

A Web-based Program for Developing EFL Reading Skills of English-Major Students of the Faculty of Education

by

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Abstract

The aim of the current study was to develop third year English major students the reading language skills in English as a foreign language. The treatment tool is a web based learning program. The participants of the current study included a group of third year English major students in Ismailia (N=30). The design of the study starts with a pilot test to assess the need of this group of learners to develop their reading language skills. A pre/post-test for the experimental group is administered then the satisfaction questionnaire. The results of the study revealed that the developed web based learning program had a significantly positive effect on developing the reading skills in English as a foreign language for English major students. The study offers a number of findings concerning the need for more efforts to help improve EFL learners' reading Skills and sub-skills as a significant component of such learners' overall mastery of EFL.

Keywords: Reading skills, web based learning

1.1 Introduction:

Learning English should not be restricted to the learning in the classrooms. With the various technologies that we have, teachers, in particular, have to be selective

and productive to ensure that their teaching is useful, varied and interesting. This can be done by promoting web-based learning.

1.2 Web 2.0

Some key concepts that have to be introduced in this section web 2.0, and the former version web 1.0. Web 2.0 a concept that refers both to a large and shifting set of technological tools and to an approach to the socially and technologically integrated use of technology. Some researchers use the term “social computing” (Redecker, 2009) or simply the phrase “digital age,” (Greenhow, et al., 2009). Some major authors in the field talk about new media practices (Ito, et al., 2008) but they are all talking about tools, ranging from blogs, Facebook, and media-sharing sites to platforms such as virtual worlds or virtual learning environments, and even Web-based applications, for example, Voice Thread or Google Earth. Briefly, Web 2.0 is an online computing platform. This term, which is now a popular buzzword, was coined by Tim O’Reilly at the O’Reilly Media Web 2.0 technology conference in 2004. The idea of Web 2.0 has completely changed our thinking about Internet usage and teaching modalities supported by the Internet.

1.2.1 Web 2.0 tools:

The following table presents the web 2.0 tools currently in use.

Table 1: Web 2.0 Tools Currently in Use

<p>AJAX :Asynchronous JavaScript And XML— web development techniques used for creating inter-active or “rich” Internet applications rather than static</p>

Web pages; this technology allows dragging elements across the page

Atom a syndication format, or publishing protocol for Web feeds; like RSS (see below) but in a newer format

Blog short for ‘weblog’—a web site that enables anyone who accesses it to add commentary, graphics, or other content via simple self-publishing tools

HTML Hypertext Markup Language – the standard page description language for the creation of Web pages; a “tagging” language that formats the page and tells where images, sound, and other elements should be inserted

Mash up a web application that combines data from more than one source into a single integrated tool e.g., Google Maps

Podcast a digital audio file distributed via the Web for playback on portable media players, smart phones, and PCs

RSS Rich Site Summary or Really Simple Syndication – a family of Web feed protocols (formats) that automatically deliver selected content to the user’s Desktop

Social Media the use of electronic and Internet tools to share information/experiences, allow group interaction and collaboration—examples include MySpace, Facebook, Twitter, Flickr (personal); LinkedIn (professional); Second Life (virtual world)

Tags short for metatag—a non-hierarchical, user-generated keyword assigned to a piece of information allowing it to be found more easily by a search engine

Wiki a dynamic Web document designed to enable anyone who accesses it to contribute to and *modify or edit* the content; which distinguishes it from a blog and makes it an excellent tool for group projects

XML eXtensible Markup Language—a mark-up language specification that is stricter than HTML which allows users to define their own elements; preserves the formatting and structure of a digital document regardless of what application is used to read it

(Kuchinskas, 2007; Stair & Reynolds, 2010; Web 2.0 Reference Center, 2009)

The researcher used some tools including podcast, wiki, youtubes, Gmail, RSS, and social media in the web based learning she designed.

1.3 Definitions of Reading skills:

There are many different definitions for reading either as a process or a skill. It is appropriate to review some of these definitions. Bhlool (2013:78) defined reading as "the cognitive process of understanding a written linguistic message and a mental representation of the meaning". However, Chamot and Kupper (2010:163) state that "reading is the ability for a reader to transfer written symbols to meaning and using them communicatively and effectively".

