Connecting the teacher and parents through a website to monitor student progress

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CONNECTING THE TEACHER AND PARENTS THROUGH A
WEBSITE TO MONITOR STUDENT PROGRESS

A Project
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California State University,
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by
Shazia Ahmad Zaidi
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ABSTRACT

No other medium has affected so deeply the lives of parents and teachers all over such as the Internet. In today’s fast paced life, parents at home and teachers at school are not able to effectively and efficiently communicate with each other on a student’s progress and methods that can help the student succeed. This lack of communication results in a total mismatch and break down of corrective measures that could have, if implemented early on, helped advance the students career. The objective of this project was to develop a well-organized and helpful online educational technology tool based on research from multiple sources to improve effective communications between students, counselors, teachers, parents and support staff. This project offers parents access to the information needed to keep an eye on the academic development of their child. With the development of a website, parents will be in the position to take appropriate measures to improve their child’s educational accomplishments.
ACKNOWLEDGMENTS

I would like to thank the faculty members of the ETEC department for giving me an opportunity to pursue my Masters in Education with an emphasis in Instructional Technology at California State University, San Bernardino.
DEDICATION

I dedicate this project to all the educators out there who have worked day and night towards the betterment of our younger generation.
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CHAPTER ONE
BACKGROUND

Introduction

No other tool or medium has affected so profoundly the lives of parents and teachers everywhere such as the Internet. It is an undeniable fact that the Internet has made available more options to the masses which were not possible before. Information that once resided only on paper in a particular file is now available to those who need it and when they need it. No longer do parents have to drive to a meeting, take time off, or call school administration to hunt down a particular piece of information. Teachers are free to teach their classes without being interrupted and have the satisfaction that all information they have on the child, the parents have access to it too. The availability of computers and the enormous amount of educational software provides relief to those who find themselves entrenched by their grade books and calculators (Friedman, Valde, & Obermeyer, 1998; Harris, 1999).

Every detail of the student’s interaction at school, attendance report, progress report, learning difficulties, problems at school and general behavior can be easily
ported over to a website. "Teachers can also print out individual student reports to share with parents, showing grade patterns as well as information such as missed homework assignments and poor test grades" (Smith & Walker, 2000, p. 64). Parents can check these reports from the comfort of their office, home, or a location that provides Internet access. Parents can also send emails to various staff members and teachers and develop effective measures to help correct a particular problem or issue and guide their kids to a sound successful career in life.

For a student's success in the classroom, there exists a need for a strong parent-teacher relationship. An online system can improve this communication effectively and regularly (Rice, 2001). Rice's journal described the various methods he developed in order to communicate with parents regularly and effectively. He found that attendance by parents and their interaction had increased at the online website and added more features using the ideas that he received from parents and students.

Studies have shown that the computer is an effective learning and teaching tool (Liaw, 2000; McFarlane, 1997). With the advent of internet, email, and online reports, parents and teachers have found a medium that works around their schedules at the same time is as effective as face-
to-face communication. Correctly utilized it can give users information they need, on demand 24-7. A teacher can now post a student’s interaction in a particular class and post it for parents to see right away, parents on the other hand can see their child’s progress and place corrective measures in place the same day. This method eliminates the waiting period for the parents who continue to wait for a grade report at the end of the semester, which can sometimes be too late to place any mechanisms to help their child. When a gradebook is accessible to parents on the Web and enables real-time monitoring of student progress, that’s informative. “It’s in this direction of being informative that schools should be heading” (Tetreault, p. 39-43).

Statement of the Problem

Through the researcher’s experience in teaching social studies at a middle school in Rosemead, California, it has become obvious that schools are lacking the resources needed to involve parents in their child’s educational process. The social studies department in Rosemead, California, does not have good support for electronic resources that parents can access to monitor their child’s academic progress.
For parents who want to be involved in their children’s education, but whose busy schedules make it difficult for them to stay in frequent contact with the school, electronic gradebook reports provide the quality and quantity of information they need (Meadows, 2005). One of the very effective ways of getting parents involved in their child’s academic progress would be to provide an electronic resource like a website where they can access their child’s academic information. In effort to discuss this possible solution with colleagues, it has become obvious that many teachers are not in favor of supporting this type of system because it requires fairly good technological skills which also requires extra time, effort and pose a substantial learning curve. To solve this problem it becomes necessary to design and develop a user friendly website that will have features to accommodate the skills of an average to low level user. Having access to a child’s academic progress helps parents to take necessary measures to improve the academic performance of their child to their satisfaction.

