

INVESTIGATING WEB SITES OF FACULTIES OF EDUCATION: THE CASE OF TURKEY

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ABSTRACT

The purpose of this paper is to explore the current status of the web sites of the Faculties of Education (FOEs) in Turkey. Bearing this in mind, a “Web Site Assessment Form” comprising thirty-seven items was developed and the web sites of the FOEs were evaluated with respect to “Content”, “Currency”, “Structure and Navigation” and “Visual Design” categories. The study was administered using a survey technique in sixty-seven FOEs affiliated to The Council of Higher Education of Turkish Republic.

The data obtained were analysed using frequencies and percentages for each item and the results were presented in tables. Our exploration has brought the following points to the ground: out of the web sites of the FOEs, most were judged to be user friendly; communicate information about the faculty, faculty members and administration; post recent news and announcements; have a good deal of color management; be free of redundant details and operate consistently. In contrast, most sites had no search engine; had outdated pages; did not contain any information regarding the dates of initial set-up and last update; didn't publish the English-versions for entire Turkish content. Finally, several recommendations were made in order to streamline the web sites of FOEs.

Key Words: Faculty of education, World wide web, Web site, Web page.

INTRODUCTION

Recent rise of new knowledge, rapid developments in and widespread use of technology lead to considerable changes in education systems. Such changes impel the use of technology in education systems. 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 (İşman, 2005; İşman et al., 2004). In this information age, it is inevitable to bring about individuals knowing how to use and share the knowledge. Employers are increasingly demanding a workforce armed with technological know-how. This implies that technology should become an integral part of education.

Computers pioneered the common technologies in education practices. The increase in the number of computers in educational settings led to widespread use of Web-based education. The most comprehensive field of application for the computer-network-based technologies is the World Wide Web. The concept of the World Wide Web was invented by Tim Berners-Lee, and then it was formalized at CERN in 1989 and 1990. The World Wide Web Consortium, founded by Berners-Lee, defines the World Wide Web as “the universe of network-accessible information, an embodiment of human knowledge”. Recently, web gained a dimension ruling over all the remaining education technologies that aid the teacher (Şimşek, 1999). IT has evolved dramatically since the onset of World Wide Web (Hackett and Parmanto, 2005). Current improvements in technology and the successive innovations changed the way school systems are viewed. Today, web site of a university has become an integral part of a virtual campus in which students, academics and millions of people around the world share knowledge (Acartürk, 2004).

Following the increase in internet usage, the most preferred tools in the field of education turned out to be web sites (Abdullah, 1998). Having gained increased significance in terms of education, web sites provide rich learning environments by incorporating audio and visual instruments, interactive interfaces, communication tools and giving links to other web pages (Uzunboylu and Ballı, 2004). Burgstahler et al. (1997) assert that the World Wide Web provides a huge network of educational resources (Lilly, 2001). Web is a medium which provides

rich learning opportunities for the individuals. Web provides a global learning environment for people from different time zones and speaking various languages (Uzunboylu, 2005).

Several studies highlighted the importance of defining an audience, identifying their needs and targeting that segment of users (Muller, 1996) and suggested that addressing only a specific group of clients would increase the effectiveness of a web site (Abels, White and Hahn, 1999).

Irgat and Kurubacak (2002) note that a web page may push the boundaries of place and time, provide multifarious interaction among individuals and organizations and support the spread and share of knowledge. Knowledge exchange and communication is highlighted in current education systems and the importance of web design is increasing. Web sites of the FOEs are important tools in revealing the infrastructure, the accreditation and services of the faculty at home and abroad. They also carry an important responsibility to implement the information services via internet. They are the windows of the faculties opening to the outer world. In this regard the web sites of the FOEs contribute to the positive image of the organization as well as providing effective IT services for the users.

When we had a quick look at the design of the web sites of the faculties of education in Turkey, we observed that they were not uniform in regard to content, currency, structure & navigation and visual design. In this context, we thought that investigating the web sites of faculties of education in Turkey would be beneficial.

LITERATURE REVIEW

Although examination and assessment of web pages is a current field of study in a variety of disciplines (Atakan, Atilgan, Bayram and Arslantekin, 2008; Clausen, 1999; Clyde, 1996; Hackett and Parmanto, 2005; Irgat 2002; Irgat ve Kurubacak, 2002; Kurulgan ve Bayram 2006; Rotem and Oster-Levinz, 2007; Schmetzke, 2001; Tillotson, 2002), too few studies focused on evaluating web pages of faculties of education (Dağdeviren et al., 2007; Erginer and Erginer, 2003).

