refer to the Appendix A, Story Board to view the design). Still, during the same meeting, the graduate candidate discussed the multitude of pages that could not be opened in the files given by the SME. At this time, the graduate candidate advised the SME as to the way in which files needed to be saved in order to be opened by someone using a Windows computer. By the end of the meeting, the SME decided to email the appropriate files to the graduate candidate.

The changes that took place in reorganizing the website's content, and taking into account the time frame involved to create the website, generated a very difficult situation to the graduate candidate. As a result, the website's content had to be changed and pages

and files had to be recreated. For instance, part I initially would have had descriptions about the program's objectives and goals; however, the "Integrated Project in Advanced BCP Courses" (part III) was to be explained in part I. (Please read each of the website's pages' content in Chapter IV). For the remainder of week five, the graduate candidate redesigned the website and inserted all the available file content to each of the website's pages.

Throughout week six, the SME sent new files, via e-mail, to the graduate candidate. Unfortunately, and for the second time, the files did not correspond to the files in the written manual. At this point, the graduate candidate decided to save time by scanning the previously selected pages in the manual and making the scanned pages into Word documents. Afterwards, the graduate candidate began selecting the appropriate information and inserting it into each of the website's pages. Later in the week, the graduate candidate met with the SME for another informal evaluation. At this time, the SME was pleased with the overall organizational design and informational components of the website. However, the SME wanted to rewrite the information on some of the pages. The graduate candidate then proceeded to make a copy of the website onto a CD such that the SME, using the SME's Macintosh computer, could directly make the changes to the webpages. However, the SME did not have FrontPage 2002 software; therefore the SME was not able to make any changes directly onto the webpages. As it turned out, the graduate candidate had to copy and save all the webpages as Word documents such that the SME could make the necessary changes directly onto the pages since the SME and the graduate candidate used Microsoft Word software which is compatible between Macintosh and Windows computers when files are saved correctly.

In any case, and for closure purposes, the information contained on each of the website's pages was sufficient now to have the website published. Therefore, the graduate candidate decided, due to time constraints, that all pages that were not created or not ready would be listed on the website as pages under construction.

During weeks seven, eight and nine, the graduate candidate waited for the revised Word files to be submitted and began writing about the experience in designing the project in order to have it submitted to the thesis supervisor for evaluation and comments. At the end of the week nine, the graduate candidate received the files from the SME, and proceeded to insert the information onto each of the website's pages. Due to the large content of information in each of the pages, the graduate candidate decided to use a feature in Front Page 2002 called "bookmark" which allows a person to click on a link on a webpage that sends the person back to the top of that same webpage. (More information in Chapter IV). At the beginning of the final week in the project the graduate candidate published the website with a password security protection as it was requested by the SME; the SME did not have the written manual copyrighted and wanted to make sure that anyone accessing the website had to have the SME's permission first.

CHAPTER IV

WEBSITE DESIGN AND CONTENT

In this chapter, the graduate candidate describes, in detail, the design components used on the webpages' content in terms of its distribution between the website's main pages and the pages linked to these main pages. Finally, the graduate candidate reflects on the experience of creating the website under the heading "Lessons Learned".

The website was created using a FrontPage 2002 feature called "shared borders", which is a region on a webpage that is common to one or more pages in a website. A shared border may be located at the top or bottom or at the left or right of the page. Using a shared border allows the designer to use the same content on multiple pages in one step, rather than editing each page; the website used two shared borders, one on the top and another on the bottom of each page. The first shared border was placed at the top of each of the ten main pages in the website; the border contains a picture of a bridge (selected by the SME) and a page banner with each of the different page titles, all set within an horizontal navigation structure. The second shared border was created and placed at the bottom of each of the website's pages, which contains the contact information for the webmaster (email address), copyright statement, and the dates when pages are last updated.

Underneath the first shared border, there is a horizontal line, which divides a subheading and a paragraph from the navigation bar. Below the subheading and paragraph, there is a group of links to other headings within the same page. Each of the headings are divided by horizontal lines throughout each of the pages; all links are

grouped together under a bulleted list for consistency and visual appearance. In addition, "back to top" links were inserted throughout each page right below each horizontal line; this component had to be present due to the large quantity of written information within each of main website's pages. Having long webpages was not what was originally intended. This situation occurred because the SME waited until the final week in the creation of the website project to deliver the files with the information to be put into the website, and these files were much longer than the original files that were sent previously to the graduate candidate. As result, the graduate candidate did not have enough time to make new pages and decided to simply create "back to top" links to minimize scrolling up and down in each of the pages. Another visual component present throughout the website is a picture (clip art) that displays the sign "under construction" next to each of the headings within each of the websites' pages that have not yet been completed.

As for the horizontal navigational structure, there are 10 buttons that link to the 10 main pages on the website. The first linked page is called the "Home" page (Appendix B, Fig. 2). On this page, one can read a welcome statement and directions on how to navigate within the site. The second linked page is called "Introduction" (Appendix B, Fig. 3); this is where one can read general information about the BCP and follow the three internal links to each of the headings in the page. Each the headings present information about the BCP's objectives and development and outside written resources that acknowledge the validity and success of the BCP.

The third linked page is called "Phase I" (Appendix B, Fig. 4). On this page, there is a description of the BCP and its main features; there are three internal links within the page in which information about the requirements and objectives of the BCP are displayed.

Finally, the third internal link leads to a cluster of external links regarding the assessment and assessment samples for each individual project in the BCP; these external links are under construction.

The fourth page is called "Phase II" (Appendix B, Fig. 5). This page contains information on what future administrative candidates need to do in order to begin their field experiences. In addition, this page contains three external links; the first link leads to a project proposal sample which serves as an example of the proposals that administrative candidates must complete before beginning their respective field experiences; this sample is a page done in Word format and can be downloaded by the website visitor. The second link displays another sample showing the conversations (logs) between previous administrative candidates and their supervisors (under construction); permission for these conversations to be posted on the website is being handled by the SME. The third link leads to a page displaying suggestions for mentoring strategies.

Page five is called "Phase III" (Appendix B, Fig. 6). On this page, the visitors will be able to view the reflections and sharing of experiences between previous graduate administrative candidates and their respective administrative leaders. This page contains four links that lead to explanations about the vehicles used to allow these sharing of experiences to take place; for instance, the use of online forums and bulletin board postings are two of the ways that the sharing of experiences occurred. Finally, the last link leads to a set of external links which are under construction and that will display the actual transcripts from the conversations between all involved. It is important to note that these transcripts deal with several different clinical practice topics that are discussed throughout the administrate candidates field experiences, unlike the transcripts on the

page "Phase II" that only deal with the guidelines for proposal samples that need to be created prior to the administrative candidates beginning their field experience.

