DEVELOPING ARABIC LANGUAGE LEARNING WEBSITES BASED ON SYSTEM USABILITY SCALE ANALYSIS: AN OBSERVATIONAL STUDY

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ABSTRACT

Arabic is one of the most widely used languages in the world. As in the past and present, it is expected to represent a critical role in educational operations and assignments. The aim of this study is to assess the websites for Arabic language learning based on multi criteria to support the learners. As well as to become a reference for teachers and learners to select a good quality websites for non-Arabic speakers. These criteria are to evaluate Arabic learning websites to be guidelines based on functionality, usability, and learning content to serve the language skills writing, reading, listening and speaking based on correct grammars. This study focuses on Arabic language learning websites to classify them based on quantitative and qualitative methods to distinguish among them. However, this study will not assess the computer systems for learning which is out of websites scope.

KEYWORDS: Arabic languages, websites, learning, usability, non-Arabic speakers

Introduction

E-learning systems or web-based applications, which is used in education, is considered as a part of education system processes in different learning levels (schools, universities, and self-learning) [1]. Learning web-based means a website contains online pages related to content; Arabic learning websites contain parts for reading, writing, listening and speaking and grammars. This website should contain a good multimedia which enhance the content presentation, and to make the learning process easy and useful. The researchers in [2] used multi criteria to evaluate the English learning websites in the university. The test of usability means assessing the interaction between users and computer interface [4]. It is a human computer interaction process, based on the quality of design interface and functions [3], which aims to develop the data and its applications. Moreover, the technology has become an integral part of our life in different aspects such as education, daily lives, shopping, entertain activities, and social communication [5][6]. According to [7], general method was proposed to assess the website and Arabic language learning websites [8][9], this method used nine criteria to assess the web-sites, the study did not mention how many websites were studied, and did not include references or links related to Arabic language learning websites. In [17], the authors discussed seven diminutions to measuring the websites usability;

those diminutions include usefulness (resource allocation, reference, and accuracy), efficiency (structure and completeness), navigation (link to home page and page linking), satisfaction (fascinate and fantastic), content (subject coverage and choice of media), accessibility (loading time and readability), and learnability (ease to learn, terminology, and memorize) [17]. The evaluation website have quantitative and qualitative methods, quantitative method should generate a statistical date to analyses them such as number of users, pages and others, but in qualitative method well understand, describe and explain the concepts and terms that are related to subject such as seven diminutions.

The research structure will be Significant of study, The ACTFL standards for foreign language learning, Learning using Internet website, Websites components, Research methodology, The Websites Evaluation, Analysis, Websites for Arabic and Multi languages, Websites with some Arabic Martials and Conclusion.

Significant of study

Websites for Arabic language learning for non-speakers suffer lack of multi factors such as the content for reading, writing, listening and speaking.

Using the internet websites is useful for the people who cannot attend live courses, because the time or place and cost are not appropriate for them. This study introduces several aims as follows:

- To enhance the Arabic language teaching via e-learning systems as internet learning websites.
- To introduce a good criteria for non-Arabic speakers, to explain the strength and weakness of the websites.
- To guide Arabic teachers to enhance their skills in some aspects according to the result of study.
- To assess the websites design to show the designers good methods to present the Arabic content though websites.

Arabic language contains main items that are important for learners, namely reading, grammars, writing, listening and speaking. Arabic language shares those elements with global languages as English, French, Chinese and others [19].

The ACTFL standards for foreign language learning

According to American Council on the Teaching of Foreign Languages (ACTFL) [2], there are five criteria including communications, culture, connections, comparisons, and communities.

Communications: means how the learners can communicative with each other using the language word properly. The main question in this point is how the learners can use the language to express and exchange their thoughts and feelings.

Cultures: means no languages without cultures, most of languages are based on the events to generate the word and sentences, which become a background history of that language. When learners understand the Cultures, they can use the correct word in the correct situations. The learners can explain the relationship among of language and other aspects related with target language.

Connections: This means the learners need to know about the important disciplines within the language. It is useful for learners to collect information from these fields that are existed only in this language

Comparisons: to understand this point we have a simple question. How the learners will learn the language? The answer is that learners should have an original language to make comparisons between it and the concepts of new language.

Communities: it is an important point, which means that the learners should use the new terms in their communities to be familiars with new words and expressions. These behaviors will increase possibility to learn more, it is life-long learning.