Akıllı (2005) analyzed user satisfaction with the web site of a university and suggested that conducting comparative studies among web sites of educational institutions in terms of usability would be useful. More comprehensive comparative studies encompassing other criteria such as content, navigation and design will also be useful.

Erginer and Erginer (2003) conducted an inquiry in 2002 demonstrating brief introductory knowledge about the web pages of the faculties of education in Turkey. This study examined the web sites of fifty-nine faculties, though, couldn't access web sites of a number of faculties and did not reveal any explanation at all about seven faculties. We think that the web sites of both the departments and main science divisions might have experienced some changes from 2002 through 2008. Dağdeviren et al. (2007) compared the web sites of faculties of education regarding *format and content*. Their study covered fifty-seven state and five private, total sixty-two faculties. The results of that study pointed to considerable similarities and differences in terms of content and format among the web sites of the compared faculties. Most of the faculties presented sufficient coverage related to academic staff, administrative staff, and management, whereas few launched a search engine, a site map and orientation in their web sites. Yiğit et al. (2007) devised a scale for evaluating educational web sites. This scale consists of three main titles as: *design, content and enhancing learning* and under these categories eight subtitles as: *graphics, color, text, author, objective, knowledge, ease of use and evaluation*.

It's trivial that every web site is not a valuable and reliable resource. The following list of features was proposed to be a summary of criteria for evaluating whether a web site is worthy of using: the more criteria a site meets, the more likely it is considered as a valuable resource: *technical considerations, purpose, content, authorship/sponsorship, functionality, design/aesthetics* (Abdullah, 1998). Irgat (2002) interviewed twenty-eight faculty members in a study to call for their opinions about "how the web site of a university should be". After the analysis of the data the researcher has encoded the views of the faculty members under five categories of *appropriateness, credibility, update, accessibility and navigation*. As a result of this study, he concluded that the web sites of the universities should meet the needs of the target population, the content should be current and authentic, the pages should be simple yet aesthetic and the site should have an in-site search engine for easy navigation, there should be English-versions for all pages in Turkish and the design task should be implemented by experts. Finally, he commented that users would not get lost in a well-designed and well-organized university web site that has no dead links.

Another study compared the web sites of university libraries and institutions. Clausen (1999) evaluated Danish academic library web pages on the World Wide Web. The main conclusion of his study was that the web sites of

the Danish academic libraries in question were found to be of a relatively higher quality in general when compared with other Danish and foreign web sites. Clyde (1996) examined school and public library web pages across countries. Dewey (1999) analyzed the Find Ability of Links on CIC University Libraries' web Pages. However, other cross cultural library web site studies are not easily found in the literature. In their study on accessibility of consumer health web sites, Zeng and Parmanto (2004) found that governmental and educational web sites are the two best categories of web sites that are relatively accessible compared to other categories such as e-commerce, corporate, community, and portal. Hackett and Parmanto (2005) looked at the current level of accessibility for 108 consumer health information web sites and evaluated the relationship between web accessibility and three variables: the category of the web site, the popularity of the web site based on Alexa daily traffic-ranking data, and the importance of the web site based on the Google PageRank. The quality of information for a web site is another matter of ongoing debate (Clausen, 1999).

Another more recent study conducted by Schmetzke (2001) evaluated the university of Wisconsin's 13 campuses for web page accessibility over three years on three sets of web pages: general campus pages, library pages and academic department pages. Using Bobby, Schmetzke found that over this three year period ending in 2001, the web site accessibility percentages increased, but the numbers of accessible pages are still low. The accessible campus pages went from 48 % in 1999 to 43 % in 2000, to 52 % in 2001. The accessible academic department pages went from 27 % in 1999 to 32 % in 2001. Anderson (1997) noted that some policies should be made in web design and included in those policies are criteria under the headings of *quality of content, some degree of consistency and general direction*. Basically, the policies should address page content, overall responsibility, potential contributors, quality, technical standards, student protection, server access, and ownership and responsibility. There have been a number of general guidelines written on the subject of web site design and usability some of which are *high quality content, frequency of update, minimal download time and ease of use* according to Nielsen (Pisanski and Zumer, 2005).