Purpose of the Project

The purpose of this project is to increase the involvement of parents in their child’s academic progress.
This project will give parents access to the information needed to monitor the academic development of their child. With the development of the proposed website, parents will be in the position to take timely measures to improve their child's educational accomplishments.

"Genuine, regular, real-time collaboration with parents can make a positive difference in a child's learning experience" (Johnson, 2000, p. 48). If parents have a place where they can go and find out how their child is performing in a particular class, it helps them to take timely measures to improve the academic performance of their child if it is not up to their satisfaction. Unavailability of a system overlooks this positive factor of parental involvement in their child's academic performance.

Significance of the Project

It is not unusual for a teacher to be asked, with little notice, to supply grades of individuals or groups of students to counselors, parents, principals, or students (Vockell, p. 141). With the availability of the proposed website, the teacher will save time, which in the past has been spent in making biweekly progress reports for students, and can eventually use this time saved
towards making the classroom a more effective learning environment.

The significance of the project can be best explained in the following by Jeffrey Branzburg (2000):

Online grade books have administrative advantages for teachers. They allow teachers to keep students' grades, calculate weighted averages automatically, maintain attendance records, publish class calendars and assignments that students and parents can see, post important messages for students and parents, list scheduled class activities, and store student and parent contact information. (p. 45)

The project will shed light on new areas and methods that can be used within an educational system to improve performance of students.

Limitations

During the development of the project, a number of limitations were noted. These limitations are the following;

1) The security and privacy of the information being made available is a major concern of many educators. Both teachers and parents need to know that they will have access to the child’s
information and that security and password confidentiality will be taken seriously.

2) One of the important limiting factors is lack of long term committed qualified technical and administrative support in maintaining and upgrading the online grading tool. This lack of support does not guarantee the absolute availability of the tool.

Definition of Terms

The following terms are defined and have been taken out of the Glossary of Educational Technology Terms as they apply to the project (http://web.mit.edu/teachtech/glossary.html).

1) Accessibility: A characteristic of technology that enables people with disabilities to use it. For example, accessible websites can be navigated by people with visual, hearing, motor, or cognitive impairments. Accessible design also benefits people with older or slower software and hardware.

2) Assessment: The process used to systematically evaluate a learner's skill or knowledge level.
3) Content: Information captured digitally and imparted to learners. Formats for e-learning content include text, audio, video, animation, simulation, and more.

4) Cascading Styling Sheets (CSS): An HTML feature that enables web page developers and users to specify the way a web page appears when displayed in a browser, by applying a number of different style sheets to the page. Each style sheet controls a different design element or set of design elements.

5) Browser: A software application used to locate and display web pages.

6) Evaluation: Any systematic method for gathering information about the impact and effectiveness of a learning offering. Results of the measurements can be used to improve the offering, determine whether the learning objectives have been achieved, and assess the value of the offering to the organization.

7) Home Page: The main page of a web site. Typically, the home page serves as an index or table of contents to other documents stored at the site.

9) Resolution: The number of pixels in a given space, usually measured as dots per inch (DPI). Also, the number of dots per inch used by an output device.

10) Screenshot: A picture of a computer display that shows the display at a given point in time, also called a screen capture. Annotated screenshots are often used in training programs and to illustrate software manuals.

11) Scroll: To move text and images on a computer screen in a constant direction—down/up, or right/left.

12) Usability: The measure of how effectively, efficiently, and easily a person can navigate an interface, find information on it, and achieve his or her goals.

13) World Wide Web (WWW): A graphical hypertext-based internet tool that provides access to homepages created by individuals, businesses, and other organizations.
14) Log on/Log in: To establish a connection over a network or modem with a remote computer to retrieve or exchange information.

15) Internet: An international network first used to connect education and research networks, begun by the US government. The Internet now provides communication and application services to an international base of businesses, consumers, educational institutions, governments, and research organizations.
CHAPTER TWO
REVIEW OF THE LITERATURE

Introduction

Technology literacy is increasingly an integral part of public school education that includes teachers, administrators, other professionals and parents (Bernshausen & Cunningham, 2001). No other advancement in technology since the dawn of the Industrial Revolution has affected so overwhelmingly the lives of parents and teachers everywhere such as the Internet. It is undeniable the fact that the Internet has made available more options to the masses which were not possible before. Information that once resided only on paper in a particular file is now available to those who need and when they need it. No longer do guardians, care takers or parents have to drive to a meeting, take time off, or call school administration to retrieve a piece of information.

