

Design Simple Instructional Package of Arabic Language Learning for Non-Arabic Speakers

تصميم حقيبة تعليمية بسيطة لتعليم اللغة العربية لغير الناطقين باللغة العربية

Huda F. Alshahad

University of Kerbala /Collage of Science/ Computer department

huda_msc2006@yahoo.com

Abstract

The Instructional package is a solution for learning needs and problems, it is used to simplify the learning to the user. In this paper, new instructional package was designed to learning arabic language for non-arabic speaker called (*Arabic School*). The designed package has more facilities for learning the components of Arabic language ,such as alphabet, numbers, seasons, directions, months, date, time and pronouns. As well as comments and explanations by examples and videos .It also has whiteboard and final examination to evaluate the learner answers, so performance of instructional package was more effective and more evident than in schools it is enjoyment of learning. This instruction is very useful to learn the arabic language without teacher. The proposed package was designed in HTML and Java language .

Key Words: Arabic language, Instructional package, ADDIE Model, Arabic school.

الخلاصة

الحزمة التعليمية هي الحل لاحتياجات ومشاكل التعلم، يتم استخدامه لتبسيط التعلم للمستخدم. في هذا البحث، تم تصميم حقيبة تعليمية جديدة لتعلم اللغة العربية لغير الناطقين بالعربية يسمى (المدرسة العربية). الحقيبة المصممة لديها المزيد من التسهيلات لتعليم مكونات اللغة العربية ، مثل الأبجدية والأرقام ، المواسم ، الاتجاهات ، الأشهر ، التاريخ ، الوقت والضمائر. بالإضافة إلى التعليقات والتوضيح من خلال أمثلة ومقاطع الفيديو. كما أنها تحتوي على لوح كتابة وامتحانات نهائية لتقييم إجابات المتعلم ، لذلك يكون أداء الحقيبة التعليمية أكثر فعالية وأكثر وضوحاً من المدارس من ناحية التمتع بالتعلم. إن هذه الحقيبة التعليمية مفيدة جداً لتعلم اللغة العربية دون معلم. لقد تم تصميم الحزمة المقترحة في HTML ولغة جافا.

1. Introduction

Instructional Design is the practice of creating "instructional experiences which make the acquisition of knowledge and skill more efficient, effective, and appealing " [1].The process consists broadly of determining the current state and needs of the learner, defining the end goal of instruction, and creating some "intervention" to assist in the transition. Ideally the process is informed by pedagogically (process of teaching) and andragogically (adult learning) tested theories of learning and may take place in student-only, teacher-led or community-based settings. The outcome of this instruction may be directly observable and scientifically measured or completely hidden and assumed. There are many instructional design models but many are based on the ADDIE model with the five

phases: Analysis, Design, Development, Implementation, and Evaluation [2].

An education system refers to a set of programmes tailored to impart knowledge and skills, formally acquired through a framework of an established schooling system, or informally through interaction with one's society, by an individual. The term "Education" is understood to comprise all deliberate, systematic and organized communication designed to bring about learning [3].

In this paper , Instructional package was designed called (Arabic School) for Non-Arabic speaker with more facilities and interactive . The rest of this paper was organized as follow , in section 2 the language is defined. Section 3 describe the properties of the arabic language. In section 4 the forms of instructional package is defined and the ADDIE Model that use to design the package is explained. Section 5 describes the proposed package (Arabic School). Section 6 describes

implementation and results of arabic school. Section 7 concludes the paper and suggestions for further research.

2. Definition of Language

Language is the human capacity for acquiring and using complex systems of communication, and a language is any example of such a system of complex communication. The scientific study of language is called linguistics. It is impossible to know precisely how many languages there are in the world, and the number depends on a partly arbitrary distinction between languages and dialects. However, estimates vary between around 6,000 and 7,000 languages in number. Natural languages are spoken or signed, but any language can be encoded into secondary media using auditory, visual or tactile stimuli, for example in graphic writing, braille, or whistling. This is because human language is modality-independent. When used as a general concept, "language" may refer to the cognitive ability to learn and use systems of complex communication, or to describe the set of rules that makes up these systems, or the set of utterances that can be produced from those rules [4].