Kurulgan and Bayram (2006) analyzed web sites of 77 university (state and private) libraries in terms of content and form. In their study, evaluation criteria obtained through content analysis were measured by visiting each library web site and measures are given as frequency distribution and percentage analysis. As a result of the study, it was determined that the web sites of the libraries of state universities use Internet opportunities more effectively than the web sites of libraries of private universities. They suggested that web pages should be designed according to users' needs, permanently considering the dynamic structure of university library web sites. Similarly, Çakıroğlu and Akkan (2008) proposed a set of criteria to determine the standardization of educational web sites and those criteria involved the categories of *pedagogy, content, design, interface, technology and security*. Then they assessed seven educational web sites using those criteria. Their evaluation disclosed that the educational web sites are insufficient in view of pedagogy, they have average-quality technological features and in general, the sites were insufficient regarding the expected criteria. On the other hand, Çalışkan et al. (2002) inquired how the students evaluated the web sites of Open University in terms of *content level, visual representation level, technical level and sufficiency level of services* to determine whether those students make use of those sites effectively or not. For this aim, they developed a survey tool including 23 questions and implemented the tool to 1831 students. They concluded that often there are no problems in the web sites of Open University technically or visually, however, the content and the web services should be streamlined for effectiveness in terms of quality and number. In one study, Uzunboylu and Ballı (2004) evaluated a number of web sites on mathematics education which used Turkish as language of publication. For this aim they developed a data collecting tool considering key tenets of the web sites and used this tool to evaluate 10 mathematics education web sites. They showed that the web sites under investigation were insufficient in terms of purpose, educational objectives, lecture notes, online courses, lesson plans, dictionaries, discussion boards and so forth.

THE PURPOSE OF RESEARCH

These studies show that educational and in a sense organizational web sites were elected as research topics in the literature. Our study will address the web sites of educational faculties in terms of not only format and content but also currency, structure and navigation. These kinds of studies are most likely to play a crucial role in evaluation of the existing structures in faculties of education. In this context, with the purpose of determining the current status of the web sites of faculties of education, a Web Site Assessment Form has been developed and the web sites of choice were evaluated as regards *content, currency, structure & navigation and visual design* categories.

The quality of the content of a web site has to be measured in other ways. As has been described by Skov (1998), the aids and tools available for assessing good information quality on the WWW differ widely. Skov advocates the view that there must be a positive correlation between reliability of content, and organization and design of a

resource: “If a site is poorly designed, if misspelled words and grammatical errors march along, if the screen is completely jammed with frames or loaded with irrelevant graphics, if sophisticated software is needed to decipher the message, I become suspicious: A creator that doesn’t bother to follow the rules for good web-publishing is unlikely to provide reliable information.”

METHOD

Research Design

This study was designed as a quantitative survey research. Survey research can be defined most simply as a means of gathering information, usually through self-report, using questionnaires or interviews. Survey research is not a design, per se; instead surveys are more commonly considered the medium used for data collection. However, most survey research falls within the framework of nonexperimental or correlational research designs in which no independent variable is experimentally manipulated (deMarrais and Lapan, 2004, p.285).

Sample

The web site of Higher Education Council contains links to 61 state and 5 private, total 66 faculties. Only web site of one faculty (i.e. Artvin Faculty of Education, KTU) couldn’t find its way in the list above. The data we examine come from these 67 web sites. We included the web site of Artvin Faculty of Education in our study for the sake of our research purpose. The researchers examined the web sites of 67 faculties on the net and gathered data relevant to the departments and main science divisions. The list of the faculties that couldn't be accessed is presented in Table 1.

The development of the Web Site Assessment Form

Web sites of the FOEs were initially examined during March – May 2006 as a preliminary pilot study. Then, the data collected were transcribed. Afterwards, these data were analyzed and some notes were taken. After examining the pilot study and carrying out a comprehensive literature review and examining the data collecting tools in the related studies, the "Web Site Assessment Form" was laid out. We submitted the form to peer review to researchers in the Fatih Faculty of Education to ensure content validity. Then we made out the final draft of the form following the feedbacks received. The form comprises of 18 items in “Content” category, 5 items in “Currency” category, 5 items in “Structure and Navigation” category and 9 items in “Visual Design” category which add up to total 37 items in four categories. All items in the form might be answered with one of three possible answers: Yes, Partly and No.

Data Collection and Analysis

The data about the web sites of the FOEs were collected during September – October 2007 using our form. The answers to the items in the form were coded as Yes (2), Partly (1) and No (0). In the analysis phase of the study, frequencies and percentages for each item were calculated and presented in tables.