An electronic gradebook program will track missing assignments and students' progress (McNichols, 2000). Prior to the advent of electronic gradebooks, teachers spent a lot of wasted time tracking students' progress. This is time spent that teachers would most likely prefer spending on their class lessons or creating and
researching more exciting ways for their students to learn (Hall, Buder, Kestner, & Limbach, 1999). Teachers are now free to teach their classes without being interrupted and have the satisfaction that all information they have on the student the parents have access to it too. Most teachers will agree that compiling grades is one of the most time-consuming and tedious tasks we do (Huber, 1997). Electronic gradebooks are computer programs that are changing the relationship among parents, their children and their teachers (Meadows, 2005).

Every detail of the student’s interaction at school, attendance report, progress report, learning difficulties, problems at school and general behavior can be easily ported over to a website. Parents can check these reports from the comfort of their office, home or a location that provides Internet access. If they’re at work, they can log into our system, see how their child is doing and talk about that when they get home (Brunkow). Parents can also send emails to various staff members and teachers and develop effective measures to help correct a particular problem or an issue and guide their kids to a sound successful career in life. Parents love them because they can closely monitor their child’s development (Kidney, 1995). For a students success in the classroom there
exists a need for a strong parent-teacher relationship. An online system can improve this communication effectively and regularly (Rice, 2001). Rice explained the various methods he developed in order to communicate with parents regularly and effectively. He found that attendance by parents and their interaction had increased at the online website and added more features using the ideas that he received from parents and students.

Communication Between the School and the Parent

Current Statues

In “Web platform enhances communication between parents, faculty in Hempstead ISD community” by Edline (2002), several needs and drawbacks were measured (http://www.thejournal.com/magazine/vault/A4162.cfm). The foremost was the in-effective turn around time between communication sent by the teacher to parents or vice versa. The communication sent via mail was either lost or ignored by parents who would not get the overall picture of the issue at hand. Parents who did communicate were not able to get a response from the teacher in time to provide measures to correct the problem. Second on the list was the meeting time and schedule, parents and teachers would find themselves routinely tied up at other engagements.
This resulted in gaps and holes in the communication process. Teachers and staff members also expressed that they were not able to carry out their duties to the fullest extent due to interruptions by eager parents who wanted to get up-to-date information on their ward. Guernsey, L. (2001), reported that parents usually like to keep an eye on how their children are doing in school and like to see the progression in a timely manner and realize the overall growth of their child, instead of getting a grade report card later on with the usual little blip, or one bad grade giving them an incomplete picture of the overall scenario.

Advantages of Online Communication

Effectiveness of New Tools Available

In order for the communication plan to succeed it needs to be simple yet effective and allow each individual participant to be able to access information easily and respond in a timely manner. It should provide respect and harbor partnership mentality where participants understand and support shared-responsibility, (Plevyak, L. & Heaston, A. 2001).

Any new technology implemented does bring in a learning curve with it; if the curve were too steep it
would prevent the effective use of the technology. For a medium to be used by a wide audience it needs to have very simple commands and very user-friendly features. In today's very competitive environment the Internet has become an indispensable tool. Educational institutions around the globe have embraced this new medium and are implementing effective tools using this technology. The Internet is now accessible from any corner of the world giving even remote users the chance to access information that they would not have had access to.

Benefits

Educational institutions that have implemented some sort of online management system, online websites, communication bulletin or online forum have seen a marked improvement and increased parental and community-wide involvement in school affairs and with children. Participation and involvement at school board meetings and with teachers jumped to record levels. Any commitment made by these institutions to enhance their communication using modern technology has paid off with parents and teachers reaping the benefits ensuring timely intervention and response from both parties towards the growth and development of students.
In "The School-Home Connection," Borelli, F. (2001), found that the districts implementation of an online reporting feature resulted in improved communication and response time from both the parents and teachers. It reduced overheads and gave teachers and administration more time to do their jobs effectively without any interruptions. The benefits can only be reaped if the system proposed or used is cheap and does not pose huge financial burden on the school.

The Hempstead ISD community used a system developed by Edline (2002), which was cross-platform and accessing 24-7 anytime and anywhere. It effectively showed the benefits of implementing a system to keep parents updated without distracting teachers from their everyday teaching tasks. Parents in the community no longer had to call or interrupt a class to confirm an assignment, check a grade or verify attendance, they simply logged on to a online web portal and got a snap-shot of the information they needed. Teachers included comments or emailed parents regarding the student's progress, which is then available for the parents to respond to and have an active participation in their wards development.
Challenges

Concerns of Using Online Communication Tools

In order to keep the parents updated on their child’s academic progress, teachers however are constantly on a schedule to keep the current information regarding the students’ progress updated. Even with the availability of online grading tools, communication between the teacher and parents should be at an effective level.