3. Properties of Arabic Language

Arabic alphabet has 28 letters. In the language, a letter can have four different shapes. The shape of each letter is determined by the position of that letter in a word. For example the letter « ع » is written as « ع » at the beginning of a word, as « ء » in the middle, as « ع » at the end, and as « ع » in the isolated form [5].

In Arabic the letters are connected to each other in both handwritten and printed texts, while in the English, the letters are written separately in printed texts. In English, the letters are written in a left-to-right format and in some languages the letters are written in a top-to-bottom format, but in Arabic and Persian the letters are written in a right-to-left format [5].

Languages can be classified in relation to their grammatical types. Languages that belong to different families nonetheless often have features in common, and these shared features tend to correlate.[6] For example languages can be classified on the basis of their basic **word** order, the relative order of the **verb**, and its constituents in a normal indicative **sentence** [7].

4. Instructional Package

Instructional package is a program that has the ability to create instructional events by participating with the user. This makes the learning sequential, graded in continual steps[8].

The instructional package is formed from the following items:

1. Title which represents the title of the package.
2. Introduction that shows the idea of the contents.
3. Target community identification.
4. Instructional target which can be measured and observed by the learner to expect what he will do during his study of the package.
5. Help about using the package.
6. Contents of the package units show the units using by the package.
7. Pre-test to know the skills of the learner.
8. Instructional activities and alternatives which are suitable for learner characteristics and take into consideration the personal differences.
9. Exercise show the range of the package benefit, which contains feedback.
10. Post-test which is the final test used after finishing from all units to determine that the aims of the package are achieved.

4.1 Instructional design models

Perhaps the most common model used for creating instructional materials is the ADDIE Model. This acronym stands for the 5 phases contained in the model (Analyze, Design, Develop, Implement, and Evaluate) as in figure (1).

The five phases are listed and explained below[9]:

Analyze – The first phase of content development begins with Analysis. Analysis refers to the gathering of information about one's audience, the tasks to be completed, and the project's overall goals. The instructional designer then classifies the information to make the content more applicable and successful.

Design – The second phase is the Design phase. In this phase, instructional designers begin to create their project. Information gathered from the analysis phase, in conjunction with the theories and models of instructional design, is meant to explain how the learning will be acquired. For example, the design phase begins with writing a learning objective. Tasks are then identified and broken down to be more manageable for the designer. The final step determines the kind of activities required for the audience in order to meet the goals identified in the Analyze phase.

Develop – The third phase, Development, relates to the creation of the activities being implemented. This stage is where the blueprints in the design phase are assembled.

Implement – After the content is developed, it is then Implemented. This stage allows the instructional designer to test all materials to identify if they are functional and appropriate for the intended audience.

Evaluate – The final phase, Evaluate, ensures the materials achieved the desired goals.

