

## **An Exploratory Study of the Effectiveness University Website of Mohamed Lamine Debaghine-Sétif-2-**

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### **Abstract**

All universities around the world focus their time and staff resources for improving their websites in an attempt to mark their presence through the web. Having a university website, which provides easy access to necessary information for people, as students, teachers, researchers, and administrators, has become vital to any institution, and should thus respond to their needs. The success of any web site is partly related to how effective it is. An effective website should provide great experiences to its users such as: interactivity, attractive design, informative content and ease of use. Among these requirements, website's design is the first thing that captures the users' attention. A clear understanding of how best to design effective websites is therefore imperative. The available literature on websites' effectiveness remains little and much more user-centric. As a matter of fact, this study tries to see into what web designers of MLD University consider as important attributes of effectiveness. For this, only one evaluation method was used: a checklist handed to members of the team in charge of the university website design.

**Key words:** university website, website effectiveness, website design.

## Introduction

In this globalization era, websites are considered as key aspect of any institution's effectiveness. A website is effective when both its users and owners achieve goals for the site. An institution's website is essential. It acts as a conveyor of the organization's message, culture, and visions. So, if the institution wants to inform, communicate, and provide support, there is no better way than to use its website.

There are millions of websites nowadays, and these websites may or may not reach a satisfactory level as far as users' needs and requirements are concerned. If websites are poorly laid out this may deeply affect how visitors' view the entire institution. Some of the reasons contributing to websites' failure are related to the rapid advancement in web technologies, limited experience and background knowledge of designers and developers, and time constraints and resources allocation for website design and development (Micali and Cimino, 2008). Despite the fact that many websites lack the quality of satisfying their users' needs, reliance on websites use for multiple reasons is increasing day after day. The variety of reasons to use websites such as shopping online, communicating with people, and finding information makes of websites complex systems. Subsequently, with time, the task of designing websites is becoming more challenging.

The academic domain is no exception. It is one field where websites are widely used nowadays. An academic or a university website is an educational site that consists of many sites, such as: faculty, department, program, and research groups' sites. These sites are generally requested by students, teachers, staff, and faculty members. A university website not only serves as a platform for the institution to interact with its users, but also helps to shape its image (Mentes and Turan, 2012). Academic websites are meant to inform a wide variety of audiences. For these audiences, usability plays a big role in communicating credible information which allows universities attract and engage the academic community and visitors. However, the goal of universities should not be limited to the presentation of their academic programs and opportunities, but a major concern should be whether the image reflected by their websites is effective. To address this concern, the primary step is to go through extensive literature to identify the features and elements of an effective website.

In order to have a satisfactory website, web designers have to consider all factors concerning the features for designing a web. The purpose of this study is therefore, to: identify the attributes of effective websites as highlighted in the literature, and determine which ones MLD University web designers team mostly consider. This study focuses on web designers' rather than web users' perspectives. While literature on web effectiveness focused on users' perspectives (Webster and Ahuja, 2006), I think web designers' perspective is critical, too, in testing and developing an effective website. In this study one evaluation method was used, a checklist which was handed to members of the team in charge of the university website design.

## Literature Review

### *Website Effectiveness*

Website effectiveness is such a difficult term to define. In early literature, researchers have proposed different criteria for effective website design based on common sense and intuition. Literature focusing on the quality of information the websites provide is narrow

(Katerattanakul and Siau, 1999). This is due, on the one hand to the fact that the Internet is a relatively new research area. Moreover, the people doing research in this area are likely to refrain and reflect on developments (Day, 1997). Effectiveness is manifold; for instance, a website may be considered effective simply by getting a user to access it, as it may also be judged on the extent of influence it has on its users. Key areas of effectiveness as loosely based on texts by Durham (1999), Nielsen (1993), Mayhew (1999) and Preece (1993) include: cognitive psychology, human-computer interaction, usability, professional writing, linguistics, and rhetoric. According to Simmons & Badni (2007), there are three phases of website effectiveness depending on the users' actions, which are: *before use*, *during use* and *after use*.