Web Design Guidelines and Instructional Design

Web Design Guidelines

Research by User Interface Engineering, Inc. (2006), demonstrates that the public cannot locate the information they search for on web sites nearly 60% of the time. This can result in wasted time, decreased productivity, high amount of frustration, decreasing the amount of repeat visits and money. This is why it is so important to develop a user-friendly web site. The following will be an explanation of usability guidelines.

The initial step in developing a user-friendly web site is to know why one is constructing a web site. It is critical for one to set objectives here. The next thing to think about is one’s targeted audience, meaning who is going to be coming to one’s web site. It is also very
important to understand when and why these people will be coming to one’s site. According to HHS Web Management Team (2006), a site must be easy to learn, efficient to use, easy to remember on subsequent visits, and satisfying with a minimum number of errors as users go through the site.

Appropriate selection of webpage elements like buttons, navigational menus, background colors, text colors dictates good percentage of user experience while navigating web sites. The key feature of any good web site is smooth and simple navigation. In developing a user-friendly web site, it is vital to create a common navigational look to ensure that users can use the Web site navigation effectively (Detweiler, & Omanson, 1996). A satisfying user experience depends on how easily he/she is able to navigate from one page to another. According to IBM (2006), it is very important that one uses labels that accurately describe the destination and/or resulting action of links.

In terms of background colors, one should provide a consistent visual look. The color scheme for the background should be kept simple and appropriate. It is also important to make sure that the background color and text color provide adequate contrast for trouble-free reading.
Instructional Design

During the process of identifying the goals of a product that is to be developed, things that should be taken into consideration and questions that should be asked include, what are the needs of the intended audience, what the product will be serving, and what is in the scope of implementation. Identifying the goals is considered part of the first phase of the ADDIE Model. According to A.W. Strickland (n.d.), a Professor from Idaho State University, College of Technology Education, "the ADDIE model is a generic and simplified instructional systems design (ISD) model" (http://ed.isu.edu/addie/). ADDIE is an abbreviation for analyze, design, develop, implementation, and evaluation.

The most critical phase in the ADDIE Model is the analyze phase. According to the ADDIE Model, presented by Intulogy (2005), the analysis phase "defines the project’s needs and ways to measure its success" (http://www.intulogy.com/addie/analysis.html). It is very important that one collects critical information during this phase regarding the learner’s abilities and route content. Examples of important questions asked during this phase are as follows: Who is the audience or what do they need to learn? It is in the design stage, where the
instructional strategies are designed and media options are chosen. A. W. Strickland (n.d.) also states that design is the systematic method of research, planning, developing, evaluating, and managing an instructional process (http://ed.isu.edu/addie/). The next stage is the development phase. The development stage is the procedure of writing and creating the resources required to meet the goals. Here, materials are created according to choices made throughout the design phase. Next is the implement phase. This stage involves the examining of samples/prototypes (with aimed audience), placing the good in full production, and preparing learners and educators on how to utilize the product. The final phase is the evaluation stage. In this stage, Strickland (n.d.) states that the evaluation phase contains two parts: formative and summative (http://ed.isu.edu/addie/). Formative evaluation exists in each stage. Summative evaluation contains exams for standard-related noted items and offering chances for advice from the users.

Summary

Lewis (1998) stated that the Internet not only allows for dissemination of curriculum but also for communication, because it decreases the social barriers
that keep teachers, parents, and students from communicating. It is clear that the use of online technologies can help improve the communication gap between parents and teachers. A critical point that should be noted here is that although the system brings in overwhelming benefits, it does require considerable effort on the teacher's part to post all the necessary information into the system. If the information were not posted in a timely fashion then the system would lose its effectiveness as a powerful reporting tool. It also brings a concern with privacy groups and advocates regarding breach of information from the system. This can be effectively dealt with by educating the teachers and parents on the use of the system and how to safeguard their data from prying eyes and identity thieves.