FINDINGS

In this part of the study, first we determined the faculties whose web sites were inaccessible, and handled the quantitative data collected from the web sites of the FOEs. These data were analyzed under four categories “Content”, “Currency”, “Structure and Navigation” and “Visual Design” and the frequency and percentages associated with the findings were presented in tables.

Table 1. The Inaccessible Web Sites

Affiliated University	FOEs (Faculties of Education) in Turkey
Afyon Kocatepe University	Uşak FOEs
Fırat University	Muş FOEs
Niğde University	Aksaray FOEs
100. Yıl University	100. Yıl FOEs
100. Yıl University	Hakkari FOEs

In Table 1, the universities and the relevant faculties of education whose web sites couldn’t be accessed among the 67 faculties were presented. From the 67 faculties, the web sites of Uşak, Aksaray, 100. Yıl, Muş and Hakkari Faculties of Education (FOEs) couldn’t be accessed.

Findings from Content Dimension

Table 2. Findings from Analysis of the Web Sites of the FOEs in Content Dimension

CONTENT	Yes		Partly		No	
	f	%	f	%	f	%
Is there any knowledge on the history of the faculty?	37	60	12	19	13	21
Is there any knowledge concerning the board of the faculty?	53	85	4	6	5	8
Are the vision and the mission of the faculty covered?	21	34	7	11	34	55
Is there any introductory knowledge about the faculty?	44	71	12	19	6	10
Is there any knowledge concerning the academic staff?	52	84	7	11	3	5
Is there any knowledge concerning the administrative staff?	36	58	9	15	17	27
Are there any Web pages appertaining to the departments?	38	61	12	19	12	19
Are there any Web pages appertaining to the main science divisions?	29	47	15	24	18	29
Is there any introductory knowledge about the departments?	26	42	18	29	18	29
Is there any introductory knowledge about the main science divisions?	25	40	17	27	20	32
Is there an academic calendar?	31	50	3	5	28	45
Is there room for social and cultural activities?	9	15	11	18	42	68
Is the site linked to the journal of faculty?	21	34	3	5	38	61
Is there any knowledge regarding the Erasmus and Socrates programs?	13	21	1	2	48	77
Is there any implication regarding the Webmaster(s) of the site?	20	32	5	8	37	60
Are there any pages targeting the students?	25	40	16	26	21	34
Is there any introduction about the city of the faculty?	9	15	0	0	53	85
Are there English-versions of web pages in Turkish?	18	29	2	3	42	68

Table 2 shows that from the FOEs 95 % involved academic staff knowledge, 92 % administrative board knowledge, 90 % introductory knowledge about the faculty and 79 % history of the faculty. From the FOEs 80 % have web pages of the departments and main divisions of science and these pages included introductory knowledge. In contrast, among the FOEs, 85 % didn't introduce the city, 68 % didn't talk about social and cultural activities 55 % didn't address the vision and mission of the faculty.

Besides, we found that 77 % of the FOEs did not contain knowledge about Erasmus and Socrates programs, 68 % did not have sufficient foreign-language-based web sites and 61 % did not give links to the journals of the faculties. When we have an overall look at the items in the content dimension we see that over one half of the faculties have not put content knowledge on their sites.

Findings from Currency Dimension

Table 3. Findings from Analysis of the Web Sites of the FOEs in Currency Dimension

CURRENCY	Yes		Partly		No	
	f	%	f	%	f	%
Is it known when the site was set up?	25	40	0	0	37	60
Are the update times known?	3	5	0	0	59	95
Are current knowledge and announcements covered?	38	61	2	3	22	35
Is design process still in progress?	12	19	4	6	46	74
Are there any outdated pages?	37	60	4	6	21	34

When Table 3 is checked we can see that 65 % of the faculties cover current knowledge and announcements but 95 % do not update their web sites, there are outdated pages in 66 % and the date of set up is not obvious in 60 %. When the answers to the items in the currency dimension are evaluated generally, we can see that more than half of the web sites of the FOEs did not gain sufficient consideration. This is not a desired situation in the web site of a faculty of education.