According to them, *before use* refers to the time spent before reaching the website as well as the ways leading to it. The areas of before use include: revisiting a website; recommendations from colleagues or leaders in the field; advertising; website searches; chance, and the appropriateness of a domain name. A revisit to a website may indicate that either the site has been successful, or the user may not have been successful in using it the first time. Gathering insights from colleagues or leaders in the field may feed website designers with experience, as long as those insights highlight key opportunities for improvement. When making a website, the main focus is its traffic. Webmasters can get as much traffic as they want through advertising their websites. Advertising activities, to name but a few, comprise getting Google Analytics and studying the statistics carefully, making other websites have links to our website, and increasing website visibility in search engine's organic results through search engine optimisation. Effective advertising is the strongest element about the before use phase, because strong advertising attracts users, makes them remember the site and bring them back to it. However, this possibility may not be true if the website is discovered simply by chance. Finally, having an appropriate domain name makes the website easier to find and more likely to come up in different search engines.

The second phase *during use* is considered as a huge area of effectiveness (Simmons and Badni, 2007). It covers: cognitive psychology (visual perception, information processing, attention, memory, learning, mental models); human-computer interaction (physical, psychological, experience, socio-cultural); usability (navigation, learnability, accessibility, feedback, satisfaction, efficiency, memorability, errors, throughput, flexibility, attitude); professional writing (comprehension of functions, value of information and inspiration, wording, community issues, users, influence, competency); linguistics (sections, choice, theme, headings, chunking, structure, cohesion, lexical density); and rhetoric (persuasive value (visual style, interaction impact, written style, aesthetics, narrative, image use), style, architecture, shell sites, content (purpose, use of text, direct, consistency, contacts, FAQs, communication statement, obvious links, clarity, initial impression)). (Durham 1999, Nielsen 1993, Mayhew 1999, Preece 1993).

### ***Cognitive psychology***

Cognitive psychology is the study of mental processes such as attention, language use, memory, perception, problem solving, creativity, and thinking. The term 'cognitive psychology' was first used in 1967 by American psychologist Neisser in his book *Cognitive Psychology*. According to Neisser (1967), cognition involves:

‘...All processes by which the sensory input is transformed, reduced, elaborated, stored, recovered, and used. It is concerned with these processes even when they operate in the

absence of relevant stimulation, as in images and hallucinations... given such a sweeping definition, it is apparent that cognition is involved in everything a human being might possibly do; that every psychological phenomenon is a cognitive phenomenon' (p.4)

This definition illustrates well the progressive concept of cognitive processes.

Because cognitive psychology is related to many other disciplines, this branch of psychology is studied by people in a number of different fields. Cognitive psychology is present in neuroscience, linguistics, industrial-organisational psychology, artificial intelligence, engineering, architecture, and web design.

As far as web design is concerned, useful principles can be drawn from cognitive psychology sub-domains, namely: sensation, perception, attention, memory, and decision making to guide web designers on fundamental issues relating to: attraction of users, facilitation of users' experience, and identification of needs and goals. Web designers' ideas which may often be borrowed from cognitive psychology include: guidelines for colour and animation use, page layout, menu length, or even those parameters which influence immersion in the digital world. Norman (1993) points out that different kinds of cognition processes (attention, perception and recognition, memory, learning, reading/ speaking/ writing, problem solving, planning, reasoning, and decision making) are essential for everyday life but that each requires different kinds of technological support. Those cognitive processes are tackled in details in the following sections.

### ***Attention***

According to the psychologist and philosopher William James (1890), attention 'is the taking possession of the mind, in clear and vivid form, of one out of what many seem several simultaneously possible objects or trains of thoughts... It implies withdrawal from some things in order to deal effectively with others, and is a condition which has a real opposite in the confused, dazed, scatterbrained state' (p. 403)

Human attention has a critical role to play in web design implications. The look of a website is mostly the first thing users will experience, and what they see will have a profound effect on what they do and their impression about the website. The designer's job is therefore to create a compelling experience for the web user. Using techniques like animated graphs, colours, underlining, sequencing of information and ordering of items may serve the desired aim.