The sixth page is called "Phase IV" (Appendix B, Fig. 7); this page contains information about the necessary documentation administrative candidates need to have in order to submit their proposal and final projects for their field experiences. In addition, this page contains four links that describe the guidelines for each of the projects. The fourth link displays another set of external links for viewing samples of the projects; this part is still under construction. The seventh page in the navigation bar is called "Phase V" (Appendix B, Fig.8). This page represents the last phase in the program, and it contains information about the evaluation of administrative candidates and the evaluation of the program itself. In addition, it contains three links that lead to explanations of how these evaluations are done. The last link on this page leads to a set of external links that are still under construction. These external links will lead to other pages that display samples of actual previous evaluations of administrative candidates. At this point, the SME is getting written permission by these candidates in order to display their evaluations on the website.

Page eight in the navigation bar is called "Research" (Appendix B, Fig. 9). This page contains two links with information on the results of three surveys taken about the BCP and on information about job postings for administrative candidates. The first link leads to the results of the three surveys; the first survey displays the results on the program's effectiveness, the second survey relates the perceived importance by candidates of some of the program's features, and the third survey relates information about the aggregate rating of the administrative candidate overall satisfaction with the

BCP. Finally, the second link leads to a set of external links to websites about job postings in several midwestern states (under construction).

The ninth page is called "Requests" (Appendix B, Fig. 10). This page contains a template from FrontPage 2002; the template is an information request form that needs to be filled out by those interested in receiving more information about the program. This form is then submitted directly to the program's director. Page ten in the navigation bar is called "Contact" (Appendix B, Fig.11). This page offers email addresses, addresses and phone numbers for the program's director and the webmaster.

Finally, all other pages in the website that are linked to the main pages follow another type of layout. This occurred because the information used for these webpages was taken from the written manual for the BCP, which was done in Word format, and the pages in the manual were actual forms done using Word templates. However, once the graduate candidate copied and pasted the Word template into a blank webpage the content was so disorganized and visually unappealing that the graduate candidate had to clear the existing format and create a design congruent with the template used in FrontPage 2002. Each of the pages contain a title centered on the top; however, all information below the main heading has a different layout; some have subheadings with bulleted lists while others have subheadings with narrative paragraphs. Therefore, whenever appropriate, the graduate candidate inserted tables, bullets and subheadings that organized the content in a way that was visually pleasing. Still, some of the forms in the manual had to remain in Word to be posted on the website to be downloaded by the website visitors. This occurred because there was no other way to make the Word

template pages look appealing when copied onto webpages. Therefore, these pages had to be imported into the website folder in order to have links to them.

At the request of the SME, the website had to be published using a password security system. This proved to be a challenge to the graduate candidate because this was something that the graduate candidate had not done before. The password was created using a java script component that was inserted onto a blank webpage and saved as the index page (Appendix B, fig. 12). This page became the first page visitors will see; it contains the same web theme, the same shared border at the bottom of webpage, and the same main picture. However, it contains the password prompt to enter the website. The website was published and a link to the website was created on one of the SME websites. At this point, no information has been given to the graduate candidate regarding whether or not the website will always need to have a password protection.

Lessons Learned

After analyzing the journey, the graduate candidate felt as a novice website designer who had just been through a first real difficult experience which would forever impact all future website designs when collaborating with SMEs. The graduate candidate realized that the time-stressed partnership with the SME made other aspects about the project more difficult and less enjoyable. One of the most challenging aspects of this project involved the graduate candidate's inability to maintain deadlines, from scheduling conflicts with the SME to missed deadlines for content delivery. These challenges occurred due to the difficulty in working with a very busy SME and, in this case, the complexity of a project requiring the SME to be more of an active participant. These

conditions demanded that the graduate candidate have had created, at the onset of the project, clear written guidelines that specified the delineation of the responsibilities of each party.

Another important set back had to do with the different technologies used by both parties. This was anticipated; however, the graduate candidate should have had created a platform for quickly resolving these issues in order to minimize delays. Furthermore, the SME was a novice regarding the intricacies involved in the creation of technology applications, software, and computer issues which caused the SME to have unrealistic expectations regarding what could or could not be accomplished within the time-frame involved. This demanded that the SME should have had created a visionary description about the project in order to allow the graduate candidate to analyze the description as it pertained to the current technological capacities. Still, the graduate candidate finds that this difficult process was something that needed to be experienced in order to use this type of knowledge to prepare oneself for future partnerships with other SMEs and to help others establish fundamental time management skills when working with their respective SMEs especially if the SMEs, are very busy people. Nevertheless, the graduate candidate hopes that sharing this experience will help those who will go through a similar experience at other universities or in other educational settings.

As it happens, the lessons learned here make it imperative that verbal contracts with lack of specification do not allow for projects to be done appropriately and/or on time. At this point the graduate candidate's goal is to create a generalized written agreement/contract between parties in order to ensure the best possible outcomes when creating designs for informational and learning environments.

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APPENDIX A

The storyboard was written at the beginning of the creation of the website project and it represents the initial design as agreed by the SME and the graduate candidate. All parts in the story board (parts I through VI) are directly related to the written manual about the BCP.

Story Board

The content on each of the six parts corresponds to the content on the main website's pages. The manual headings (a, b, c, d, and f) correspond to the parts (I through VI) on the website.

Part I: This part describes the overview of the program and contains the files or pages that correspond to the manual's part A. These files contain information to be used in creating the main or introductory page for the website. The headings below are the original titles and files names of each of the webpages as agreed by the SME.

Description:
a) Program's background information. Description, goals and objectives.
b) Overview of the Clinical Processes, Requirements in Technology
c) The Integrated Project in Advanced The BCP Courses
d) Guidelines for Planning and Implementing the Clinical Experience
e) Cooperating Administrators Role and Responsibilities
f) Effective The BCP Suggestions for Cooperating Administrators

Part II: This part corresponds to the manual's B section. Headings (b) and (c) will be made into webpages, and heading (a) will be made into a Word document to be downloaded from the site.

Description:
   a) The Traditional Administrative Competencies Areas
   b) Overview of Clinical Context-Key Elements
   c) The Administrative Portfolio

Part III: This part corresponds to part C in the manual. There are other components to this heading; however, the SME is not sure, at this time what components will be on the website.

Description:
   a) The Integrated Project

Part IV: This part corresponds to part D in the manual. In this part there will be several assessment pages for each of the field experiences in the Bridge Clinical Program. The SME is not sure which pages will be put on the website. However, and whatever pages are chosen, the pages must remain as Word documents that will be linked and downloaded from the website.

Description:
   a) Summative Assessment Instruments

Part V: This part corresponds to part E on the manual. This is still under review for possible changes at a later date. The SME is not sure what documents will be published.

Description:
   a) College and Professional Standards Applicable to The Bridge Clinical Program

Part VI: This part will have the compilation of all the written projects by previous administrative candidates, at least the ones that SME wants to use as examples of

outstanding work (these will be linked word documents to be downloaded from the website). In addition, there will be video components in which previous administrative candidates and school administrators discuss their field experiences.