Findings from Structure and Navigation Dimension

Table 4. Findings from Analysis of the Web Sites of the FOEs in Structure and Navigation Dimension

STRUCTURE AND NAVIGATION	Yes		Partly		No	
	f	%	f	%	f	%
Is the site user friendly?	47	76	10	16	5	8
Do all the pages in the site operate properly?	47	76	3	5	12	19

Is the organization of knowledge in the site fuzzy?	2	3	6	10	54	87
Is navigation between pages comfortable?	40	65	12	19	10	16
Is there a search engine in the site?	12	19	0	0	50	81

As seen in Table 4 in 97 % of the web sites, organization of knowledge is not complicated, 92 % are easy to use, in 84 % the transition between pages is smooth and in 81 % the pages operate properly. Yet we found that in 81 % of the web sites of faculties of education, there's no search engine at all. When the items in Structure and Navigation dimension are evaluated generally, one can say that faculties of education take the criteria in this dimension into account.

Findings from Visual Design Dimension

Table 5. Findings from Analysis of the Web Sites of the FOEs in Visual Design Dimension

VISUAL DESIGN	Yes		Partly		No	
	f	%	f	%	f	%
Are the font types and sizes consistent in all pages?	59	95	3	5	0	0
Is a virtual campus tour covered?	25	40	6	10	31	50
Are the appearances of the Web pages of the departments/main science divisions the same?	43	69	5	8	14	23
Are there any pages that are inoperative or inaccessible?	30	48	1	2	31	50
Are there any animations in the pages?	15	24	6	10	41	66
Are there unnecessary details in the pages?	0	0	3	5	59	95
Are too many colors used in the pages?	1	2	0	0	61	98
Is the color harmony in the site accommodated?	57	92	1	2	4	6
Are there any pages under construction?	23	37	3	5	36	58

In Table 5 most of the FOEs used same type and sized fonts throughout the site (100%), did not use color variation in the site (98%), paid attention to color harmony (94%), did not give too much details (95%) and did not use animations in the site (66%). Besides, in some of the web sites of FOEs, there are no pages under construction (58%), whereas in some (50%) there are a number of pages under construction. When the items under the Visual Design dimension are evaluated generally, it is shown that the web sites of the FOEs have taken the criteria about visual design into account.

DISCUSSION, RESULTS AND RECOMMENDATIONS

The web sites of the faculties of education were evaluated in terms of content, currency, structure & navigation and visual design categories. We couldn't access web sites of five faculties. These are Uşak Faculty of Education, Muş Faculty of Education, Aksaray Faculty of Education, 100. Yıl Faculty of Education and Hakkari Faculty of Education. We think that, these faculties should initiate their web sites immediately and they should give place to the introduction of their faculties in these web sites.

There should be enough content to make visiting these sites worthwhile. Information on how often a site is visited may indicate its usefulness (Abdullah, 1998). In content dimension, we concluded that web sites of the FOEs generally involved introduction of the faculty, administrative board and academic staff, whereas they did not entail any knowledge regarding social and cultural activities, the presentation of the city and they did not disclose the vision and mission of the faculty. These latter types of information will help the users that are seeking information about the faculty.

When we have an overall look at the items in the content dimension we see that FOEs covered content knowledge on their sites. Another crucial point is the need for the personal web pages of the academic staff. These personal pages serve any number of purposes such as communicating with peers and students, presenting personal information and biographies or giving information about the courses. Too few academicians are really capable of preparing and continuously updating her/his web page. Moreover, the existing personal pages of academicians are not satisfactory in terms of web design principles and usability.

Likewise, Dağdeviren et al. (2007) reported that most of the FOEs incorporated sufficient knowledge about academic staff, administrative staff and administration. Besides, we observed that some FOEs did not publish English-versions of corresponding Turkish pages whereas some FOEs use English as the sole language of publication. Across the web sites of total 62 FOEs in Turkey, only 20 offered the option of language selection for the users. In this case these sites would be accessible only to those whose native language is English and some users in our country who don't have an appropriate level of English would not make use of the site. To

overcome this issue, we think that the main language of publication in these web sites should be Turkish, and English should be used as supplementary. The web sites should be prepared by considering a wide range of audiences such as researchers, teachers, students and others who want to be informed.

Another important finding in content dimension is that many sites lack giving links to the journal of the faculty. Some of the FOEs which give link to the journal of the faculty also publish their journal online. Some faculties explain publication principles and guidelines for authors, though, do not publish their journals online. The faculties should count on the ease of use in sharing knowledge online and immediately deliver their journals on the WWW. Users should access the sought information in the web sites of FOEs as fast and accurate as possible. Easy access for the users is an indicator of effectiveness for a web site (Kurulgan and Bayram, 2006).