### ***Perception***

Perception can be defined as 'the means by which information acquired from the environment by sense organs is transformed into experience of objects, events, sounds, tastes etc' (Roth, 1986, p.81). It is how we engage with the world around us. In other words, perception is the result of complex interactions between external visual stimulus and prior knowledge, goals, and expectations. Understanding how humans perceive things visually will help designers create better. Their job should be therefore to design representations of information in a perceptible and recognisable way, to assist the visual appearance of the website by diverting the users' eyes, and making them attach meaning to the web's visual elements to better remember and understand the web's message. They should for instance, make icons and names easily recognisable so that they can be found easily when scanning a list or menu.

### ***Memory***

'Memory is the process that allows us to record, store, and later retrieves experiences and information' (Passer, 2009, p.333). Memory is the process of maintaining information over time (Matlin, 2005). It is also the means by which we draw on our past experiences in order to use these information in the present' (Sternberg, 1999). Most psychological models of human memory distinguish between short-term (STM) and long-term (LTM) memory as separate but interrelated structures of the brain. STM refers to the brain's capacity to hold information for approximately twenty seconds. It has three key aspects; limited capacity (only about seven items can be stored at a time), limited duration (storage is very fragile and information can be lost with distraction or passage of time), and encoding (primarily acoustic, even translating visual information into sounds). In contrast, LTM has an almost infinite capacity, and information in long-term memory usually stays there as long as the person is living.

On the basis of this understanding of memory, web designers should keep in mind that they should structure the web interface to reduce the need to memorise and recall things. They should also guide the users through tasks having a sequence of steps, and not forcing them to remember the series of commands or navigate to different screens to finish the task.

### ***Learning***

Learners do not understand instruction unless they become acquainted with the thing they are learning about. Carroll (1990) expresses this when talking about learning to use computer applications: 'to learn, [users] must interact meaningfully with the system, but to interact with the system, they must first learn' (p.77). In his edited collection *Designing Interaction*, Carroll (1991) and his colleagues wrote about how to design interfaces that help learners develop computer-based skills. A main point is that people prefer learning through doing, rather than learning by following sets of instructions in a manual. Preece (1993) emphasises that learning to use a new system requires active involvement of users. Preece identifies five key aspects of learning. First, learning through doing; secondly, learning by active thinking, which highlights the fact that users need guidance while using the system (p.29). If they could not interact independently with the system, this means that the system is neither clear nor suitable for them. A system should not be constructed in a way that is understood only by an expert; thirdly, learning through goal and plan knowledge. This means that people interact with interfaces to accomplish certain goals. Knowledge about people's goals may be useful for designing intelligent user interfaces. Moreover, learning through analogy, in which web designers should use familiar user interface patterns to help users feel at home. Finally, learning from errors for error messages represent a careful design which prevents problems from occurring in the first place. Error prone conditions should be eliminated or checked, and users should be presented with a confirmation option before they commit to the action (Nielsen, 1995).

### ***Reading, speaking and listening***

People differ in their ability to use language. This difference depends on the ease with which people can read, listen, or speak; as well as the context or task in hand. Designers should therefore, accentuate the intonation of artificially generated speech voices, as these are harder to understand by people than human voices. Moreover, designers should provide opportunities for making a text large on a screen, without affecting the formatting for people who find it hard to read small text (Rodgers et al., 2011).

***Problem-solving, planning, reasoning and decision-taking***

Problem-solving, planning, reasoning and decision-taking are cognitive aspects of interaction design. According to Rogers et al. (2011) there are two modes of cognition, namely: experimental and reflective cognition. Experimental cognition refers to the state of mind where we perceive, act and react to events around us; whereas, reflective cognition involves: thinking, comparing, and decision taking. Problem-solving, planning, reasoning and decision-taking are processes that involve reflective cognition. These processes require a person to consciously think of his actions and decisions; to discuss with others or oneself; and finally use various kinds of physical items.

The extent to which people go about engaging in reflective cognition depends largely on their level of experience with a domain, application or skill. For instance, someone with little or no experience if tasked with a problem to solve may find himself unable to solve the problem. He will end by going through the trial and error process while using his assumptions about knowledge of other situations. In contrast, an expert if tasked about the same problem is more likely to be able to use appropriate actions while making any move. Role of designers in this context is to provide additional hidden information that are easy to access for users who wish to understand more about how to engage with tasks more effectively (Rodgers et al., 2011).