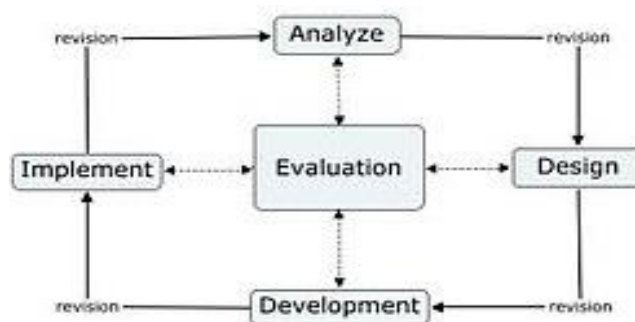


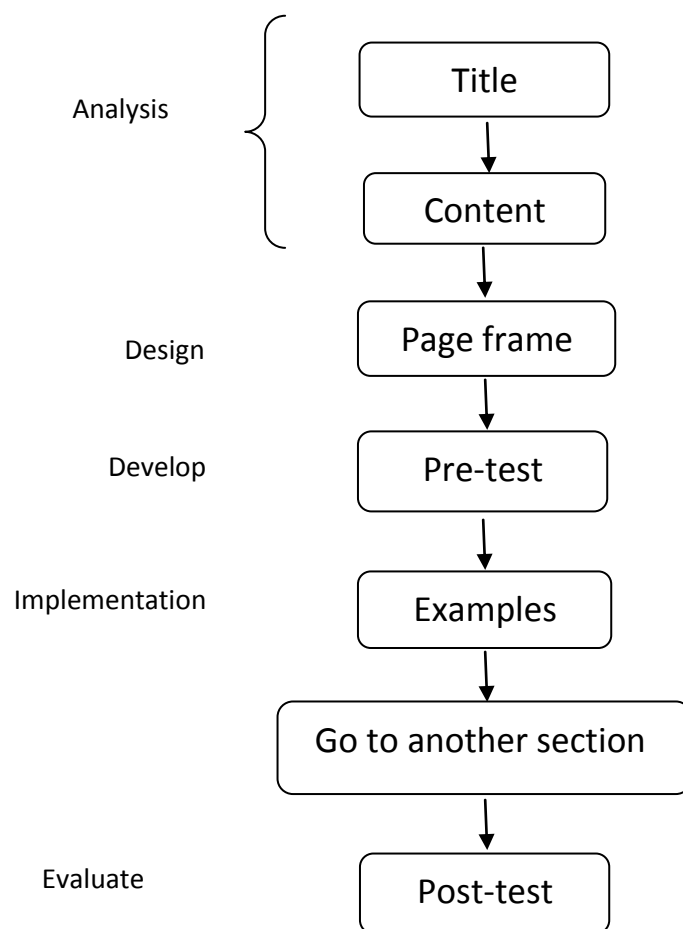
Figure (1) : ADDIE Model

5.Proposed Package (Arabic School)

This package is a simple educational package that use to learning the Arabic language for non-Arabic speakers. It is have many stages that learn arabic alphabets, the conscience, the sentences , exercises and the meaning of these sentences. It also contain the voice about each character of arabic alphabet , how to write it and how many sign it have.

The objective of the research is to simplification the learning of arabic language to the non-Arabic speakers people by using simple articles. Figure(2) show the block diagram of proposed package.

The package is used HTML and Java language to design the pages because they have the facilities to build the presentation screen with full capacity to use colors, fonts, sounds and transition between pages easily.



Figure(2) Proposed Package Block Diagram

6. Implementation and Result

In this section, the implementation of instructional package will be explain that designed to learn the Arabic language, Interface of this package will be shown in figure(3).



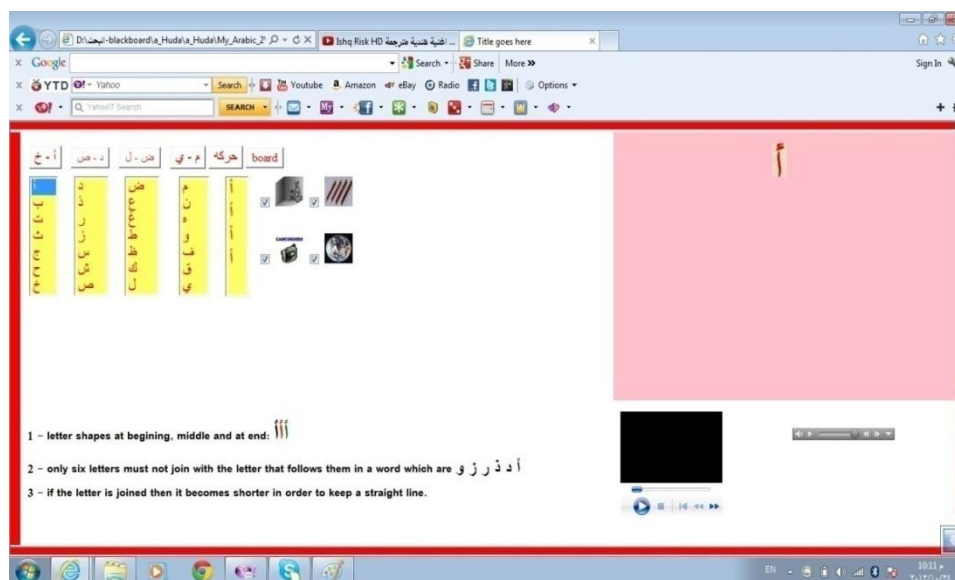
Figure (3) Arabic School Package Interface

In the left side of this interface , many fields will be learned such as **alphabet, numbers, months, seasons, directions, date, time and pronouns** as shown in figure(4).