The Internet is bound to change the way educational institutions perform their day-to-day functions. This system can be improved by having individual profiles of the students when they get admitted into the class and provide information via email or an online forum for regular updates on attendance, extra-curricular activities, grades, weakness and strengths. This information can then be tied to a career advisor who can look at a student's progress using powerful analytical
tools to see which core strengths can be utilized and inform parents of their child's future career. Johnson (2000) suggests that students' learning can be enhanced when teachers and parents keep close communication.
In designing and developing a product, it is vital to use a systems approach that offers the smoothest development resources for training courses. As a result, an instructional design approach to the formation of the resource was used in this project. This included the ADDIE Model, which stands for analysis, design, development, implementation, and evaluation. "The ADDIE instructional design model provides a step-by-step process that helps training specialists plan and create training programs" (http://www.intulogy.com/addie/analysis.html).

The main purpose of this project was to identify and address the needs of the targeted audience, who in this case were parents of seventh grade students taught by the researcher. In the analysis process, the researcher found out who the parents of students were and what concerns they had regarding their child's regular academic performance. In order to do this, the researcher gave out a survey to its targeted audience. Through this survey the researcher intended to find out if the targeted audience
was satisfied with the existing system, such as biweekly progress reports given out by the teacher.

Another important issue of this project was to identify who the focus group would be. In order to find out the focus group, a research was conducted based on existing systems and their successes. Some resources included online features and teachers from other schools. In the research process, the examiner concentrated on what problems had been encountered, their success rate, and any other special issues needed to be addressed. After conducting the research a system was chosen that best fit the target audience, that is parents and their needs.

After identifying the targeted audience, surveys were handed out to 50 subjects of whom 29 were returned. The survey questions were designed and organized to find out what motivated the parental involvement in the academic performance of their child. Some examples of survey questions were, "Would you prefer to monitor your child's progress online, rather than in a progress report given to your child to bring home? Do you have a computer at home? Are you comfortable using the internet?" A review of the responses to the survey indicated positive responses as expected. Responses to the questionnaire demonstrated a fairly good level of computer literacy amongst the
targeted audience (parents). The study of the survey showed that the targeted audience is comfortable using the Internet for day to day needs and would prefer to use the Internet to monitor their child’s academic performance at school on a regular basis.

Research was conducted to identify a focus group for my project. The main idea of doing this was to base my project on any standard model that serves the same purpose. As a part of research work, a colleague was consulted who is a Social Studies teacher at another middle school, who has a similar system which addresses the identified problem. This gave the researcher an idea about what specific content one should be focusing on in the design plan.

Design

This project is designed as a website which will be used by the parents of students and the researcher. The success of a good website design depends on effective content organization and a good design layout. According to a user’s point of view, good visual organization makes it easy to locate content (Wolfe & McCracken, p. 82). In terms of visual organization, the following 4 principles
were taken into consideration: proximity, alignment, consistency, and contrast.

With proximity, people tend to perceive items that are located close together as being related (Wolfe, p. 83). As a result, it was important for the researcher to arrange various items centrally rather than distributing them throughout the screen. This also helps resolve the issue of distorted look of the page while viewing it with different screen resolutions. By arranging navigation menu and content of the page close to each other with a dark black border adds to the look and feel of the website.

The content was organized into different pages and each page consists of a navigation menu which provides smooth navigation to all the different pages of the website. The website maintains consistency related to various characteristics like, page background color, navigation menu, title bar design, font size and font color.

Content in the web site is organized into different web pages based on their functionalities, with a proper navigational menu. The content is broken down into the following pages:
1) Introduction- This provides an overview of the web site and its purpose. It consists of instructions on how to use the various resources on the website.

2) About Teacher- This gives information on the educational background of the teacher and will also have contact information.

3) Syllabus- This provides information on what is expected from the students, in terms of behavior and the curriculum.

4) Weekly Calendar- This shows daily assignments and electronic presentations.

5) Parent/Teacher Login- This gives parents access to only their child’s academic information. This also gives the teacher access to view and update the academic information of all his/her students.

6) Parent Resources- This provides links to help parents become more involved in their child’s education.
Figure 1. Flowchart of Content Structure

This website consists of a home page which has the information about the purpose of the website and consists of directions for using various resources on the website. As the intended users of this website, parents will be required to have a unique username and password to access the resources (grades) on the website. Having a unique username and password will partly address the security issues by restricting the authorized access to the information on the website. The contents of the website
consist of information about the teacher, a syllabus for classes, a weekly calendar showing assignments for the previous week, and links to resources to help parents to become more involved in their child’s academic progress.