Learning using internet website

Most of the people believe that the learning is the most important factor in human development. The information revolution continues increasing, therefore the learners need a fast methods to learn a new concepts in different fields such as internet. Using websites to learn Arabic language is becoming active method to reach the far people and other sciences. Website is a good and effective method to learn the people, because it is available any time, which means that the website can be used in proper time according to learner, every day means no day off. Moreover, a low cost to keep people saving. The information and materials updated on websites are faster than books, journals or even magazines. Another advantage of using websites is including a multiple media such as images, videos, sounds and text effects to display information, it makes the learning process fun and exciting. Using the internet for learning is divided into two categories as follows:

Enrichment system: means using the internet to find the general or specific information; it is for reading the articles, journals, books or other learning about cultures and people. In this level, the teachers and professors used the websites to distribute the materials for students and assignments like e learning systems

Primary system: it uses the internet as main method to learn and gain the information; such as formal classroom for learners, it is used as a resource store for materials content and learning tools.

Websites components

The websites on the internet are built by using Hypertext Markup Language HTML, Cascaded Style Sheet CSS to design pages, and language programming such as PHP, ASP.net (VB, C#) to create the functions and classes which implement the tasks, these pages are divided into categories according to main websites usage. Learning websites include the text (normal text and hypertext), images (fixed image and animated images) to support the texts to explain the terms. Graphics mean using shapes, lines and texts to arrange something. Sound, which recorded for people to send a message as lessons or instructions to assist explanation of some concepts. Videos to support the lessons and give examples for some concepts. Communication and interactive tools, which used to communicate with users such as emails and chat system.
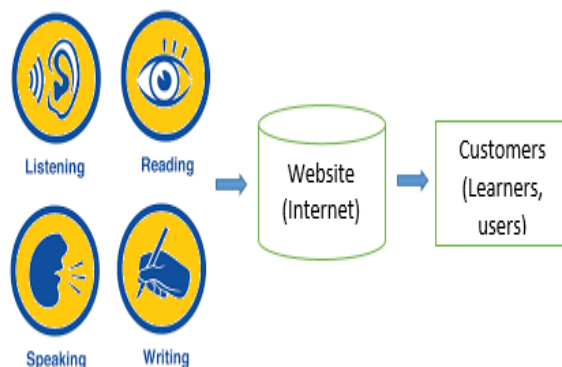
Figure 1: Language learning website components

The main website components for learning language is presented in Figure 1. The website should have four sections which are reading, writing, listening and speaking, with various supporting materials. In addition, the website should contain multimedia types such as text, images, graphics, videos and sounds to attract the users and learners. The website interface and all pages should also have good structure. Usability is an important issue that includes the five components (See Figure 2), which integrate with each others. Those components include ease of learning, high speed of user task performance, low user error rate, subjective user satisfaction, and user retention over time [18].
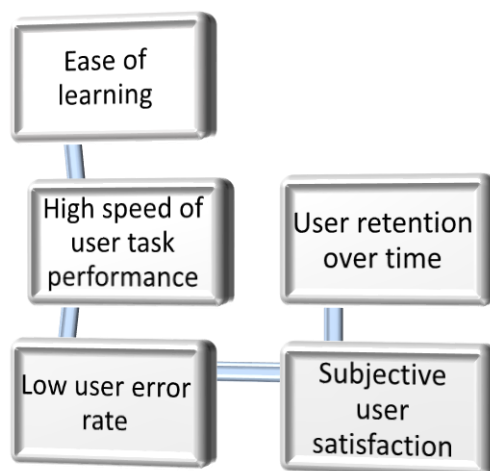

Figure 2: Elements of Usability websites internet

Bad website design makes the user not satisfied of the services that offered in this website. In study from the internet performance research firm found 95% of IT, managers felt the loss of revenue [15] because of bad website due to bad design, content and not ease of use. The websites that have poorly or good design often signal to quality of website such as content, brands and services [16]. Language skills refer to the skills that are required for learners to communicate with others using the target language. Language skills divided into four core skills namely writing, reading, listening and speaking. There are two skills to support the cores such as grammar and skill of literary taste.

Research methodology

The research methodology in this study involves qualitative and quantitative analysis to study the Arabic learning language websites. Qualitative method analyzes the websites based on a set of factors including the main criteria for assessment learning Arabic language websites, for example websites design, websites content and language skills (reading, writing, listening and speaking). The analysis is based on referring to websites and observing the websites criteria. In the quantitative method, some of statistics from Google website is used to compare between them. The accepted websites is the website that uses Arabic formal language to help non Arabic speakers, and includes the main language skills and good interaction with users.