In addition to what has been discussed above, understanding web users' thought processes for how they uncover web's content is a wonderful way to design a website. In effect, designing an effective web requires that designers completely understand the users' goals and the procedures they use to accomplish those goals. They need to understand how users carry out tasks and what they want to get done as well. The challenge of matching what is going on in users' brains with the constraints and opportunities of nowadays technologies is the study and practice of creating mental processes for websites. It is also the matching of mental models with conceptual models. The section below will explain the difference between the two models.

***Mental models and conceptual models***

Mental models are one of the important concepts in human-computer interaction (HCI) (this concept will be explained in the next section). A mental model is what the user believes about the system at hand (website for instance) (Nielsen, 2010). Or it is simply, the representation a person has in his mind about how does the object he is interacting with look, feel and work. On the other hand, the model that designers will build to communicate the design of the web with users is called the conceptual model. Once conceptual models match with mental models, users will find it easy to learn and use the web.

***Human-computer interaction (HCI)***

HCI is an area of research and practice that emerged in the early 1980s (Carroll, 2014). The focus in HCI is on the interactions between human users and computer systems, including the user interface (UI) (UI will be explained in the following section) and the underlying processes which produce the interactions. The contributing disciplines include computer science, cognitive science, human factors, software engineering, management science, psychology, sociology, and anthropology (Online Business Dictionary 2003). To be effective, Shneiderman (1997) sees that HCI has to have certain characteristics, he posits

Well designed, effective computer systems generate positive feelings of success, competence, mastery, and clarity in the user community. When an interactive system is

well-designed, the interface almost disappears, enabling users to concentrate on their work, exploration, or pleasure (p.10).

According to Shneiderman there are many principles for the design of users' interfaces. Those which are relevant to information access include: Providing informative feedback, permitting easy reversal of actions, reducing working memory load, and providing alternative interfaces for novice and expert users to name few.

When assessing website effectiveness the HCI factors (physical, experience, psychological, socio-cultural) will help determine users' roles and the impact their backgrounds has on the effectiveness of websites design.

### ***User interface (UI)***

According to the Online Business Dictionary (2003), UI refers to the visual part of computer application or operating system through which a user interacts with a computer or software. It determines how commands are given to the computer or the program and how information is displayed on the screen. There are three main types of UI, which are: Command language (the user must know the machine and program-specific instructions or codes); Menus (the user chooses commands from lists displayed on the screen); and Graphical user interface (GUI) (the user gives commands by selecting and clicking on icons displayed on the screen).

When crafting user interfaces and websites, UI design patterns must be given careful consideration. Designers should, for instance, organise content to achieve the best possible usability (usability will be explained in the next section): implement logical page structure; lead the user to UI through minimal efforts on his part and enhance his experience; and simplify data entry.

### ***Usability***

According to Nielsen (2012) usability is a quality attribute that assesses how easy UIs are to use. It also refers to methods of improving ease of use during the design process. Usability is defined by five quality components, which are: Learnability (the extent of easiness with which users accomplish basic tasks the first time they encounter the design); efficiency (the quickness with which users can perform tasks); memorability (how easy is it for the user to remember when returning to the design after a period of not using it); errors (how many errors do users make, how severe these errors are, and how easy can users recover from those errors); and satisfaction (how pleasant is it to use the design).

Utility is another important quality attribute. Usability and utility are of equal importance. They both determine whether something is useful. At first glance, the two concepts do not seem to be much different. However, utility suggests that whatever the object is (software) there is an advantage to using it. It is in general the applicability, appropriateness and serviceability of the object. Utility does not state the ease with which the object can be used, and this is where usability comes.

### ***After use***

The last phase concerning website effectiveness is called '*after use*'. This refers to patterns of use, usability reviews, website sales, influence, and likeability. In recent research of Simmons (2010) after use concerns users taken actions after accessing a particular website, and the influence this latter had on the user. It also concerns whether the user would return to the website or not, and how would users get the information they look for in the right time.