Description:
a) Examples of past completed projects
b) Video testimonials from faculty, cooperating administrators and from administrative candidates who have successfully completed the field experiences in the BCP.
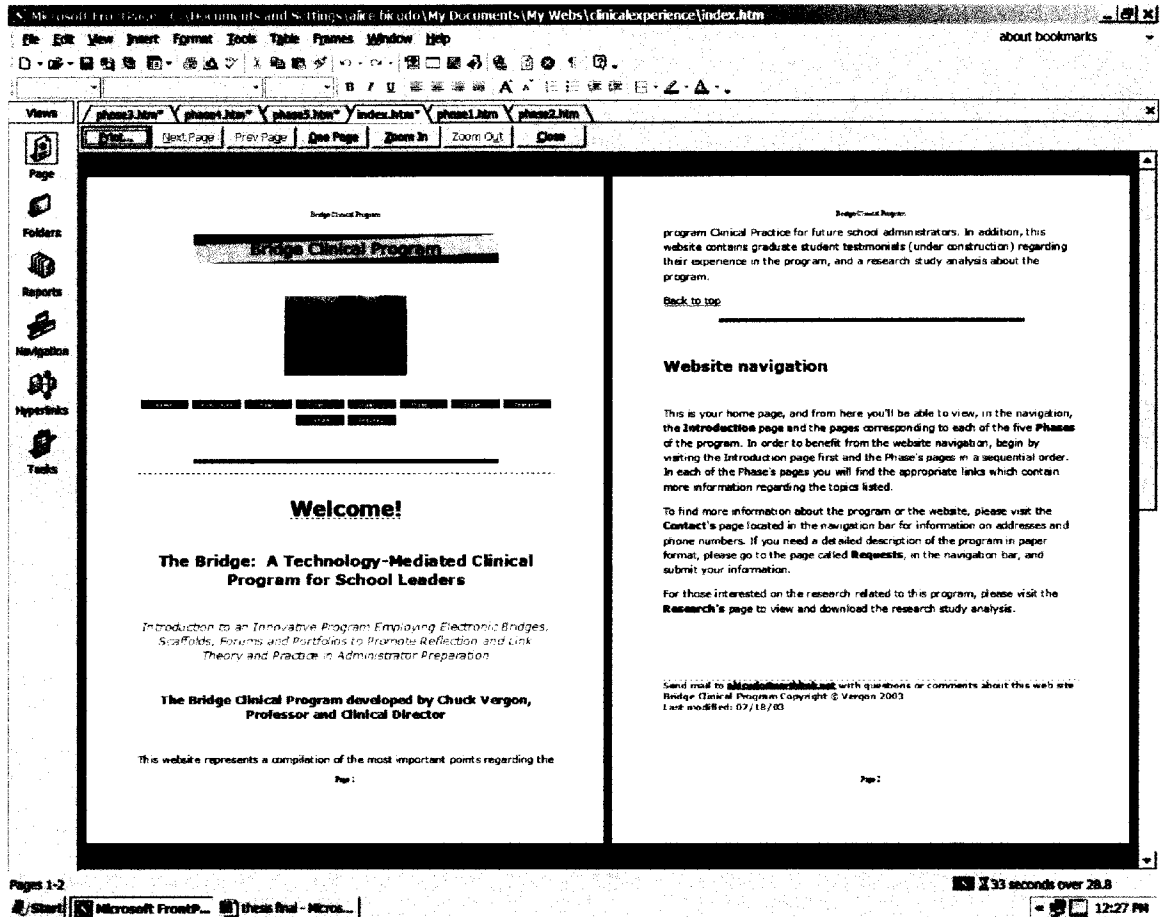
APPENDIX B