This would be a helpful resource to the parents who are willing to be involved in their child’s academic performance. Parents will be using this website to monitor their child’s progress in my Social Studies classes. They will be assigned a username and password which they will be using to access their child’s personal information regarding academic progress. Parents will be able to view the information about the teacher, syllabus, and a weekly calendar showing weekly assignments, and parental resources by choosing from various options of the navigation menu. Parental resources will offer information that will help them to get more involved in their child’s academic progress.

The design of the website has been kept simple and user friendly. The pages consist of three main components: the navigation menu, the title bar, and the content area. Navigation menu and content area are clubbed together. The extensive use of tables has been done in designing the layout of the pages. The tables have various advantages over the frames. They take less loading time than what
frames usually take. The tables are processed in the similar manner by most of the browsers whereas frames are not. To resolve the resolution issue of different viewers, an equal amount of left and right columns are left blank. This lets the major contents of the webpage to be displayed in the center. This addresses the alignment issue of the website.

Since this website is intended to be used by an instructor and parents, it was not necessary to use a variety of colors. The appropriate use with a couple of colors with a decent combination served the purpose. The color scheme for the background of the page is simple. The design of the webpage is flexible enough to accommodate future changes to the website extending the features of the website.

The background color remains the same for most of the portion of the webpage except the column which holds the navigation menu. The font used for most of the text on the website is Arial, which is the most common and widely used font on the Internet. The font color is black. The font color for the text with hyperlink is blue. This is to distinguish hyperlinks from the normal text in the content area. This is an example of contrast, making different items look different.
Navigation of the website was designed to give user flexibility to jump from one page to another with the least effort by providing a consistent navigational menu for all the webpages. The navigation menu remains the same throughout all the pages of the website. This supports the consistency feature of the website. This is to assure comfortable navigation across the pages of the website. As the intended audience of this electronic gradebook was parents of students, this selection was made to cater to the pleasing experience of elderly users.

This means that a user can navigate to any page of the website from any page of the website. A simple text based menu was chosen instead of an image menu because for a slower internet connection, it takes reasonable more time to load images. This also provides flexibility to add menu options to the navigation menu as the part of future development. Font color for the navigation menu item is white. This color was chosen because it blends well with the background color and can be distinguished from the content font. The column that holds the navigation menu has a white background which makes it stand out and adds an appealing look to the website.
The title bar gives a basic idea about the contents of the webpage. It consists of a page title in the center and images of the school on the left and right corners.

Development

The purpose of this project is to increase the involvement of parents in their child’s academic progress. This project gives parents access to the information needed to monitor the academic development of their child. With the development of the website, parents will now be in the position to take timely measures to improve their child’s educational accomplishments.

With the availability of the proposed website, the teacher will save time, which in the past has been spent in making biweekly progress reports for students, and can eventually used this time saved in making the classroom a more effective learning environment. The web pages are coded using HTML and JavaScript. The website is hosted on a windows platform using IIS 6.0 server.
The researcher has tried to keep the design of the website simple and user friendly.

This page consists of three main components, Navigation Menu, Title Bar and Content Area.
• Extensive use of tables have been done in designing the layout of the page. Tables have various advantages over frames, they take less loading time then what frames usually take. Tables are processed in the similar manner by most of the browsers whereas frames are not.

• To resolve the resolution issue of the different viewers, equal amount of left and right columns are left blank. This lets the major contents of the webpage to be displayed in the center.

• Since this website is intended to be used by instructor and parents it wasn’t needed to use various different colors. Appropriate use of couple of colors with decent combination served the purpose.

• The color scheme for background of the page is simple.

• The design of the webpage is scalable and flexible enough to accommodate future changes to the website extending the features of the website.
Color and Font

- Background color remains the same for most of the portion of the webpage except the column which holds the navigation menu.
- Font used for most of the text on the website is Arial which most common and widely used font for the internet. Font color is black.
- Font color for text with hyperlink is blue.

Navigation Menu

- Navigation Menu remains the same throughout all the pages of the website. This is to assure comfortable navigation across the pages of the website.
- A simple text based menu was chosen instead of image menu because for slower internet connection it takes reasonably more time to load images.
- Navigation Menu has a white background which makes it stand out and add a pretty look to the website.
- Navigation Menu has five menu options which are:
  1) Home
  2) About Ms. Zaidi
3) Syllabus
4) Weekly Calendar
5) Parent Resources.

**Title Bar**

- Title Bar of the webpage gives a basic idea about the contents of the webpage.
- It consists of Page Title in the center and images of the school on the left and right corners.