Users experience different types of behavior after using a web. In HCI it is called user experience (UX). UX refers to ‘all the aspects of how people use an interactive product: the way it feels in their hands, how well they understand how it works, how they feel about it while they are using it, how well it serves their purposes, and how well it fits into the entire context in which they are using it’ (Alben, 1996, p. 11-15).

The field of website design is constantly changing. Thus, staying updated and creative is a big challenge that designers are to face. An effective website is the one that can keep visitors engaged and to persuade them to stay on the website and come back. Factors affecting a website’s ability to impress and engage users include an important concept which is likeability. Likeability refers to whether the user enjoys using the website and its associated applications and services. Increasing a website’s likeability is controlled by simple factors: Optimized and fresh content, page speed, organisation of the website, and the social media sharing strategy. A website will be likeable if all these principles are put together.

## **Research Methodology and Data Analysis**

### ***About MLD Sétif-2- University Website***

As stated in the title of this paper, the present research is an exploratory study of the effectiveness of MLD Sétif-2- University. This latter was created via the presidential decree of November the 28<sup>th</sup>, 2011. This university was the result of a division of the mother ‘Ferhat Abbas University’ into: Sétif1 and Sétif2 universities. The university division brought with her the creation of MLD Sétif-2- University website. The initial launch included a complete redesign of the homepage, a new content management system, a multiple language feature and a new homepage for the Central Library. The website was first created by a group of six engineers and two teachers (including the researcher). Three engineers are chiefly working for the web design; whereas the other three work at the level of the three different university faculties, all working at the vice-chancellery of Post Graduation, Accreditation and Scientific Research. The group has been managing this website since October 2013. The current website provides news and information about the institution to the public, academic and other links, email and phone directories, and access to the library. It also includes details of courses, admissions and bursaries, faculties, and departments that make up the university. The scope of services has been expanded since the website’s creation. An exploratory study of the University website’s effectiveness is vital since the university is planning to redesign its website the next months.

### ***Research Instruments***

In the digital world, there are no editors to proofread, to send back, or to reject the content of websites. The burden is therefore on the readers, surfers, or designers to evaluate carefully what they find on their university websites.

Over time, I started looking at the way university websites look like and wondering about their effectiveness. Website’s effectiveness piqued my curiosity mainly after I have been offered the opportunity to work with the team in charge of our university’s website design. As a matter of fact, I believe that being a nerve center for a global world; a university website must be effective.

In this study one evaluation method was used: A checklist handed to members of the team in charge of the university website design. Through the method of evaluation, I aimed to meet the website’s designers who will share their vision, inspirations and expertise with us. I also attempted to gather general information about the current website. Effectiveness criteria for

assessing the effectiveness of MLD Sétif2 University were developed based on an extensive review of the literature. The checklist used in this study was originally developed by the Management Centre International Limited (MCIL). MCIL is a management consultancy that is based in England, but operates on a world-wide basis. The checklist is available on: [www://mcil.co.uk](http://www://mcil.co.uk). It provides a structured way to establish how well the website is performing. The website effectiveness review is conducted by examining eight different sets of criteria. These criteria include: first impressions, navigation, content, attractors, findability, making contact, browser compatibility, and user satisfaction. Other useful information and knowledge of users criteria have been deleted being irrelevant to the context of the study. The checklist was tailored to suit the requirements of the present study since not all criteria are relevant to Sétif 2 University context. The use of the checklist requires scoring each website issue out of ten, where the score 0 means *not applicable at all*, 1 means *extremely poorly represented*, and 10 means *extremely well represented*. The intended participants of the study are all members of the team in charge of the university website design. This is extremely important because most issues in the checklist cannot be properly addressed with a single visit to the website. Those issues require the reviewer to get the group's replies. The intended participants were introduced to the MCIL checklist and asked to record their opinion about the website, on a scale from 1 to 10. The final chosen criteria to be used in the evaluation includes the following. First impressions (URL, download time, readability, home page on one screen, KAP, depth of site, contact details, credential validation, are users' registration to get into the site); navigation (ease of use, site map, return to home page from any page, internal search engine, internal links, broken links, text as well as graphic links, visibility of navigational links, and using frames); content (useful information, degree of substantiated information, level of interaction, use of valuable graphics, use of valuable animation, use of valuable sound, reviews testimonials and certifications, digestible quantity of content, up-to-date, multiple languages, accessibility for disabled people, terms and conditions, FAQs, availability of follow up discussion); attractors (competitions, special offers, freebies, breaking news, providing external links, newsletter, others); findability (intuitive URL, advertising); making contact (visibility of email and other details, response time to enquiries, use of online forms, telephone contact numbers, and telephone call back); browser compatibility (Internet Explorer version, Netscape Explorer Version, Macintosh, Monitor Compatibility); user satisfaction (reliability of the site, clicks to completion, acknowledges order/request, order/request tracking online, and use of cookies).