Table 1: Arabic language learning websites

NO	Website Link	Reading	Writing	listening	Speaking	Pros	Cons
1	http://www.madinaharabic.com/	Available A lot of sections and very good categories	Available	Available	Not Available	A lot of quizzes	The interface needs enhancement
2	http://www.hobob.org/arabi/	Available	Available	Available	Not Available	A lot of words and sentences, Contains quizzes	The interface is very old design
3	http://mylanguages.org/index.php	Available A lot of sections and very good categories	Available	Available	Not Available	A lot of sections and very good categorical, Multi language, Contains quiz	Not Available for how to pronounce the letters
4	http://www.dalilusa.com/arabic_course/lexical_arabic_lessons_01.asp	Available Sample	Available	Not Available	Not Available		Not free

5	http://www.naturalarabic.com/	Available The Arabic Alphabet, Arabic: Pronouns, Arabic, story	Available	Available Sample	Not Available	Contains quizzes	Not free
6	http://www.arabicpod.net/aboutus	Available Sample	Available Sample	Available Sample	Not Available	--	Not free
7	http://www.lootah.com/arabictutor/engfrmset.htm	Available Words Sentences	Available	Not Available	Not Available	--	Very simple and little content
8	http://www.arabiconline.eu/	--	--	--	--	--	Not free, it is a system learning, not a web site
9	http://www.l-lingo.com/en/learnarabic/index.html	--	--	--	--	--	Not free, it is a system learning, not a web site
10	https://www.rosettastone.com/lp/sbsr/livemocha/?prid=livemocha_com	--	--	--	--	--	Not free, it is a system learning, not a web site
11	http://www.myarabicwebsite.com/	Available	Available	Available, videos	Not Available	Some Arabic Culture, Contains tests	It is used HTML pages only, it is weakly in usability

							and interface
12	http://looklex.com/babel/arabic/12.htm	Available	Available	Not Available	Not Available	has Arabic world map with details about most cities in all countries	It is very simple, it uses HTML pages only
13	http://www.learnarabiconline.com/	Available Only sentences and words	Available	Not Available	Not Available	A lot of word and sentences, Contains tests	Not free

Table1 shows thirteen websites for Arabic language learning. Those websites divided into two parts namely free and not free websites, seven websites are not free and six free websites. On the other side, there are many websites not included in the table for two reasons, the first is those websites offer learning Arabic language as a simple part of multi services of that website. The second is some websites learn Arabic languages using local accent as Egyptian accent and others, which affect correct pronunciation of formal Arabic language.

Analysis

Table 1 shows that the first three websites (mylanguages.org [10], madinaharabic.com [11] and hobob.org [12]) offer a good services and high quality learning facilities over other websites. These three websites are the most comprehensive websites in three criteria of reading, writing and listening. However, speaking criteria is not available in the all studied websites. On the other hand, websites 4, 5, 6, and 13 have some advantages as free services, but most of the advanced contents are not free.

The websites 8, 9, and 10 offer some contents to promote their Arabic language learning software but it is not free. The websites 11 and 12 have reading and writing sections, and contain some of Arabic Culture and information about Arabic countries.

To conduct more analysis, an online checkpagerank.net [13] is used in this study to get the data statistics related to mylanguages.org, madinaharabic.com and hobob.org.

Table 2: Online websites ranking

Website	Google PageRank	CPR Score	Domain Authority	Global Rank	Trust Flow	Spam Score /18	Referring Domains	EDU Backlinks
mylanguages.org	5	5.2	51	44,423	43	5	2000	273
madinaharabic.com	5	4.9	49	226,203	44	1	1,496	934
hobob.org	3	2.8	25	495,348	3	7	78	0

Table 2 shows eight important factors to evaluate the most comprehensive and best three websites in this study including mylanguages.org, madinaharabic.com and hobob.org. The most important two factors are Google PageRank and Consumer Perception Rating (CPR). Google PageRank is a measurement used to measure the level of a whole website or each page in the website in google [14]. CPR is the second factor which is used to score a consumer perception rating which indicates a reputation of website between consumers. The result in Table 2 and Figure 3 show that the Google PageRank for the websites of mylanguages.org, madinaharabic.com and hobob.org are 5, 5, and 3, respectively. Besides, CPR Scores for the three websites are 5.2, 4.9, and 2.8, respectively. Moreover, the usability components are applicable to be used in these websites of Arabic learning language.
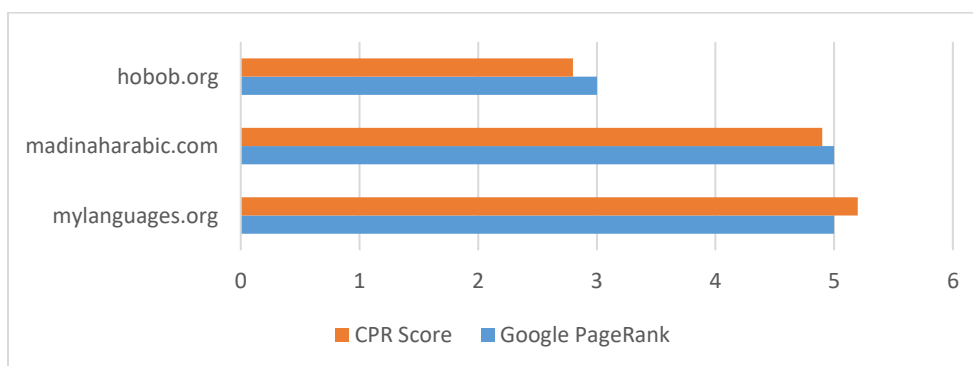