**Content Area**

- It forms the major component of any page of the website.
- It gives the overview of the website and contains instructions on how to use various resources on the website.
- Here the user will find an option to sign in as an instructor or parents. To sign in, upon clicking the drop down list user can select appropriate user type and entering the password click user clicks on the sign in button.
- If the user is “Parent” then he/she will get to see the grades of the student and teacher
comments. If the signed in user is the "Instructor" then the instructor sees the option to enter students' grades and post comments for that student.

Figure 3. Screenshot Showing About Ms. Zaidi Page
Content Area

• Content Area of this page consists of the researcher's educational background.

• It consists of the researcher's contact information. Parents can use this information to reach the teacher regarding concerns with the academic progress of their child.

External Links

Under the title of Favorite Links, this section lists external links to various educational and informative websites.
Content Area

- As the title specifies, content area of this page consists of Syllabus for the course taught by me.
- This page introduces parents to the curriculum taught at the school.
- This part of the website will keep the parents updated with the test schedules, assignment and project deadlines.
Content Area

- Here weekly activities taking place in my class are listed.
- It will list the activities scheduled for two weeks and will be updated biweekly.
- Weekly assignments and lesson plans will be arranged in tabular format as seen above.
- Parents will be able to view a particular lesson plan by clicking on the hyperlink.
Content Area

Content area of this page consists of various external links that help parents to get more involved in their child’s education and influence their academic progress.
Content Area

- The above page gives an overview what parents can see upon signing into the system.
- Content area lists individual assignments and project grades student had received. This gives parents the necessary feedback on the academic performance of their child.
- Parents can also view any comments posted by the instructor for the particular student.

According to Li (1998),
Electronic grade books help you keep records up to date, and communicate grades to students, parents, and administrators more effectively. Grades can be entered numerically, with letters, or with comments for alternative assessment. Perhaps the greatest advantage of these grade books is the flexibility they allow educators in reporting student progress. They possess the ability to print class averages, individual student grades, lists of assignments, and even missing assignments, (p. 62)

The project will have an electronic gradebook that will allow instructors to calculate grades automatically and will let them email parents as and when they update it. The parents on the other hand will be able to view these grades at their own convenience.

Testing

The website underwent User Acceptability Testing (UAT) and QA testing. The website went through the following test cases that were evaluated. The errors were collected from the survey that was handed out to the parents asking them questions on the website;

1) Navigation: The feedback received helped in improving the links and placement of buttons on
the website. For example, font color for links was adjusted for proper contrast and thus was now visibly better.

2) Layout: The design, color and template of the site was taken into consideration. During the testing it was noticed that the text and pictures would loose their formatting when viewed in different browsers. To fix the issue, all objects on the webpage were individually placed within their own cell space in a tabular format.

3) Security: It was noticed that users would not close the browser after they were done with the website. This meant that any other user could actually browse the website and compromise security and privacy. It was thus recommended that the website log users out if there was more than 15 minutes of inactivity.

4) ADA Compliance: The website was tested for ADA compliance. For example, the images were tagged with a textual description for blind readers.
Implementation

This would be a helpful resource to the parents who are willing to be involved in their child's academic performance. This is just a design template and not a complete working model. Parents will be using this website to monitor their child's progress in my Social Studies classes. They will be assigned a username and password which they will be using to access their child's personal information regarding academic progress. Parents will be able to view the information about the teacher, syllabus, and a weekly calendar showing previous weekly assignments, and parental resources by choosing from various options of the navigation menu. Parental resources will have information that will help them to get more involved in their child's academic progress. The researcher will take surveys, feedback and reviews to help fine tune the website in accordance to my target audience. During the initial phases the researcher will mail flyers and conduct joint sessions with parents to introduce the website, its features and other functionalities to them.
Evaluation

The website is at: http://www.elinksoftware.com/shazia/

The main purpose of this project was to identify and address the needs of the targeted audience, who in this case are parents of seventh grade students the researcher teaches. In the analysis process, the researcher found out who the parents of its students were and what concerns they had regarding their child’s regular academic performance. In order to do this, the researcher gave out a survey to my targeted audience. Through this survey the researcher found out if the targeted audience was satisfied with the existing system, such as biweekly progress reports given out by the teacher.