Reading is the third language skill that children learn at schools; it comes after listening and speaking and followed by writing. It is simply defined as the process of looking at series of known and familiar symbols that may be letters or punctuation marks, then trying to get the meaning from them. Many people think

that reading as a skill is taught in the first few years at school and just for once. Based on this view of reading, the student's reading ability goes to primary grade teachers, so the student in the upper elementary or secondary level needs just to learn new vocabulary and new concepts (Cziko et al, 2000).

Reading is a complex process that relates what you need to background knowledge. If you could recapture your mental processing you, would find that you read with reference to a particular world of knowledge and experience from other times and places (Camille et al, 2007:27).

The researcher defines reading as a process of decoding symbols for the intention of constructing or deriving meaning. Reading is a complex interaction between the text and the reader and connected with the reader's prior knowledge, experiences and attitude.

1.3.1 Reading Comprehension:

There are several definitions for reading comprehension. Some of these definitions are presented below:

Bhloul (2013:88) and Badr El Deen (2011:11) state that "reading comprehension may be defined as the ability to communicate a text leading to integrated process that involves decoding vocabulary and sentences, employing prior knowledge relevant to the text and using cognitive and meta cognitive strategies in order to make sense and to get the target message that the author wants to convey".it is according to Cuesta College (2003) the process of constructing meaning through interaction and involvement with written text, the ability to make sense of the author's message and the ability to understand the text and the activity to make every word and sentence in the passage meaningful by decoding the words and using the previous knowledge).

The goal of reading is to make the reader understand what the writer wants him/her to understand from the text and get the target message that the writer wants to convey. Reading comprehension process has many skills which play an important role in making the passage easy to be understood (Yossuke, 2011).

Based on the above definitions, the researcher concludes that reading comprehension is the person's ability to interact with a text to construct meaning or to convey the author's message through employing an integrated process that involves cognitive and meta cognitive strategies. In other words, reading comprehension is interacting with the text using different reading comprehension skills.

1.3.2 Reading comprehension skills:

Since reading is a complicated thinking process, the reader should use main skills and sub skills that make significant gains on reading comprehension lessons to help the students to become purposeful and active readers (Cziko, Greenleaf, Hurwitz and Schoenbach, 2000). Despite the disagreement among writers about the skills of reading comprehension, reading comprehension skills are necessary for meaningful and effective reading if they are used appropriately to retell information accurately, to make personal references, to identify the main idea and supporting details, to ask questions, to make and revise predictions based on outcomes, to evaluate and express opinions, to draw conclusions, to visualize and use sensory information, to summarize information, to analyze story elements and story problems.

The following are the major skills to reading comprehension:

1. Skimming: It means reading the text quickly to get the general idea of the text and to understand the gist without reading all the words (Beale, 2013). According to Konstant (2003; 35) proposes three types of skimming:

1- Skimming to overview: Identifying what a reading passage is basically about.

2- Skimming to preview: Re-reading a passage in order to gain as much information as possible.

3- Skimming to review: Refreshing and familiarizing the reader with the content.

2. Scanning: It means reading the text carefully to get specific information hidden in the text. The focus is on the required information. A useful way to teach this skill is asking students to search for information such as a definition or a name of a person or a place, asking them to start at the same time and see who the first to find it (Beale, 2013).

3. Gaining the meaning of words through context:

It means to relate information and to understand the meaning from the symbolic use of language gained from reading to other experiences they have had or other readings they have done. Kim (2008: 25) proposes four steps of guessing the meaning of words from context:

Looking at the word itself and its surrounding to decide on the part of speech.

Looking at the immediate grammar context of the words.

Looking at wider context of the words usually within a clause or sentences

Guessing the meaning and checking whether the guess is correct or not.

4. Inference:

It means drawing and deriving a conclusion by the combination of our original meaning and the words printed on a page to produce something uniquely ours and we use this skill when the idea is not directly stated. As a result, good readers become like a detective and use clues to guess about the text and about the writer's idea (Cuesta College,2003).