Figure 3: Google PageRank and CPR score for (mylanguages, madinaharabic, hobob) websites

Websites for Arabic and Multi languages
This section highlights websites that introduce multi languages learning. Table 3 shows twelve website to learn multi languages.

Table 3: Multi languages websites

No.	URL	Description
1	http://ar.forvo.com/languages/ar/	Has an Arabic interface for reading Arabic but not for non-Arabic speaker
2	http://www.dicts.info/	It is a dictionary for multi languages, not to learn Arabic language
3	http://linguanaut.com/index.htm	It is to learn Arabic letters and some sentences only.
4	http://gloss.dliflc.edu/Default.aspx	It can support learners. It contains examples for reading, listening and videos.
5	http://www.l-lingo.com/en/learnarabic/index.html	Not free, it supports the examples by images to explain the Arabic terms.
6	http://www.transparearabic/-nt.com/learn	This website has reading, listening , grammar, and letters, but not free
7	http://livemocha.com/	It learns Arabic in multi languages; it contains some lessons and examples with images and sounds.
8	http://mylanguages.org/index.php	Presents some of lessons related to subjects with related words and sentences with recorded sound for them.
9	http://www.rocketlanguages.com/	Not free, used Egyptian dialect, this website is marketing for software
10	http://a4esl.org/	Has a vocabulary quizzes to support learners
11	https://www.internetpolyglot.com/arabic/languages	Learn Arabic words in multi languages with using images and sounds.
12	https://www.esl-languages.com/en/study-abroad/online-tests/arabic-test/index.htm	Has simple quizzes for multi languages.

Among multi languages websites to learn some languages, not all websites have same number of languages. They have fluctuation in multi levels such as content, interface design and others. Table 3 presents a simple description for the selected twelve websites to support the learners during learning process.

Websites with some Arabic Materials

This section discusses the websites that contain some Arabic language material, the websites are not used as a reference for learners.

Table 4: **Websites with some Arabic learning content**

No.	URL	Description
1	http://www.laits.utexas.edu/aswaat/index.php	This website presented some of Arabic sounds and videos as an examples for Arabic language, not for learning.
2	http://www.abcleb.com/	It used youtube.com videos to learn Arabic in Lebanese Accent.
3	http://lang.arabe.free.fr/	It is like a dictionary
4	http://www.languageguide.org/user/wiki.jsp?lang=ar	It is like a dictionary
5	http://transcon.info/co-1-english-ntent/arab1	It contains a sentences and words in military field
6	http://looklex.com/babel/arabic/index.htm	The website has a good content for letters and writing, it contains some sentences and words for reading and sounds.
7	http://arabic.colegioo.com/	It used Egyptian accent to learn Arabic language. But not free.
8	http://web.uvic.ca/hrd/hist455/index.htm	The site is very simple and has an unattractive view, it does not have multimedia media such as pictures or videos, and the sound of some words.

Table 4 shows the websites that are interested in Arabic language; they contain some information related to Arabic such as letters, dictionary, examples from Arabic in videos and images, and culture history.

In general, the websites (madinaharabic.com, hobob.org/arabi, and mylanguages.org) include good skills of reading, writing and listening. Thus, they are recommended to assist the learners to learn Arabic language.

Conclusion

Arabic language learning using websites is an effective method to help the learners over the world. This research conducted the observation method and used data statistics to evaluate Arabic language learning websites. It was found that mylanguages.org, madinaharabic.com and hobob.org websites are more comprehensive in reading, writing and listening, and have good ranking, likewise the learners can depend on them since they more inclusive from other websites. As well as, numerous websites for learning multi languages were involved because it have some contents related to Arabic language, but they are not comprehensive to be a reference or main resource for learners. In addition, for the most websites with some Arabic learning content to learn multi languages, the content and the website structure will support the learners in some skills but not all. Eventually, the whole websites need developments in various aspects such as interface designing, reading, writing, listening and speaking

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