### Findings

Scorings of website effectiveness checklist depend on nine criteria. As explained previously, each website issue is scored out of 10. Issues with 0 score are not applicable at all to Sétif 2 University website. On the other hand, issues with the score 1 are poorly represented in the site. Finally, issues with the score 10 are well represented in the website. The following tables give display results of key issues used to evaluate the website effectiveness with regards to each criterion. The researcher made sure that all participants score all features representing all the evaluation criteria of the website.

**Table 1. Scores for Website First Impressions Features**

Features	Scores /10	Responses/06
Intuitive URL	10	6

Download time (size of home page)	10	6
Look and feel – readability	10	6
Home page on one screen (above the fold)	01	6
Ability to take action (key action point- KAP)	10	6
Feeling of wanting more – depth of site	01	6
Available immediate contact details	10	6
Credential validation – certifications, associations etc.	00	6
Ability to get into site without having to register	10	6
<b>Total score for section</b>	<b>60/90</b>	<b>6</b>
<b>Percentage</b>	<b>66.66%</b>	<b>100</b>

Results drawn from this table reveal that users need to scroll up and down to see everything on the screen. The homepage is not above the fold. Moreover, the depth of the site is poorly represented, and credential validation is absent from MLD University website design. The site respects *six* general requirements of the professional visual design; these are: Intuitive URL, download time, readability, KAP, and contact details. All five requirements marked a score of 10 for each. First, the MLD University website URL is short, simple and intuitive. The homepage is small and quick to download; to the best knowledge of the researcher it is digestible in 5 seconds. Moreover, the website pages are readable, clear and easy to understand. Different direct links to key action points are visible on the homepage, too. The website provides to its users an immediate clear path to contact information (email addresses and telephone numbers).

**Table 2. Scores for Website Navigation Features**

Features	Scores/ 10	Responses / 06
Ease of use	10	6
Site map	10	6
Return to Home Page from any page	10	6
Internal search engine	00	6
Internal links	01	6
Broken links	00	6
Text as well as graphic links (ALT tags)	10	6
Navigational links visible	10	6
Open multiple windows	10	6
<b>Total score for section</b>	<b>60/90</b>	<b>6</b>
<b>Percentage</b>	<b>66.66%</b>	<b>100</b>

From table 2 it can be concluded that *six* out of nine navigation features are applicable to MLD University website. These features include: ease of use of the navigation system, site map, return to home page from any page, text and graphic links, visible navigational links, and open multiple windows. The websites navigation system provides direct access to different content and services on the site. Users of MLD University website have an alternative method of navigating the site via its site map, and navigation can be carried in multiple open windows. Users are also provided with visible navigational links that are consistent throughout the entire site. They cannot get lost while navigating the site since a link back to the homepage is constantly provided. MLD University website contains internal links that are poorly represented; whereas broken links and internal search engine do not exist.

**Table 3. Scores for Website Content Features**

Features	Scores/ <b>10</b>	Responses/ <b>06</b>
Useful information	10	6
Degree of substantiated information	01	6
Level of interaction	01	6
Use of valuable graphics	10	6
Use of valuable animation	00	6
Use of valuable sound	00	6
Reviews, testimonials and certifications	00	6
Content in digestible quantity	10	6
Up-to-dateness	01	6
Available in multiple languages	10	6
Accessibility for the disabled	00	6
Terms and conditions	00	6
FAQs	00	6
Availability of follow up discussion	00	6
<b>Total score for section</b>	<b>43/140</b>	<b>6</b>
<b>Percentage</b>	<b>30.71%</b>	<b>100</b>

Results of table 3 show that MLD University website provides useful content for its users. This content is digestible in quantity since it is broken up into accounts of information. Designers of MLD University website always try to avoid long texts. The content is also supported by the use of graphics and it is available in three languages. Making the site's content available in multiple languages will serve the aim of accessing a wider range of users.