5. Prediction:

Prediction refers to guessing and understanding what is coming next based on the context. This skill allows more interaction which increases students' interest, reading speed, enhances comprehension and improves their understanding of the text, title and subtitles. The teacher can play a role in improving the students prediction ability by asking questions or giving some keywords (Kjhatzi, 2009).

6. Sequencing:

A good reader can decide the events order, the relationships in the text and how a writer presents his passage and what keywords he uses such as first, then, next, later and finally as mentioned by (Teacher Vision, 2013).

7. Distinguishing facts from opinions:

This skill helps students to form their own opinions towards the topics they read, to understand the text and to elicit various points of view; consequently, students can differentiate facts from opinions. The students form their opinions based on their

knowledge and the available information such as numbers, dates, times and names of places and events (Learning Express Editors, 2011).

8. Abstracting:

The ability to outline a text by focusing on the main points and major details so he/she can get a summarized text. This ability can be improved by using some activities such as dividing the text into parts and each part is summarized by a group of students working together. This may help the students to identify, to connect the main ideas and to remember what they read so students become able to use it as a reading comprehension skill and apply it in their own experiences as mentioned by (Bailey, 2013).

9. Note-taking:

Miller (2004) mentioned that note-taking is the ability to report the text's main ideas so the reader shouldn't remember or revise everything he/she reads. Note taking helps students to organize their ideas, free their mind from having to recall everything, arrange new knowledge, focus their reading, select the important information, and save their time and effort. Students need to be taught how to take notes by drawing them from a temporal source such as an oral discussion in class. The notes that are taken from reading texts will have a key role in making reading comprehension.

10. Cohesion and Coherence:

Parvaz and Nodoushan (2006) state that students can achieve coherence and cohesion through using different markers such as pronoun reference, anaphoric and cataphoric elements or a logical tense structure, definite articles, as well as assumptions and implications connected to general world knowledge.

11. Visualizing:

The reader's ability to form an image of the text they read is based on the actions, characters and settings in the text to help the reader to become more involved in the reading process. It is one of many skills that makes reading comprehension possible as it helps students to gain a complete understanding of the text they are reading by using the words to create mental images. Visualizing helps students to have a richer reading and to remember what they have read for longer periods of time, to gain a more meaningful reading experience (Teacher Vision, 2013).

1.4 Statement of the problem

The problem of the current study stems from the fact that 3rd year, Ismailia Faculty of Education students have difficulty in reading correctly, they cannot easily understand a reading text.

That is why, the current study attempts to help such prospective teachers receptive skills through a web based learning program.

1.5 Questions of the study:

The study tried to answer the following questions:

1- What are the reading language skills required for English major students of Education?

2- To what extent do they master such reading skills?

3-What is the effect of a web- based program on developing overall Reading skill of English major students of Education?

- a- What is the effect of a web- based program on developing prediction skill of English major students of Education?
- b- What is the effect of a web- based program on developing skimming skill of English major students of Education?
- c- What is the effect of a web- based program on developing scanning skill of English major students of Education?
- d- What is the effect of a web- based program on developing inference skill of English major students of Education?
- e- What is the effect of a web- based program on developing note taking skill of English major students of Education?
- f- What is the effect of a web- based program on developing facts and opinion skill of English major students of Education?

1.6 Hypothesis

1- “There is a statistically significant difference at (0.00) level between the mean scores of the pre-post administration in favor of the mean post-test scores of the experimental group in the overall sub-reading skills test”.

2-“There is a statistically significant difference at (0.00) level between the mean scores of the pre-post administration in favor of the mean post-test scores of the experimental group in the skimming skill test”.

3-“There is a statistically significant difference at (0.00) level between the mean scores of the pre-post administration in favor of the mean post-test scores of the experimental group in the scanning skill test”.

4-“There is a statistically significant difference at (0.00) level between the mean scores of the pre-post administration in favor of the mean post-test scores of the experimental group in the inference skill test”.

5-“There is a statistically significant difference at (0.00) level between the mean scores of the pre-post administration in favor of the mean post-test scores of the experimental group in the prediction skill test”.