In currency dimension, we found that most of the FOEs cover current knowledge and announcements in their web sites. However, there are outdated pages, the piece of knowledge about when and how these sites were prepared and the date of last update are not clear. Yet this deficiency might have a negative impact on anyone who seeks knowledge. A body of evidence suggests that web sites should be regularly updated and the latest update times and frequencies should be revealed (Abdullah, 1998; Everhart, 1997; Tweddle et al., 1998; Yiğit et al., 2007).

Researches show the importance of good navigation and recommend using a navigation bar and a logical structure (Misic and Johnson, 1999; Van der Merwe and Bekker, 2003). In structure and navigation dimension we found that web sites of most of the FOEs are easy to use, transitions between pages are smooth, and pages operate properly but do not have a search engine. In visual design dimension, font types and sizes are found often inconsistent among pages, color variety is not redundant, color harmony is accommodated and there aren't any unnecessary details. Besides, while there are no pages under construction in the web sites of some FOEs, some faculties have pages that are inoperative or inaccessible.

In most of the web sites there's a redundant use of images. In most of the web pages instead of giving text links to e-mail addresses, some images occupying a space of 3 – 10 kb are used (Cebeci, 1999). These extra bytes may increase the download times of these pages. To decrease the download times of these pages, images should be used only when necessary. At one end of the equilibrium, if visuals are used scarcely in a site design, the site may not be appealing for the users. At the other end, if too many visuals are consumed both the site appears complicated and download times increase (Irgat, 2002). Researchers recommend minimizing the use of graphics, or small font sizes for text, avoiding pop-up windows, separate browser windows, or cascading menus, and minimizing the number of links on a page for easy navigation (Ivory, 2003, quoted in Oppenheim and Ward, 2006).

Another concern in web design is color harmony. Colors can convey images to users and influence their perception. For example, white is associated with purity, cleanliness, lightness and emptiness, purple conveys wealth and sophistication, and blue conveys truth, dignity and power (Oppenheim and Ward, 2006). In his study, Karataş (2003) underscores the significance of the readability of a web site, the color harmony in the background, graphics and the content. For this reason the color range should be determined previously and color harmony should outweigh the personal preferences in color management. Some studies suggest that the font color(s) should contrast to background color(s) (Yates, 2005; Tweddle et al., 1998; Irgat and Kurubacak, 2002). Colors, fonts and graphics should be suitable and relevant to the web site (Baron, 1998). Similarly, Abdullah (1998) states that both warm colors (e.g., red, orange, yellow) and cool colors (purple, blue, green) should be used in the same web design. The color scheme should not be too gaudy and hurtful to the eye. Most experts recommend that a site contain no more than four colors, with a limit of seven throughout the site. In this way, readability may be boosted and knowledge may be more accessible. For this reason, to retain the integrity between pages the font types and colors should be chosen cautiously. Hence faculties of education may be advised to keep these points in mind when editing or updating their sites. On the other hand, using these principles may also be beneficial in preparing a web site for a faculty of education from scratch.

One of the most important tools of distance education is the use of web sites. The design of the web site is as important as the content to draw the attention of the users and to keep them tuned (İşman et al., 2004). A successful web site should have a similar look and feel to other web sites. This is because customers "spend most of their time on other sites," so widespread design elements should be incorporated into the design (Nielsen, 1999, quoted in Oppenheim and Ward, 2006). However, one should be cautious and balanced in using design tools. As web page designers have included more of these complex web design components such as images and streaming audio and video, it has become less accessible for many users with disabilities (Ammann et al., 2000; Bucy et al., 1999). Needs of users with disabilities should not be ignored. There are several guidelines for setting

a user-with-disability-friendly web site. But this is beyond the scope of our paper. Web sites of some FOEs seem to be prepared with great effort both in department and main science division levels. However, others seem problematic and some pages seem to be prepared sloppily. In particular, some pages appear to involve redundant details, use too many colors and animations, have dead links, are outdated, lack necessary contact knowledge, do not meet the web design criteria in terms of page setup and color management. An outdated web page would not be effective for users. Such defects should be fixed immediately.

In this study we attempted to evaluate the web sites of FOEs affiliated to The Council of Higher Education of Turkey. Future studies may explore the web sites of the education institutions affiliated to the Turkish Ministry of National Education.

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