The results also reveal that designers of MLD University site do not pay enough attention to date of last update, degree of substantiated information, and level of interaction.

According to MCIL tool, information published on the web should be evaluated under five headings. These headings comprise: Authority (who is responsible), currency (dates for site's creation and updates), coverage (outline of the content), objectivity (statement of biases), and accuracy (information available for cross checking). The content on MLD University website is verified by the vice-chancellor in charge of Post Graduation, Accreditation and Scientific Research. He is the one responsible for approving the pages. However, this fact cannot be verified on the site. The website provides clear headings to illustrate the content's outline; and sources of information and factual data are clearly stated. Nevertheless biases and dates when the site was created and last updated are not provided.

The results of the above table also show that MLD University website does not use animation, sound, reviews, testimonials and certifications, accessibility for disabled people, FAQs, and follow up discussion. Concerning terms and conditions, the researcher thinks that this criterion is purely business oriented. It is about payment procedures, goods supply and services details. Thus, it is automatically not applicable to the website under study.

**Table 4. Scores for Website Attractors Features**

Features	Scores/ 10	Responses/ 06
Competitions	00	6
Special offers	00	6
Freebies	00	6
Breaking news	00	6
Ease of access by External links	00	6
Newsletter	00	6
Other	00	6
<b>Total score for section</b>	<b>0/70</b>	<b>6</b>
<b>Percentage</b>	<b>00%</b>	<b>100</b>

From table 4 it can be concluded that MLD University website does not use any of the above stated attractors.

**Table 5. Scores for Website Findability Features**

Features	Scores/ 10	Responses/ 06
Intuitive URL	10	6
Intuitive keywords	10	6
Use of metatags	00	6
Use of frames	00	6
Online advertising	00	6
Offline advertising	00	6
Online recommend a friend	00	6
Partner and affiliate sites	00	6
<b>Total score for section</b>	<b>20/80</b>	<b>6</b>
<b>Percentage</b>	<b>25%</b>	<b>100</b>

It can be seen from table 5 that the intuitive URL (has already been confirmed in results of table 1) and Keywords that MLD University site use make this latter easy to find. However, there is no use of metatags on the website. Features designed for search engine performance (use of frames) and advertising, which got a zero score are not important to MLD University website. Again, these features are applicable to business sites.

**Table 6. Scores for Website Making Contact Features**

Features	Scores/ 10	Responses/ 06
Email and other details visible	10	6
Automatic email response	00	6
Personal email response	10	6
Use of online forms	00	6
Telephone contact number provided	10	6
Telephone call back offered	00	6
<b>Total score for section</b>	<b>30/60</b>	<b>6</b>
<b>Percentage</b>	<b>50%</b>	<b>100</b>

Results of table 6 reveal that on MLD University website emails and other details are visible. Moreover, personal email responses and telephone contact numbers are provided. However, the website does not use online forms, automatic email response and telephone call back.

**Table 7. Scores for Website Browser Compatibility Features**

Features	Scores/ 10	Responses/ 06
Internet explorer (1-5)	10	6
Netscape Navigator (1-4)	00	6
Mac	00	6
Resizeability (Monitor Compatibility)	10	6
<b>Total score for section</b>	<b>20/40</b>	<b>6</b>
<b>Percentage</b>	<b>50%</b>	<b>100</b>

Results displayed in this table show that MLD University website uses one browser (Internet explorer) and a compatibility monitor.