6-“There is a statistically significant difference at (0.00) level between the mean scores of the pre-post administration in favor of the mean post-test scores of the experimental group in the note taking skill test”.

7-“There is a statistically significant difference at (0.00) level between the mean scores of the pre-post administration in favor of the mean post-test scores of the experimental group in the distinguishing between facts and opinion skill test”.

1.7 Participants

Participants were one intact group (30) of English major students at the faculty of Education in Ismailia. They all came from a homogeneous community, both socially and economically. Their ages ranged between twenty to twenty one years old. The access to computer and Internet was easy as the majority of the participants had their own personal computers or notebooks.

1.8 The research Design

This study used the one group pre-post test experimental design, where one intact group was randomly selected to be the experimental group.

1.9 Significance of the study

This study may be useful for the following categories:

1- **Students:** by improving reading language skills among students of Education through the suggested program.

2-**Teachers:** by designing a program for English language teachers that may help them to teach skills of English-language.

3- **Curriculum developers:** by drawing the attention of curriculum designers and developers to the importance of including reading skills in the textbooks for students.

1.10 Variables

The variables in this study were: the independent variable is the Web based program and the dependent variable which is students' reading skills.

1.11 Instruments and materials:

- A checklist of the receptive skills required for English majors at the faculty of Education.
- A web- based program.
- A receptive language skills pre/post test.

1.11.1 Reading skills checklist

Aim of the checklist:

The aim of this checklist was to identify EFL reading skills suitable for third year English major students at Ismailia Faculty of Education

Description of the checklist:

It contained seven main levels of reading sub skills suitable for third year English major students at Ismailia Faculty of Education include read to skim, predict, Inference, distinguish between facts and opinion, scan and Note taking.

1.11.2 Designing the web based program (TEACH ME ONLINE.NET)

Aim and objectives of the program

The aim of this program was to develop 3rd year Ismailia faculty of Education students' reading skills.

Learning objectives:

By the end of this website, learners will be able to:

- Skim: to get the general idea of the text and to understand the gist without stopping at every word.
- Read and develop vocabulary
- Scan: to get specific information embedded in the text.
- Distinguish between facts & opinion: to help students form their opinions towards the topics they read, to understand the text and to elicit various points of view; consequently, students can differentiate facts from opinions.
- Predict: what is coming next based on the context.

- Note taking: to report the text's main ideas and the important things disregarding the less important ones.

1.11.3 Designing the Receptive Skills pre-post test

Aim of the test

The aim of this test was to measure English major student reading language skills of EFL after administering the proposed program in an attempt to measure the effect of the proposed program on developing these skills. Also it was used as a pretest the entry level of the participants.

Description of the test

The test consists of 40 items that measured the main reading language skills identified as suitable for English major students at the faculty of education.

1.12 Procedures of the study:

1. Reviewing literature previous studies related to the study variables.
2. Preparing the instruments and materials of the study.
3. Selecting the participants of the study.
4. Designing the web based learning program taking into consideration the various dimension of program design.
5. Designing a test for reading language skills.
6. Pre-test of the group.
7. Designing an initial checklist of reading language skills appropriate for English majors at the faculty of Education.
8. Teaching the proposed program to the group.

9. Post- test of the group.
10. Administering the satisfaction questionnaire.
11. Analyzing statistical data to show the effectiveness of web based Learning, discussing and explaining the results.
12. Writing recommendations and suggestions for future research.

1.13 Reading session:

1- Before Reading Stage

In the first stage, they are given a definition of the skill they are going to have training on

2- During Reading Stage:

The goal of this stage is to guide the students to understand the real content and the meaning of the text. The teacher tries to monitor understanding by a number of exercises such as questioning. For example Read each passage and then respond to the questions. Each question will ask you to make a logical inference based on textual details. Explain your answer by referencing the text

3- After reading Stage:

It occurs after finishing reading the text. In this stage, teachers first check students' comprehension through their answers online then lead students to a deeper analysis of the text to notice if the text was understood clearly or not. The goal of this reading stage is adding new knowledge to what the students have already known and examining their competence.