Figure(4) Left Side of Package Interface

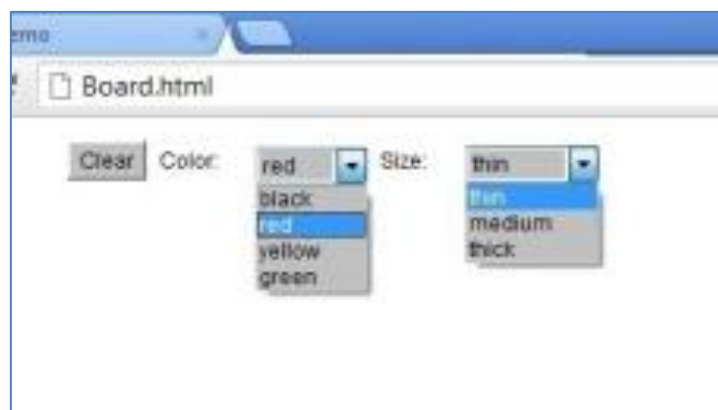
The alphabet page contain many fields as shown in figure(5), characters field that have all arabic alphabet, board field that show how to write the character, video to show the character, voice to show the way of pronunciation and note about the character.



Figure(5) Alef page

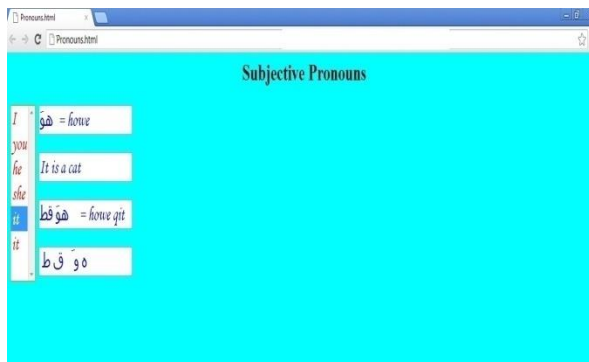
In figure(4) when choose (alef ا) character, the signs of alef is appear (أ, إ, ؤ) when press one of sign, the voice in voice field will show how to pronounce the character with every sign and the video of each sign.

The learner must try the pre-exam that is presented as white board that the user try to write a character on it as shown in figure(6) , the figure shows the font type, font color and clear bottom.

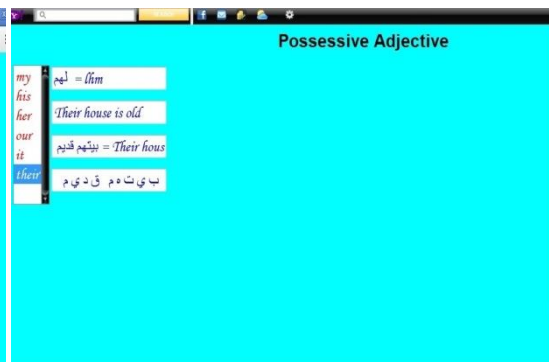


Figure(6) board page

Another section of Arabic School is pronouns. Pronouns is divided as **subjective**, **demonstrative**, **possessive**, **interrogative** and **reflexive**. When enter the pronouns page and select one of classification of pronouns, a new page will occurs that contain the meaning of the pronouns in arabic, example of pronouns in a sentence, meaning of the sentence in arabic and how to write in arabic by using single character as shown below in figure (7-A) and (7-B).

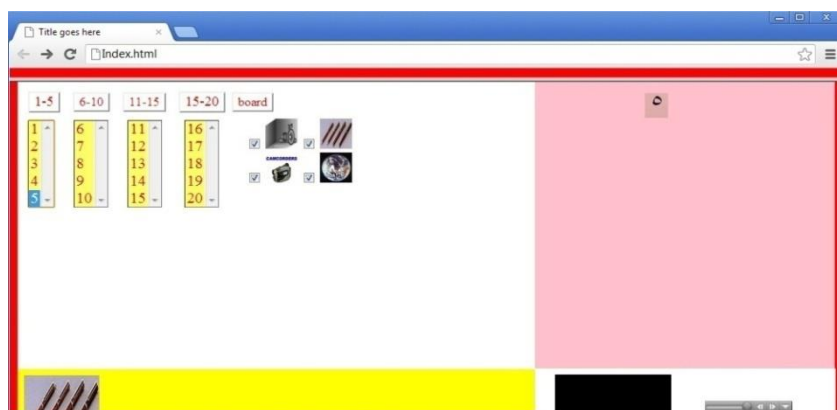


Figure(7-A) Pronouns page1



Figure(7-B) Pronouns page1

The other section is numbers section, it is like the alphabet page, it have numbers field, board field that show how to write the numbers, the video field that show the way of writing in video, the voice that pronounce the selected number and finally the notes about the numbers as shown in figure (8).