Field Test Background

Since the targeted audience for this website is parents of seventh grade social studies students, the researcher decided to concentrate the field testing on three selected participants. The selection criteria of these participants was based on a survey the researcher initially conducted which helped select the right participants based on how comfortable they were in using the World Wide Web for day to day use.
Field Test Result and Setup

After the selection process was completed the chosen participants were contacted through phone calls. Upon their agreement, for testing out the proposed product they were provided with the necessary instructions on how to use the product through email. Along with the instructions each of the participants was provided with a unique username and password to access the user specific information on the website. Besides the instructions given on how to use the product, a survey (see appendix b), was sent through electronic communication, which was required to be filled by the participants after testing out the product.

Evaluation Results

According to the surveys returned, the feedback was quite positive. Parents of 7th grade Social Studies students were ecstatic about the fact that they could access personal information about their child’s academic performance. According to the feedback, the site was easily accessible and user friendly.

Plans for Revision

As the designer of this website, the researcher will work on making sure that each user is provided with a
username/password that is something they can relate to and that is easy to remember. For example, using the student’s birth date as a password is something parents can remember.

Summary

This project was a good learning experience for instructional design and was a good opportunity to identify different issues that are encountered during the instructional design process. The instructional design process is a step by step process and each step requires a significant amount of time and effort. The researcher acknowledges the importance of analysis and the design phase of the instructional design process, which if given enough consideration, results in a good final product. Identifying the needs of the targeted audience is very important in the process of instructional design.
CHAPTER FOUR

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this project was to develop an efficient and effective online educational technology tool based on research from multiple sources to improve effective communications between students, counselors, teachers, parents and support staff.

Conclusions

Working on an online gradebook has been a very exciting learning experience. One of the major challenges was to get acquainted with available learning tools in Instructional Technology. Looking back at the current scenario I found that parents, teachers and staff all had the same objective but had no means of communicating with each other effectively and efficiently on a daily basis.

Parents form a very important role in the upbringing of their ward, by not being able to involve themselves in their wards' day to day progress due to other constraints and using outdated modes of communication with instructors and staff, they have little of no information on their ward. Thus the very information that could have helped them make better decisions and implement new ideas at the
right moment in their child’s progress is lost. This has become the major challenge in today’s educational system to improve this basic underlining dilemma. By implementing this bold new way of communicating between staff, parents, and teachers, we stand at a better chance of improving and implementing new ideas to monitor and measure their wards progress.

Recommendations

This project heavily relies on the fact and assumption that parents are looking at various ways to monitor their wards progress in more efficient and effective ways. The traditional model has insofar been helpful in only certain areas. Having an online-portal based activity model as the underlying form of communication for grades, attendance, projects and other overall progress available 24 hours a day, 7 days a week, gives everyone the flexibility to check the information when they want and where they want. This project can be better served if parents, staff, students, counselors, and teachers all have been invited to use this technology. Group sessions should be organized to inform them of the benefits of this model and explain the various areas that they can utilize. Having email, on demand fax-back, chat
group, audio-video functionality in there would help each individual member to communicate effectively with each other without the constraints of today’s environments. The project would recommend that parents from low income families be given access to internet so they can work effectively with teachers and staff.

Summary

Access to information in the present world is the key to success. Having access to that information in a 24-7 model improves the chances that effective steps can be implemented as and when needed both by parents and teachers and keep each other posted in a timely fashion.
APPENDIX A

CD OF PROJECT
Please take the time out to fill out the following survey. You response will be greatly appreciated.

Directions: Circle one of the following to respond to the question. Please feel free to share any comments/suggestions.

5 = Strongly Agree
4 = Agree
3 = Somewhat Disagree
2 = Strongly Disagree
1 = No Response

1. Website was easily accessible

5  4  3  2  1

Comments: ____________________________________________

2. Instructions were clear and helpful in using the website.

5  4  3  2  1

Comments: ____________________________________________
3. Progress report was accessible with the provided username and password.

4. All the links on the different pages were working properly.

5. Website was well organized and informative.
Social Studies

Instructions for Accessing Your Child’s Progress Report

1) Go to the following website:
   http://www.elinksoftware.com/shazia/

   To access your child’s progress report, follow these steps!

2) Scroll down on “usertype” to choose the parent option.
3) Click username box.
4) Enter your username that has been assigned. (Type it in exactly as it appears: letters and numbers are case sensitive)
5) Click password box.
6) Enter password.
7) Click submit.

To find information on Ms. Zaidi’s background, click “About Ms. Zaidi” on the left side.

To find information about the syllabus, click “syllabus: on the left side.

To access information about class assignments, click “weekly calendar.”

To access information about parental resources, click “parental resources” on the left.
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