ILLUSTRATIONS

Figure 1
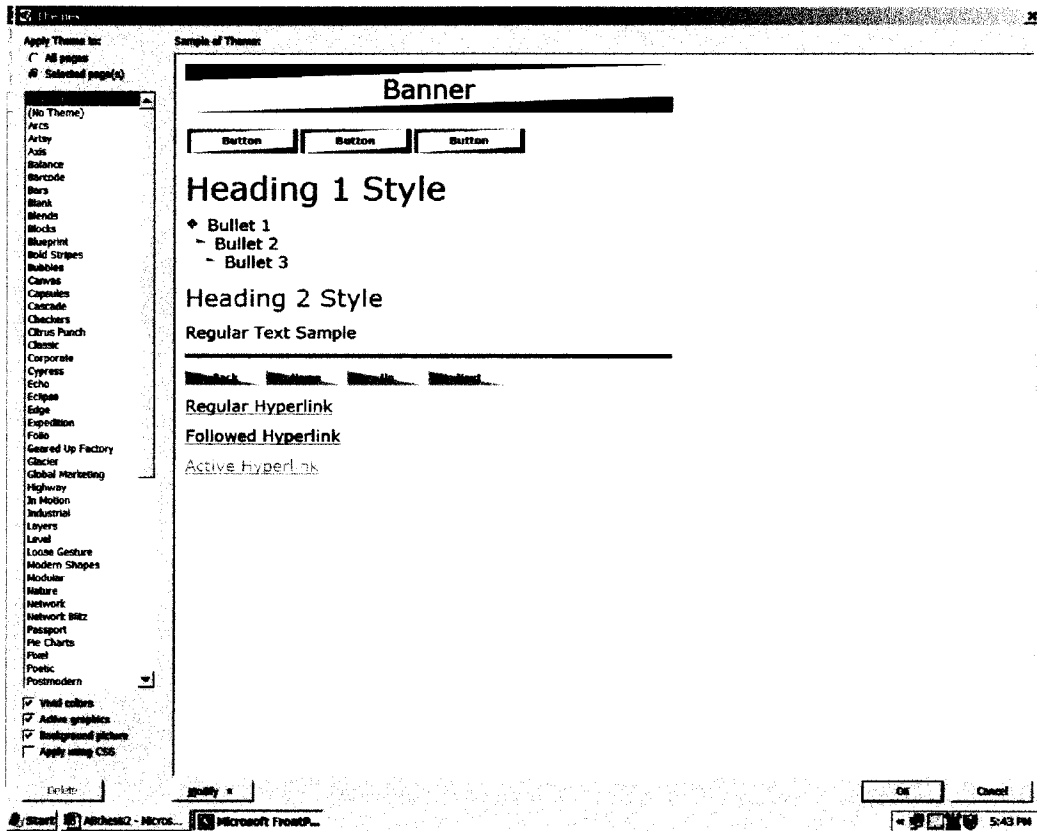
Figure 2

Figure 3
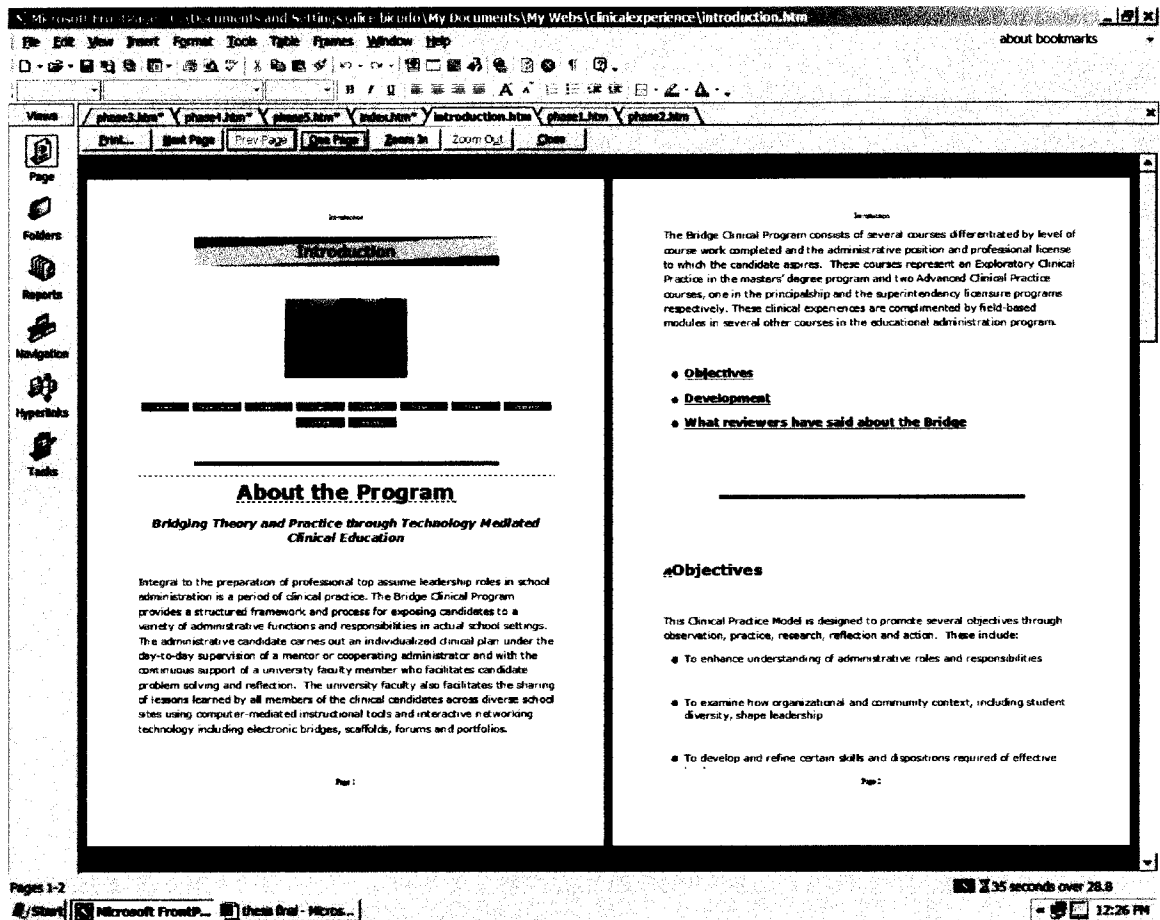
Figure 4
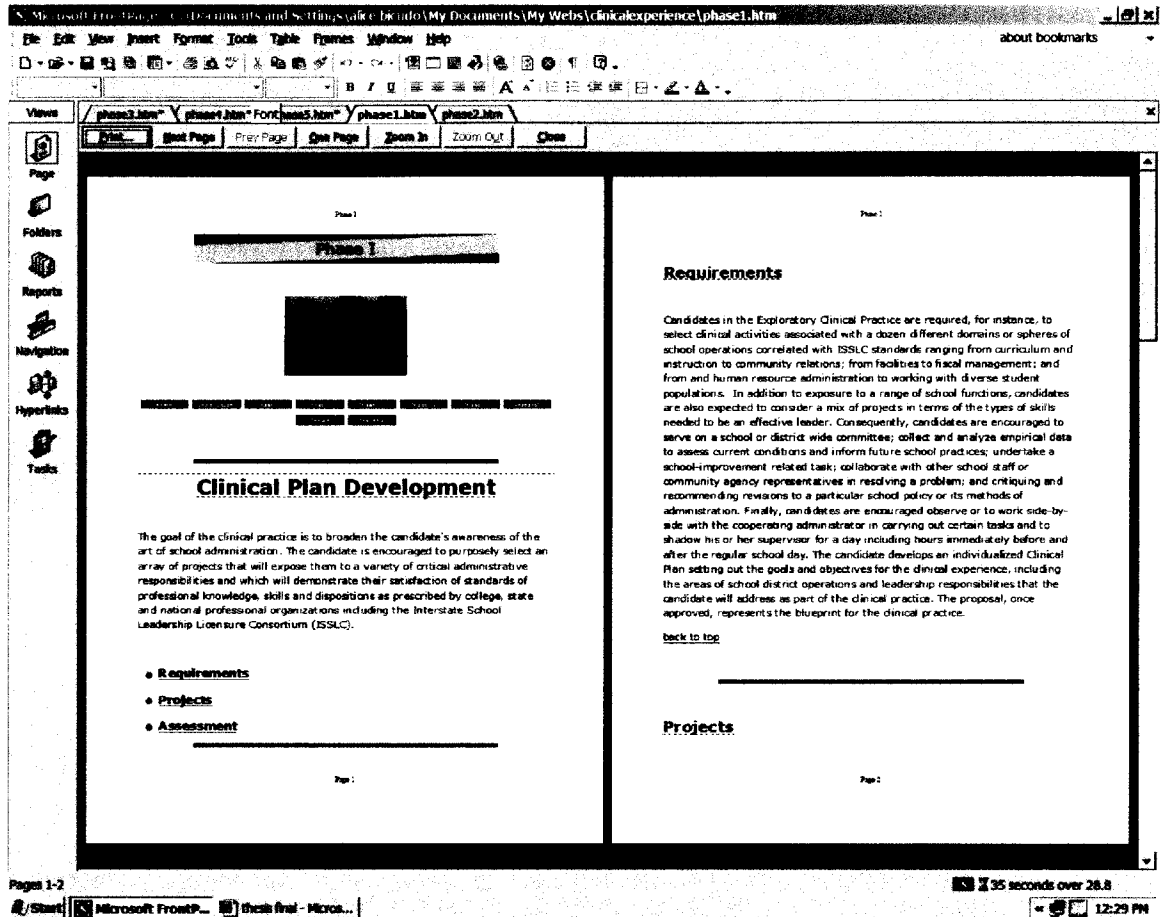
Figure 5
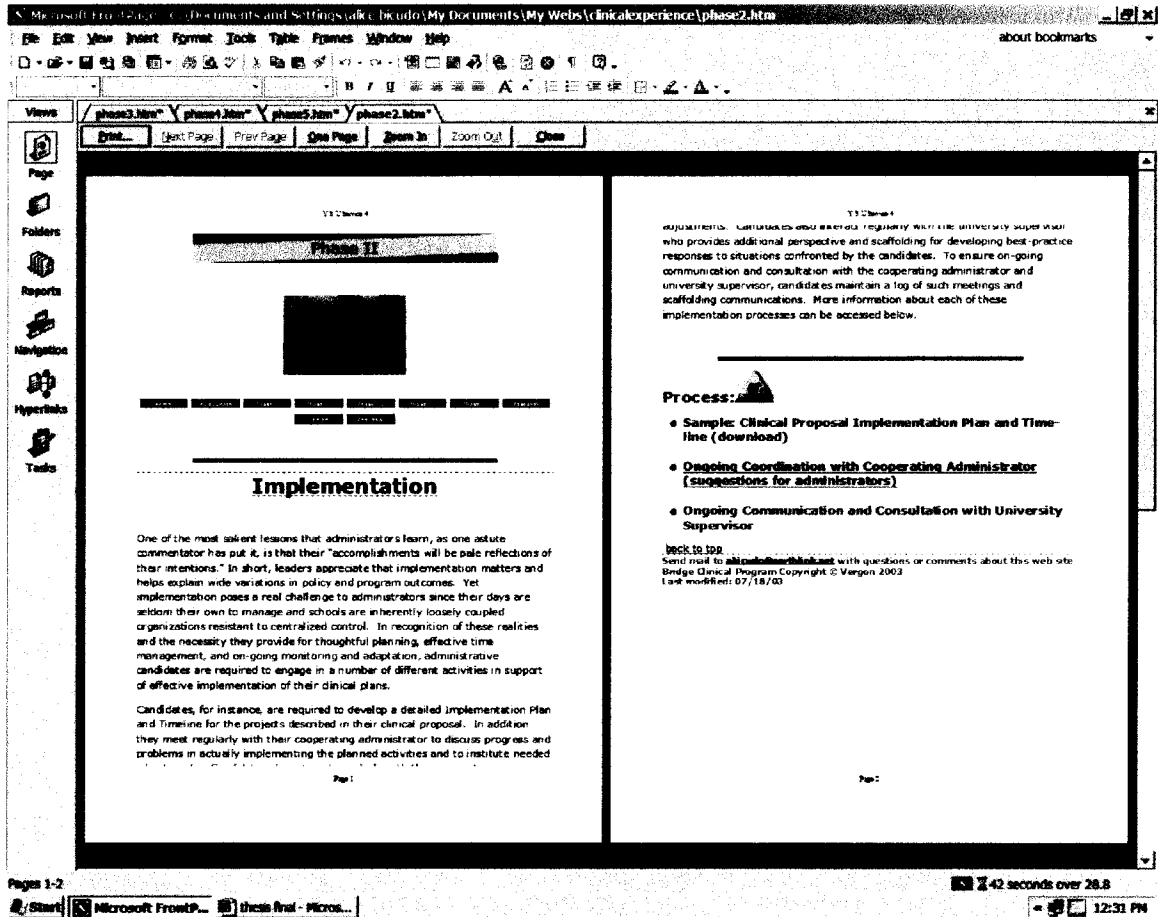
Figure 6
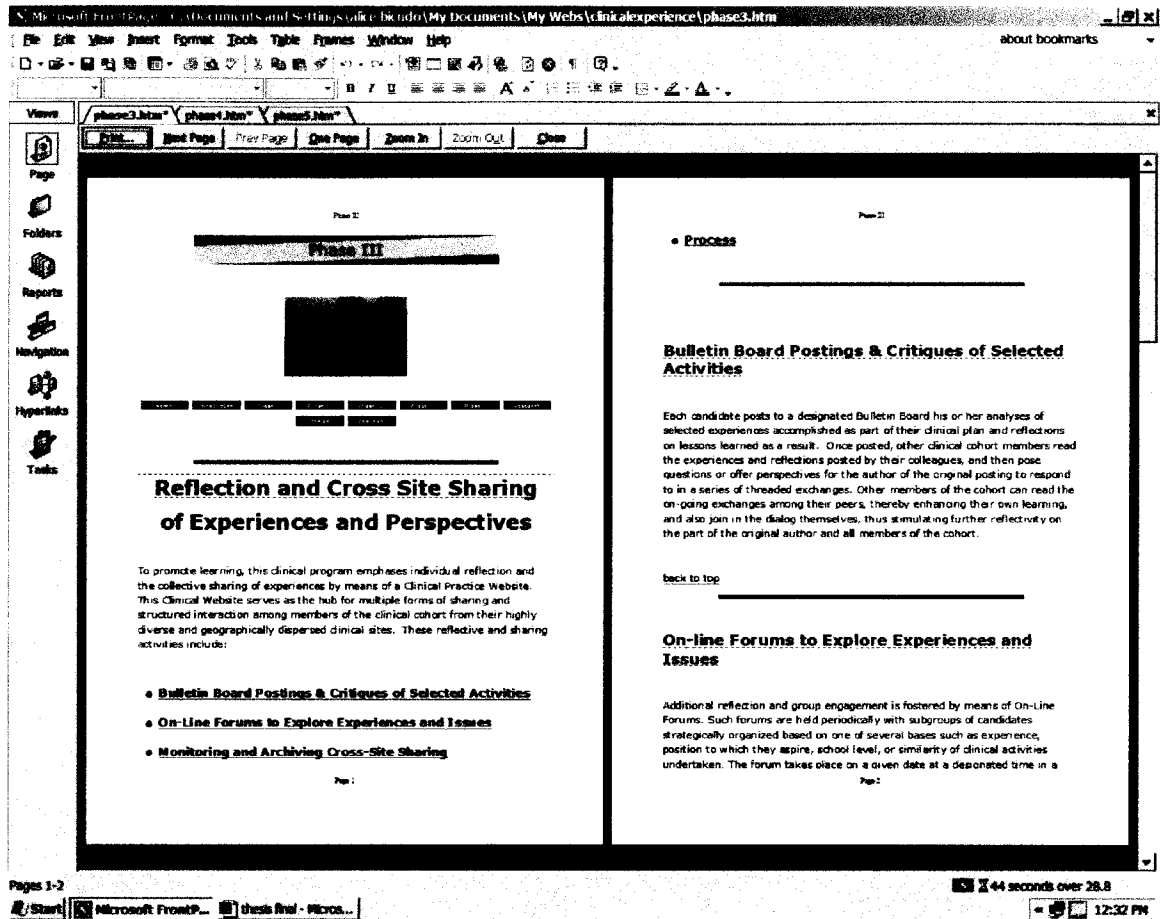
Figure 7
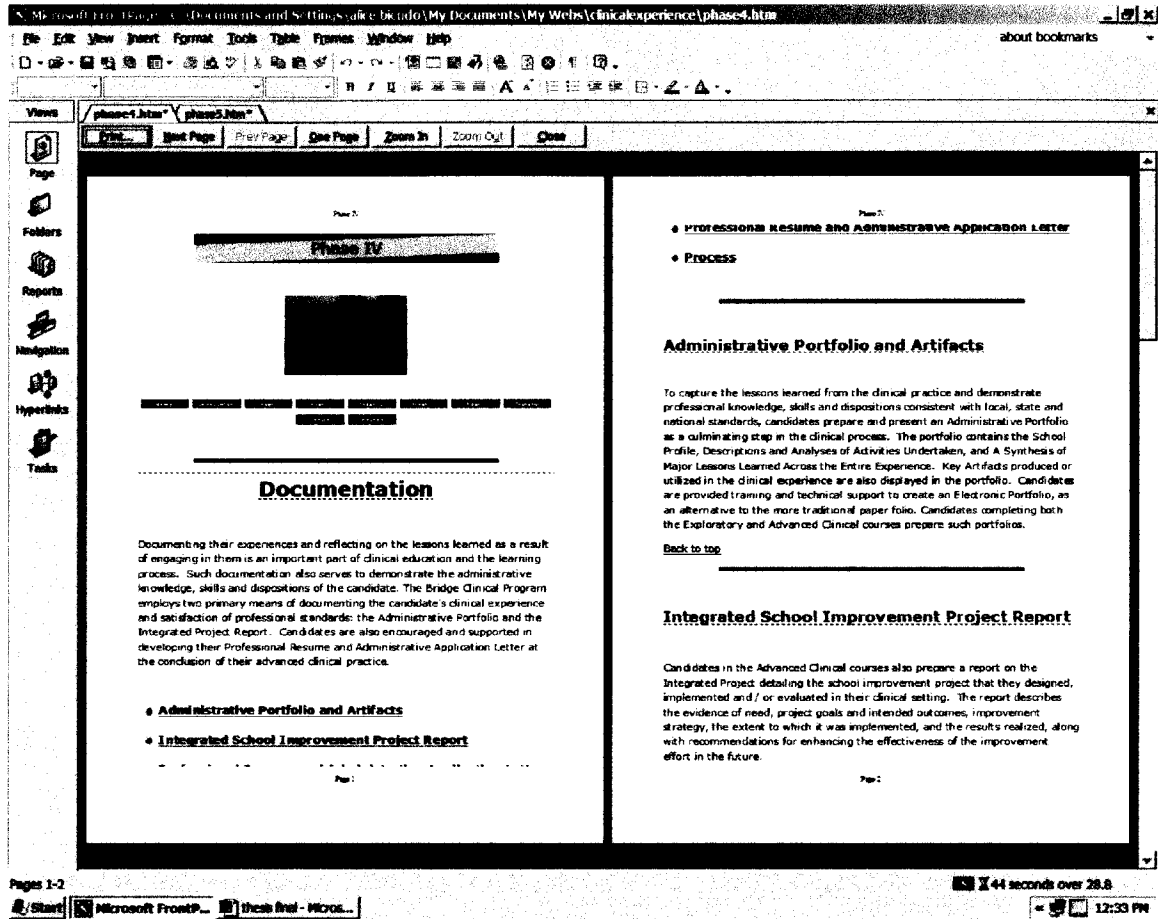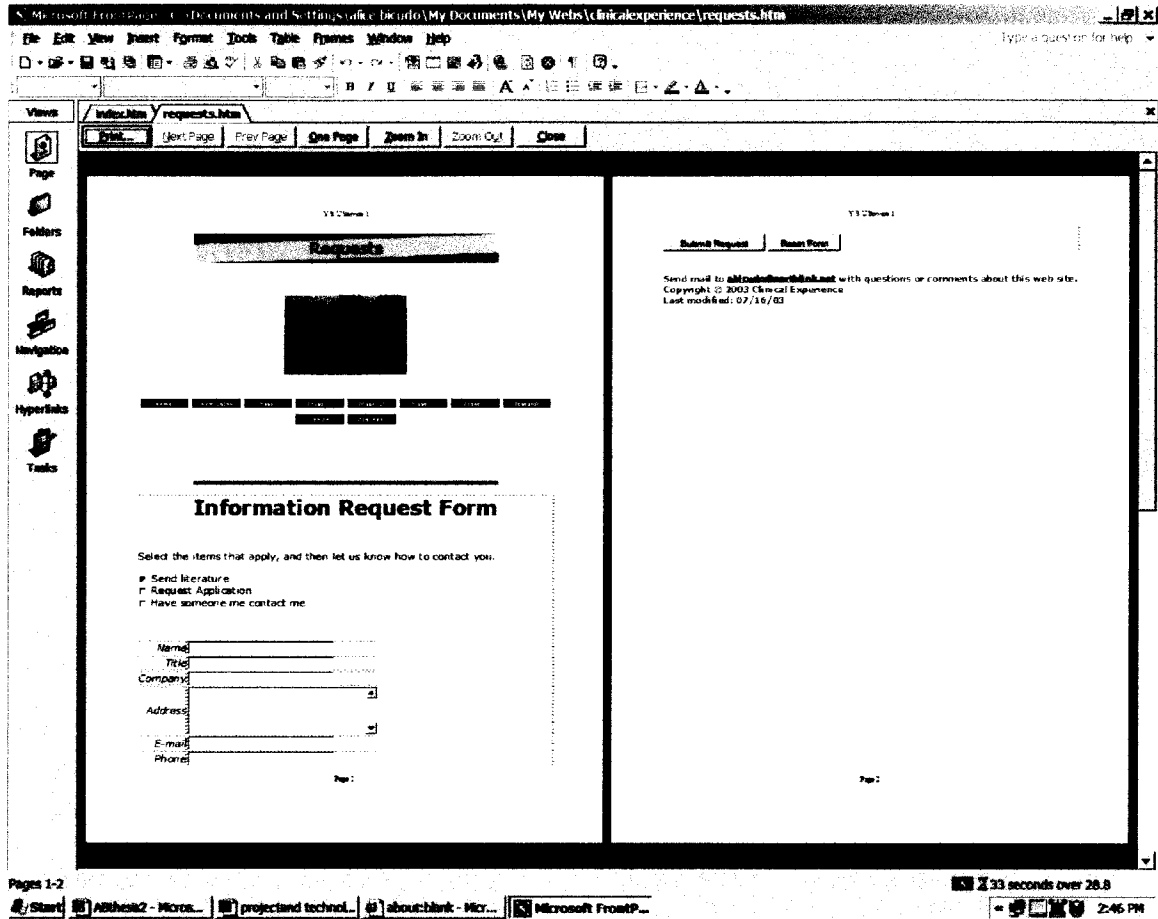
Figure 8