Figure(8) number page

The months section is show in figure(9), show how to write the month in arabic, what is the preposition that use with the month and how to write it in separated character.

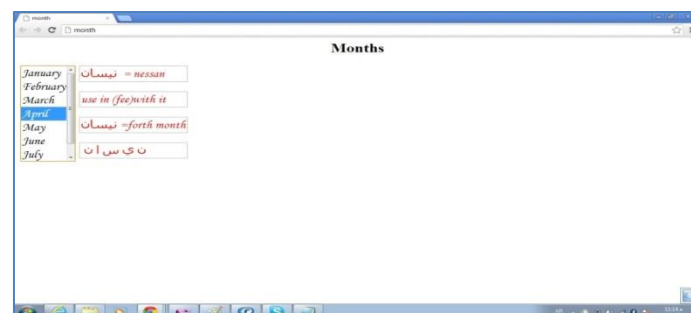
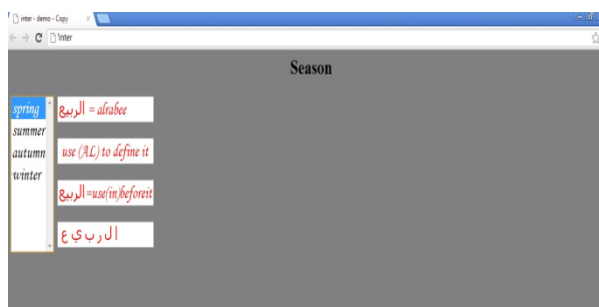


Figure (9) month page

The season, direction, date and time is the same of work in their pages, show how to write it in arabic, what is the preposition that use with the term and finally how to write in separated character as shown in the following figures(10) and (11).



Figure(10) season page



Figure(11) direction page

The last page in this package is the post-exam, it contain the questions that must the learner answered it, when he/she finishing the questions must press answer to evaluate his/her answering as shown in figure(12).



Figure(12) post-exam page

7. Conclusion and Future work:

The instructional package is design to facility the learning of arabic language(second language) in the world. The package is built to simplify the learning of arabic language for the people that not speak arabic. The package is consist of many parts: index part theat shows the fields that will learning to the people, the board that write the alphabet on , the vedio that show how to write the alphabet and the voice that pronounce the alphabet. It also contains the test that the user will try to show if he/she is learn the language or not. This package is very useful and simple for the user. The suggestion is to use the other fields of arabic language like sentence (verb, noun) or the verb division (past, present and future). It also can use the natural language to process the package. This package can use by children(about 10-14 years) that working on computer and want to learn arabic.

References:

- [1]Merrill, M. D., Drake, L., Lacy, M. J., Pratt, J., & ID2_Research_Group."Reclaiming instructional design. Educational Technology" , 1996.
- [2] Duffy, T. M., & Cunningham, D. J. "Constructivism: Implications for the design and delivery of instruction", 1996.
- [3] John F Mayberry." The design and application of effective written instructional material: a review of published work", 2007.
- [4] Moseley and Christopher. "Atlas of the World's Languages in Danger",2010.
- [5] Hassan S.Shahreza and Mohammad S.Shahreza."Steganography in Persian and Arabic Unicode texts using pseudo-space and pseudo", 2005.
- [6] Stockwell and Peter. "Language and Linguistics: The Key Concepts (2nd ed)", 2007.
- [7] Campbell and Lyle . "The History of Linguistics", 2001.
- [8] Frank Anini. "Design and production of instructional materials made with leather for pre-school education", 2011.
- [9] Reiser, R. A., &Dempsey, J.V."Trends and issues in instructional design and technology", 2012.