**Table 8. Scores for Website User Satisfaction Features**

Features	Scores/ 10	Responses/ 06
Robustness/ reliability of the site	01	6
Clicks to completion	10	6
Acknowledge order/ request	00	6
Order/ request tracking online	00	6
Recognizing a pre-inclusion	00	6
<b>Total score for section</b>	<b>11/50</b>	<b>6</b>
<b>Percentage</b>	<b>22%</b>	<b>100</b>

The above results show that users can find what they are looking for on the website due to clicks of completion. These latter are well presented on the site. Unfortunately, the site is frequently crashing or off line. This problem may bring users away.

## Discussion

In this study, web designers' practice in terms of web effectiveness criteria provided in the checklist has been translated and scored. The findings as presented above represented a comprehensive list of important considerations web designers should take into account when designing and developing university websites.

First impressions are always important. Whether this is fair or not, users will judge an institution depending on what the website looks like. These impressions depend on many factors: layout, colours, spacing, texts, and more. The website's target audience must know it exists. They must be able to find it as long as they want to access it. Finally, the website must attract a reasonable number of visitors and users. As regards MLD University website, results revealed

that the website respects in general the requirements of a good visual design (Table 01). It looks good, organized, with uncluttered layout, and text blocks are easy to read.

Being offered an easy way to use the website is critical for an amazing user experience. Moreover, users must be able to access a download page even if their computers or surfing devices are impaired in some ways. Compared to other criteria scores, the navigation criterion of MLD university website registered the highest score (66.66%) together with first impressions criteria. Website navigation is important to the success of users' experience. Creating the website navigation system at the beginning of the design process will influence the overall design of the web page layout and help in the development of the website.

The website has only seconds to capture interest. Without valuable and useful content, the website will fail to fulfill its objectives. When evaluating the content of the MLD University website, results showed that many issues need more attention and revision. It is important to proofread the content thoroughly before adding it to the site. A use of sound and animation is highly recommended. Moreover, the frequently asked questions section is an important element, which needs to be included in the MLD University website. It is important because it introduces the site to unfamiliar visitors. Last but not least, I think accommodating people with visual and auditory disabilities must be a priority for website's development.

To achieve website effectiveness, it is recommended to use attractors such as: breaking news and newsletters. Finally, I think that although the MLD University website is not compatible to as many Internet viewers as possible (limited use of browsers), and does not use cookies; making contact remains very easy through the website. However, it is highly recommended for MLD University designers to consider creating alternate pages for those incapable to view the enhanced site. Using metatags is also crucial to enhance display on smartphones.

## Conclusion

Effectiveness of a website plays a central role in establishing a healthy interaction between the university and its stakeholders. The research has shown that the website's effectiveness checklist used in the study elicited some in-depth design factors. Results highlighted the MLD University website effectiveness issues that received little or no attention, as it provided details about existing website characteristics. The results has identified the strengths and weaknesses associated with the current university website. However, the study is limited because the checklist used in this research is best used in a comparative way. Comparison will show how the website under study compares with other chosen sites. Moreover, the review should be constantly repeated to see how the site continues to compare to others. The study used a tailored version of MCIL with deletions only. No other criteria have been added to the ones kept for the sake of the study. A consideration of all other elements of website effectiveness, which are not part of the checklist, such as cognition, memory and the like would go beyond the scope of this study. Furthermore, considering the web designers perspectives only is not enough; in fact users' suggestions and criticism regarding the website should be taken into account as they can serve as a guide to designers. Finally yet importantly, decisions to change the way the university website is designed rests upon the academia and web designers.

### About the Author

Ikhlas Gherzouli has been teaching English over twelve years both in middle school and university. She graduated from Ferhat Abbas University with a BA degree in English Language and from Abderahman Mira University with a Magister degree in English Didactics. Miss Gherzouli taught many courses both to graduate and postgraduate students including: Grammar, Oral Expression, Listening Comprehension, Phonetics and Phonology, Méthodologie du Travail Universitaire, Perfectionnement de la langue Anglaise, Neurosciences, Méthodologie de la recherche Scientifique, Recherche Documentaire, and Translation. In addition she is a member of the Quality Assurance Cell and University Website Design Team of Mohamed Lamine Debaghine University. Miss Gherzouli's interests include: teacher professional development, action research, ICT, quality assurance in higher education and curriculum development.

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