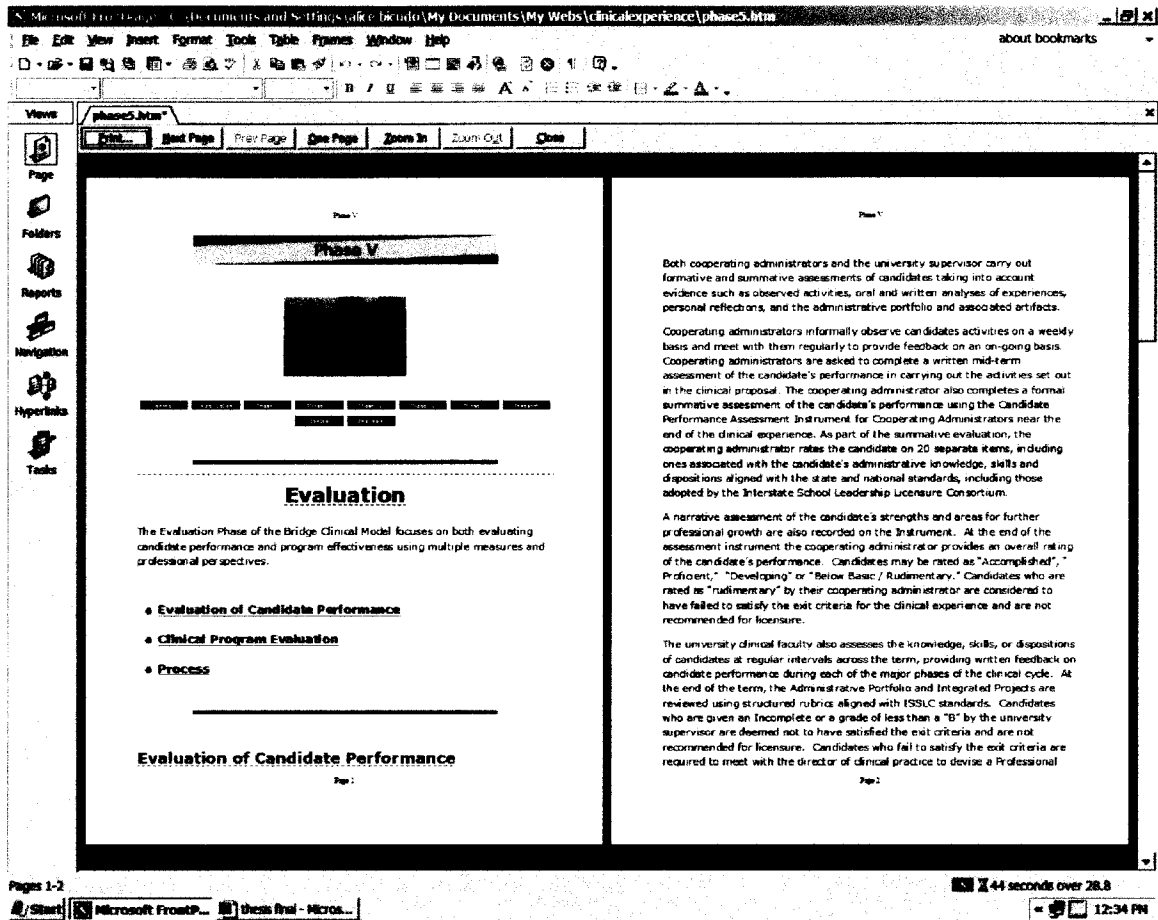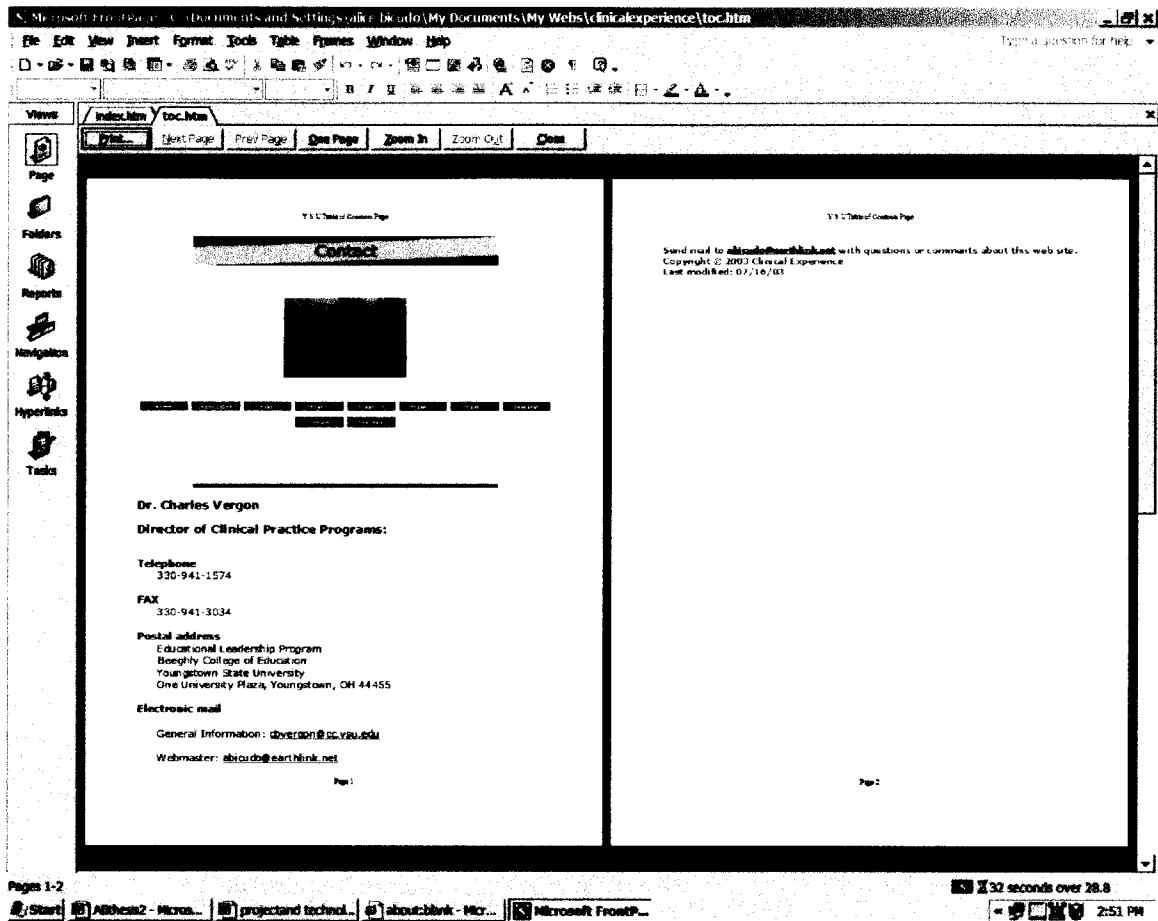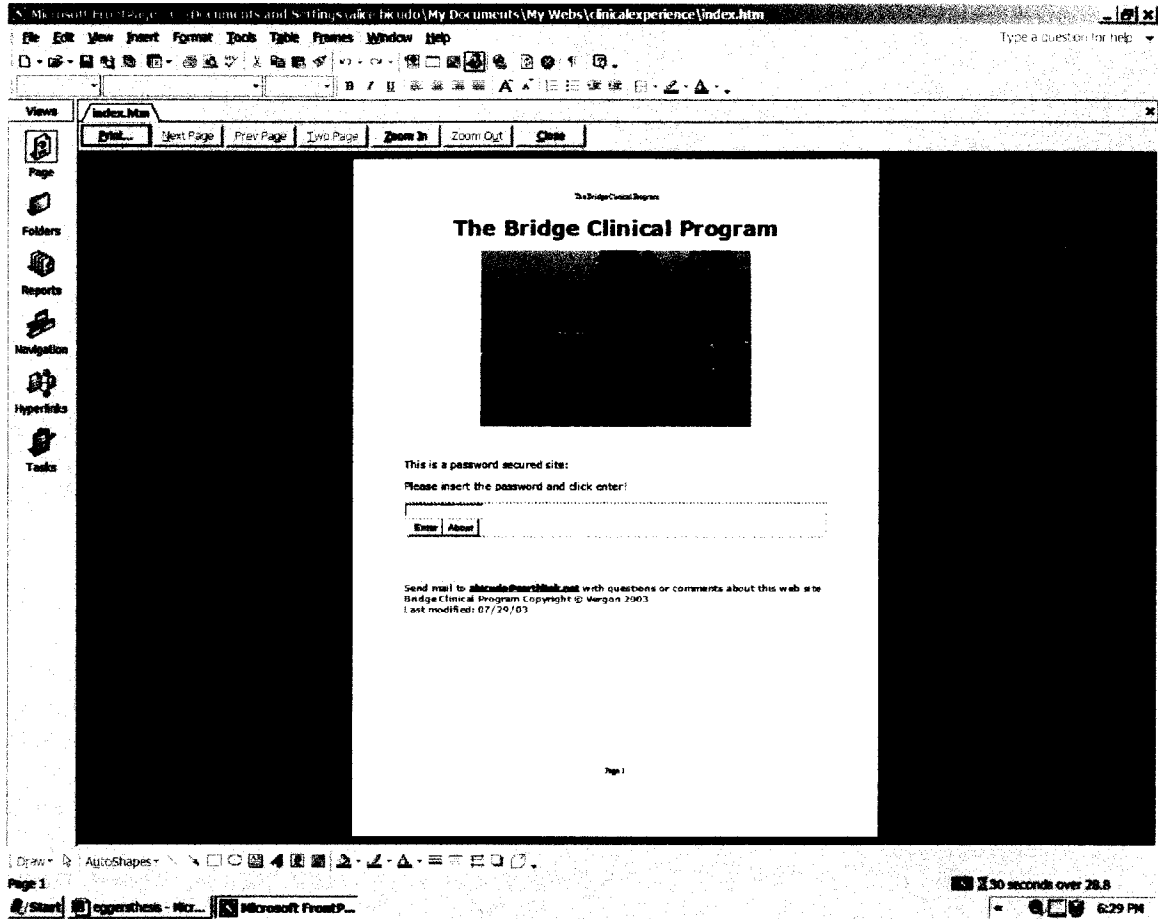
Figure 9
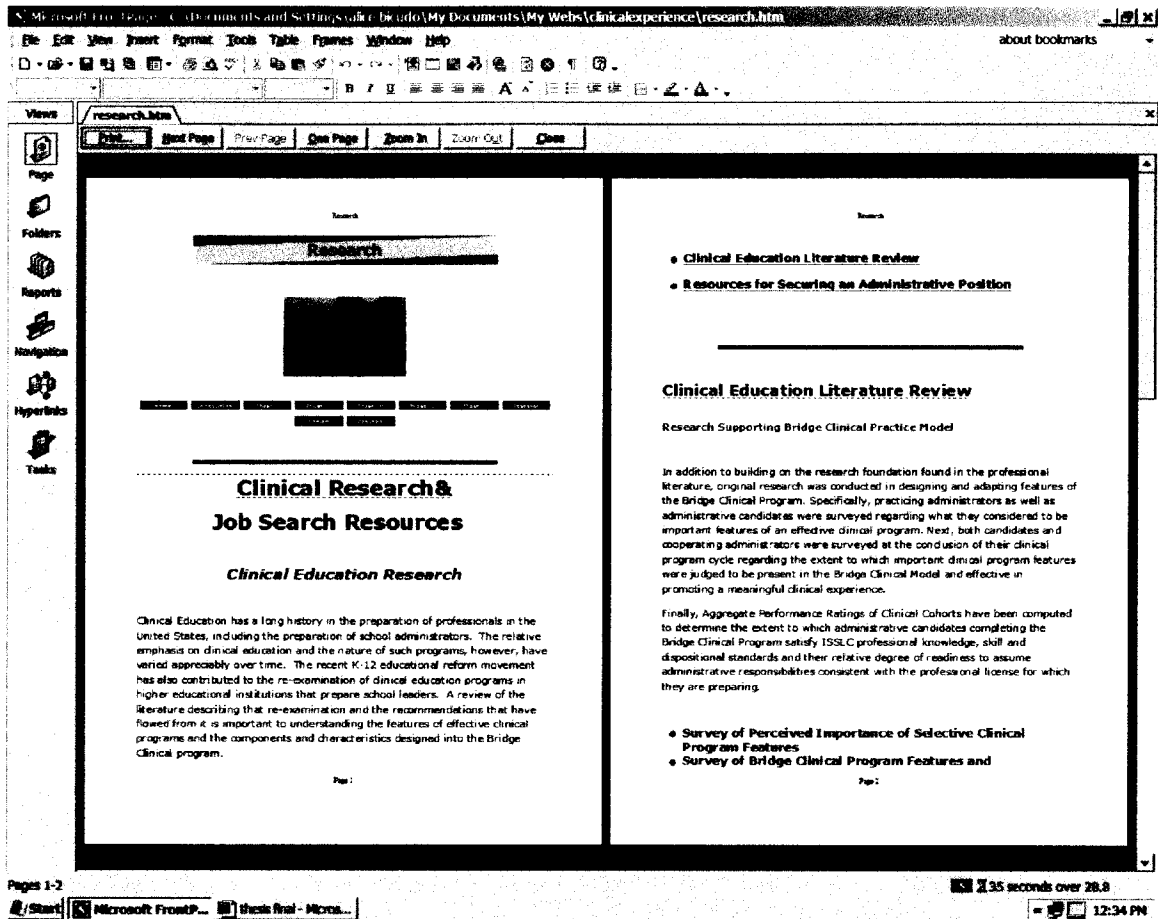
Figure 10

Figure 11

Figure 12

APPENDIX C

This evaluation component was written at the onset of the creation of the website. It refers to the evaluation that needed to occur and which was agreed upon between the SME and the graduate candidate as the website was being created.

Evaluation

In order to guarantee the success of the project/website, the designer and the SME must meet periodically to conduct formal evaluations in which decisions will be made regarding each of the website's pages in terms of content, visual appearance, and the website's navigation features. During these formal evaluations the SME will give his personal opinions and suggestions regarding preferences in the topics mentioned above. After each formal evaluation is conducted, the graduate candidate will make the appropriate changes and schedule the next evaluation date. At the culmination of the project, or once the project is completed, the SME will have a period of time to complete a final evaluation before the project is published online; the SME will informally report his overall opinions to the graduate candidate. At this point, there are no evaluation forms to be completed by either party; however, the graduate candidate will keep a journal in which all evaluations and steps, taken in project, will be recorded.