WEB PAGE DESIGN IN DISTANCE EDUCATION

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Abstract
Distance education is contemporary process of the education. It facilitates fast, easy delivery of information with its concrete hardware and software tools. The development of high technology, internet and web-design delivering become impact of effective using as delivery system to the students. Within the global perspective, even the all work place need educated staff, therefore; there is huge tendency to be education without any time, space, distance limitations from anywhere of the world. Distance Education programs and related web-design should be effective and available in immediate time to catch the students for doing e-learning through the internet connection. If the web-design is a tool to deliver information and attract attention of students in order to access e-learning, there should be evaluation and reflections of how this page can be more attractive and informative to be effective. In the study, the scope of the research, there should be the approximate reflections of how web design should be in distance education based on the concrete, approval research study results.

Introduction
In order to come up with the expanded explanation of distance education and its effective tools, we should know the basic tools which are internet and development of high technology. There are some kinds of concrete reasons that we should use internet. First of all; online resources can help us to teach students accessing information immediately and then web encourage some of the latest trends in learning as interactivity in learning process. Thirdly; with technology and internet activities, students catch the motivation and requires focusing collaboration and project-based team activities, cooperative learning which leads to catch meaningful learning for the students.

Distance Education is the technological improvement that facilitates all advantages of technology. Distance Education is the process of delivering information between the participants with the actively involving of technology. Students are the active participants and technology requires student-centered education through the distance education. In order to make effective distance education programs, there should be understandable, meaningful communication and guidance through the web-design.

In order to cope with the effectiveness of web-design in learning process of students, we should understand the whole process of distance education and its inevitable useful tools within the communication between participants and their self-study activities.

The rapid development of communications requires eliminating the distance and opening the new link to the education. With using technology distant learning can be defined as participants' separation as time and space, using electronic, print resources, voice communications and combinations of all of them. Distance education means that learning may take place when learners are connected with information resources, each other, instructors. Internet and web pages are main fundamentals of distance education in order to provide communication interactivity. These tools make distance education programs different from every university program and change, affect the attitudes of students toward distance education. While the distance education become huge market place, effective system and productive tools make programs different between each other (Roblyer, et al., 2002).

In distance education, there are three types of interaction as learner-content interaction, learner-instructor interaction, learner-learner interaction (Harry, et al., 1993). There are also different design considerations and their principles that should apply all of them; 1- Good structure, 2 - Clear objectives, 3- Small units, 4- Planned participation, 5- Completeness, 6- Repetition, 7- Synthesis, 8- Simulation, 9- Variety, 10- Open-ended, 11- Feedback, 12-Continuous evaluation in distance education (Moore, Kearsley,1996,p.122). Under the sense of constructivist approach, there should be technology within the education. Because the main objective is the understanding and meaningful learning of the students. With the well designed web-page and interactive internet tools of the distance education, student can easily access information that they should experience within the sense of self responsibility.

In fact; distance education is not the personnel staff, it's group design, work in order to create effective system. Technical group, design and sender-receiver participants have active role within this process. As it was mentioned before, distance education provides elimination of time, space and distance. It is different from the traditional classroom context because it's flexible, student-centered, home atmosphere context. In addition to this, it helps for the development of self, self-responsibility under the sense of constuctivist approach. Web-design is one of the main tools of the distance education to guide, deliver information to the students. It should be immediate, easy delivering, understandable for the meaningful, effective learning of the students.

Aim of the Research

Effective communication and immediate access of the information for people who involve distance education based on internet, there should be available and understandable web-design to the students. Web-design and interactive visual screen of the distance education system should be well organized in order to attract attention and motivate people who actively participate self-responsible activities.

In communicating online atmosphere, in order to get education, there should be design of the courses and technical, technological applications. Computer-based online courses require using email, internet, videoconferencing, audio-visual learning and telecommunicating interactively. Students can face with technical, semantic physgraphic barriers through the learning stages in distance education. It's inevitable to face this kind of problems in communication process. For minimizing the communicational barriers, increasing their motivation, understanding and self-responsibility, concentrating well designed web page is one of the component to overcome understanding, attracting and motivating problems (Howell, 2001).

In addition to this; through the web page based accessing the course, personalized, individualistic learning can be established effectively according to needs, interests. Learning through the web page and directly internet access learners can cooperate, collaborate with group members and become more pragmatic learners who can do and learn with their experiences. What it means that, they can take what they need from content as a learning style.

With the help of technology and distance education, learners find the atmosphere of meaningful learning and courses that really make a difference. It can be beneficial if students could create real friends, interaction within the experiencing an online degree program. Therefore; based on constructivist view the course design, web design and internet activity should be designed. Constructivism implies specific learning activities or instructional strategies, is a theory of learning, is underlying way of thinking that informs instructional decisions and activities. When the standards and principles of constructivism fit or apply to the distance education, learners actively experience their own reality and information. In addition to this; required or inevitable communication barriers should be overcome with the effective design of technical, semantically, psychographic conditions. For the effective system of distance education programs, design of the system and understandable, meaningful, helpful web page should act properly within the communication process (Wilson, et al., 2000).

In the research field study; as it was mentioned before, distance education is a whole process that participants involve to get education through the technology based. In order to create effective distance education programs, its tools and web page design should be effective, understandable for accessing immediately and delivering meaningful information. In that study field; web page design of the distance education program was handled to reflect some kind of perspectives on how the web page or design should be implemented in order to create quality of system based on communication and information high technology.

Importance of the Research

With the development of high technology, social, political and educational aspects of life become affected. Like the learning and behavior styles of the individuals, theories, approaches that should involve into education change. Especially the development of interactive internet and computer system, education system and participants become having concrete active roles.

The popular concept as constructivism has impact to the learning and cognition within the learning environment. Individuals should experience search and accept their own reality from internet and web which they catch information immediately. Web-design and internet are main cues of creating interactive education system based on technology and vulnerable distance education. With the web page and effective design, students can catch reality through digital library, cyberspace and global village. In traditional classroom learning, there is no chance to let the student experience reality and access information according to their needs, interests. But technology provides to overcome all ineffective system of learning especially through distance education and its tools (Wilson, et al., 2000).

All explanations and reflections carry us to determine and focus to the effective tools or components of distance education which are web-design and internet interactivity. Because distance education become the huge market and place in education based on its constructivist view and elimination of distance, time. Therefore; each program can compete to catch students who are active role in e-learning. In this research study, web-design effectiveness and importance on informative and communication base will be determined in order to be reflective on how could be effective of distance education and its applications in developing country within the competition of systems based on distance education.

Web Design Principles

A good Web experience consists of useful and usable content framed by the principles of visual communication to create meaning and understanding for an audience. The following formula can be used to point out the importance of Web design in distance education: content + design = understanding. Structures of perception which will tie in to structures of cognition should be used in information architecture. A designer should work not simply with lines on paper, but with perceptual structures.

The three founders of Gestalt psychology were German researchers Max Wertheimer, Kurt Koffka, and Wolfgang Köhler. These men identified a number of principles by which people organize isolated parts of a visual stimulus into groups or whole objects. There are five main laws of grouping: proximity, similarity, continuity, closure, and common fate. A sixth law, that of simplicity, encompasses all of these law.

Gestalt qualities by which eye group things and which enable designers to bear repeated viewing:

Similarity: similar objects are percieved as belonging together and dissimilar objects stand out from a group of similars.
Proximity: objects close to each other are percieved as belonging to each other.
Continuetion: connected points in straigth or smoothly curving lines get connected.
Closure: eye will complete a line or curve to form a familiar shape.

Although most often applied to visual perception, the Gestalt laws also apply to perception in other senses. When we listen to music, for example, we do not hear a series of disconnected or random tones. We interpret the music as a whole, relating the sounds to each other based on how similar they are in pitch, how close together they are in time, and other factors. We can perceive melodies, patterns, and form in music. When a song is transposed to another key, we still recognize it, even though all of the notes have changed (http://encarta.msn.com/encnet/refpages/RefArticle.aspx?refid=761571997).

According to Gestalt principles, font sizes, colors, style and alignment must be in good arrangement, this helps to keep different groups separate and give strength to the site. Graphic design creates visual logic, an optimal balance between visual sensation and graphic or text information. Without the visual impact of shape, color, and contrast pages are often graphically boring and will not motivate the viewer to investigate their contents. Dense text documents without the contrast and visual relief offered by graphics and careful page layout and typography are also more difficult to read. However, without the depth and complexity of text, highly graphic pages risk disappointing the user by offering a poor balance between visual sensation, text information, and interactive hypermedia links. Visual and functional continuity of the Web site organization, graphic design, and typography are essential to convince the audience that the Web site offers them timely, accurate, and useful information. A careful, systematic approach to page design can simplify navigation, reduce errors, and make it much easier for users to take full advantage of the information and features of the Web site

Just as in traditional print publishing, high-quality web sites adhere to an established set of type style settings consistently throughout the site. Consistency gives polish to a site and encourages visitors to stay by establishing an expectation on the structure of a text. If this expectation is dashed by sloppy, inconsistent formatting, visitors will not have a comfortable experience and may not return back to the site thus, reduce efficiency. (http://www.webstyleguide.com/page/index.html).

If on every page different background colors are used this weakens the strength identity formation of the whole site. The primary task of graphic design is to create a strong, consistent visual hierarchy, where important elements are emphasized, and content is organized logically and predictably. Graphic design is visual information management using the tools of layout, typography, and illustration to lead the reader's eye through the page. Readers see pages first as large masses of shape and color, with foreground elements contrasted against the background field. Only secondarily they begin to pick out specific information, first from graphics if they are present, and only afterward do they start parsing the "harder" medium of text and begin to read individual words and phrases (http://www.webstyleguide.com/page/index.html).

The pages should fits in one screen. Many human interface researchers and designers of graphic user interfaces have noted the disorienting effect of scrolling on computers screens. This loss of local context within scrolling computer screens is particularly troublesome when basic navigational elements like linkages to other local pages in the Web site disappear off-screen as the user moves through very long pages. This argues for navigational Web pages (home pages and menus in particular) that contain no more than about one to two 640x480 screens worth of information, and which feature local navigational links at both the beginning and end of the page layout. Long Web pages require the user to remember too much information that is currently scrolled off the screen; users easily lose a sense of context when the navigational buttons or major links are not visible (http://www.webstyleguide.com/page/index.html).

Repeatedly same colors, shapes and textures should be used. This strengthens the organization of the page. Texture is the surface quality of an object. Texture is experienced when someone touches objects and feels their roughness, smoothness or patterns. Texture is the artist's way of mapping these tactile impressions on to the two-dimensional picture. Varying the pattern of light and dark areas on an object creates texture. Light and dark gives the impression of depth. Photographs and shapes should be created with enclosing boundaries and white background should be used, if possible, to forms a perfect contrast color. Mostly, horizontal lines should be preferred. The direction of a line can convey mood. Horizontal lines are calm and quiet, vertical lines suggest more of a potential for movement, while diagonal lines strongly suggest movement and give more of a feeling of vitality to a picture. The weight of the page should be equally distributed. In terms of kinesthetics, top to bottom and left to right must be balanced.

Related Researches

Howell (2001) pointed out those elements of effective e-learning by providing three design methods to minimize side effects of online courses. In addition to this, Howell reported that students spend more time communicating on the internet by being passive information gathering. On the other hand, students come together as a grouped such factors as interest, personal situations, goals or the pace. New leads of technology will find ways to tap into individual differences to help create meaningful courses.

Wilson, et al. (2000) examined the constructivist learning on the web by defining the world-wide web as second major wave of digital revolution. On the other hand, Bred and Lowry realized that web could be used to help adult to build meaningful understanding and competencies. They defined constructivism as the result of mental construction which students construct their own understanding. In addition to this, they clarified three core principles, which are providing access to rich sources of information, encouraging meaningful interactions with content and bringing people together to challenge, support or respond to each other about effective use of the web for learning.

Philips (1998) wrote on article about virtual classrooms, real education under the subheads of distance learning programs on the internet. Article mentioned that online learning through internet is gaining popularity because of its low cost and effectiveness in training employees in various subjects, notably in computer skills. On the other hand, number of universities offer accredited degree program online.

Moisey, et al. (July 2002) wrote on article about fostering self-help at a distance for adults with visual impairments. Article mentioned older people with visual impairments found to have greater coping ability and satisfaction with their activities and more positive outlook on life.

Schwartzman, et al. (Sept. 2002) examined that effects of fiscal economy with technology changed the direction of education toward online courses based education. By these changes, students enhance educational experiences by electronically enhanced course components. Redesigning provides to cover interpersonal communication, interviewing, small groups and public speaking by merging hybrid.

Smith (1998) wrote on article about education poised to go to the "distance". Research comparing distance education to traditional face-to-face instruction indicates that there are no significant differences between two methods of learning when the method and technologies used are appropriate to the instructional tasks. An instructional technology plan uses various distance education techniques, including electronic bulletin boards, email, web resources for relevant links active course sessions based on the web, arranging interest cluster groups, video, audio and chat rooms. On the other hand, internet provides students on distance education to become active participants in the process of understanding course content by implementing interactive, online materials.

Nasseh, (1997) wrote on article about distance education and Learning Infrastructure. Article discussed that distance education is a process of teaching and learning, which delivers interactive, responsive, convenient,

empowering and outcome-oriented activities. Most experts in distance education believe that computer-based distance education is a necessity for the advancement of our learning society and the needed technologies are available for this method of education. Capabilities of World Wide Web will revolutionize distance education in the near future.

Jansson, (1995) pointed out the functions in Groupware to Support Distance Education, which specifies functions especially needed in non-simultaneous groupware systems (computer conferencing systems, bulletin board systems, BBS, etc.) to support their use for distance education. Both general tools, useful also for other uses than distance education, and special tools just for distance education are discussed.

Conclusion
   One of the key elements in distance learning is the Web site used. To attract the user's attention and keep them in and improve learning facilities, besides the content, a good web design is required. In a typical good Web design, similar objects must be used to give a sense of belonging to each other, objects should be closed to each other so that the page looks as complete, connected points must be in straight lines, to have a good texture, block letters must rarely be used and texts must be seen as figures. It is necessary to avoid the use of banners and animation in the Web site so that they do not attract user's attention which is not required. In a good designed Web site, shapes must be created with enclosing boundaries and top/bottom and left/right weighing of the images must be in balance. Finally, every element on the pages must have a visual connection with others so that there is a strong unity.

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