1.14 Findings:

Hypothesis two stated “There is a statistically significant difference at (0.01) level between the mean scores of the pre-post administration in favor of the mean post-test scores of the experimental group in the sub-reading skills test”.

In this respect, the researcher estimated the mean scores of the pre and post-measurements of the sub-reading skills test, and then T-Test Paired was used to estimate the statistical significant difference between both mean scores of the pre and post measurements for each reading sub-skill.

The following tables show the related findings for each sub-reading skills:

Table (2)

T test Value for the difference between the mean scores of the pre and post measurements of skimming

	Number of Subjects	Mean Scores	Standard Deviation	* T-Value
Pre	25	2.68	.988	7.94
Post		4.88	.971	

Table 2 above indicates that the T-Value for the sub-skill of skimming is significant at (0.01) level. Accordingly, the findings suggest that the developed website had a high and positive effect on this reading skill for English major students

* Significant at (0.00)

Table (3)

T test Value for the difference between the mean scores of the pre and post measurements of the scanning

	Number of Subjects	Mean Scores	Standard Deviation	* T-Value
Pre	25	3.40	1.22	6.53
Post		5.04	.888	

Table 3 above demonstrates that the T-Value is significant at (0.00) level. Accordingly, the findings indicated that the developed program has a high and positive effect on the reading skill of scanning acquisition in the English as a foreign language for English major students.

* Significant at (0.00)

Table (4)

T test Value for the difference between the mean scores of the pre and post measurements of prediction

	Number of Subjects	Mean Scores	Standard Deviation	* T-Value
Pre	25	2.12	.8165	10.69
Post		4.60	.8165	

Table 4 above demonstrates that the T-Value for the sub-skill of prediction is significant at (0.01) level. Accordingly, the findings indicate that the developed website has a high and positive effect on that reading sub-skill in the English as a foreign language for English major students.

* Significant at (0.00)

Table (5)

T test Value for the difference between the mean scores of the pre and post measurements of note taking.

	Number of	Mean	Standard Deviation	*

	Subjects	Scores		T-Value
Pre	25	2.84	.68	8.00
Post		4.44	.82	

Table 5 above demonstrates that the T-Value is significant at (0.00) level. Accordingly, the findings indicate that the developed website has a high and positive effect on the reading skill of note taking acquisition in the English as a foreign language for primary school students.

Table (6)

T test Value for the difference between the mean scores of the pre and post measurements of reading vocabulary.

	Number of Subjects	Mean Scores	Standard Deviation	* T-Value
Pre	25	2.48	1.045	8.04
Post		4.64	1.18	

Table 6 above demonstrates that the T-Value is significant at (0.01) level. Accordingly, the findings indicate that the developed website has a high and positive effect on the reading skill of reading vocabulary acquisition in the English as a foreign language for English major students.

Table (7)

T test Value for the difference between the mean scores of the pre and post measurements of facts &opinion.

	Number of Subjects	Mean Scores	Standard Deviation	* T-Value
Pre	25	3.68	1.069	5.66
Post		4.76	.435	

Table 7 above demonstrates that the T-Value is significant at (0.01) level. Accordingly, the findings indicate that the developed website has a high and positive effect on the reading skill of facts &opinion acquisition in the English as a foreign language for English major students.

Table (8)

T test Value for the difference between the mean scores of the pre and post measurements of making inference.

	Number of Subjects	Mean Scores	Standard Deviation	* T-Value
Pre	25	2.32	1.069	7.85
Post		3.76	.778	

Table 8 above demonstrates that the T-Value is significant at (0.00) level. Accordingly, the findings indicate that the developed website has a high and positive effect on the reading skill of *inference* acquisition in the English as a foreign language for English major students.

Applying the paired t-test also shows that all mean values are statistically significant at 0.01. This clearly shows that the effectiveness of the proposed program employed in the present study has been confirmed according to the statistical analysis shown in tables 13-19, table 20 and figure 11 below. This applies to both the results obtained for the individual sub-skills and the total scores for the different sub-skills of reading skills. This is clear from comparing the pre- and post- test results in favor of the post test scores for the subs-kills included in the study.

* Significant at (0.00)

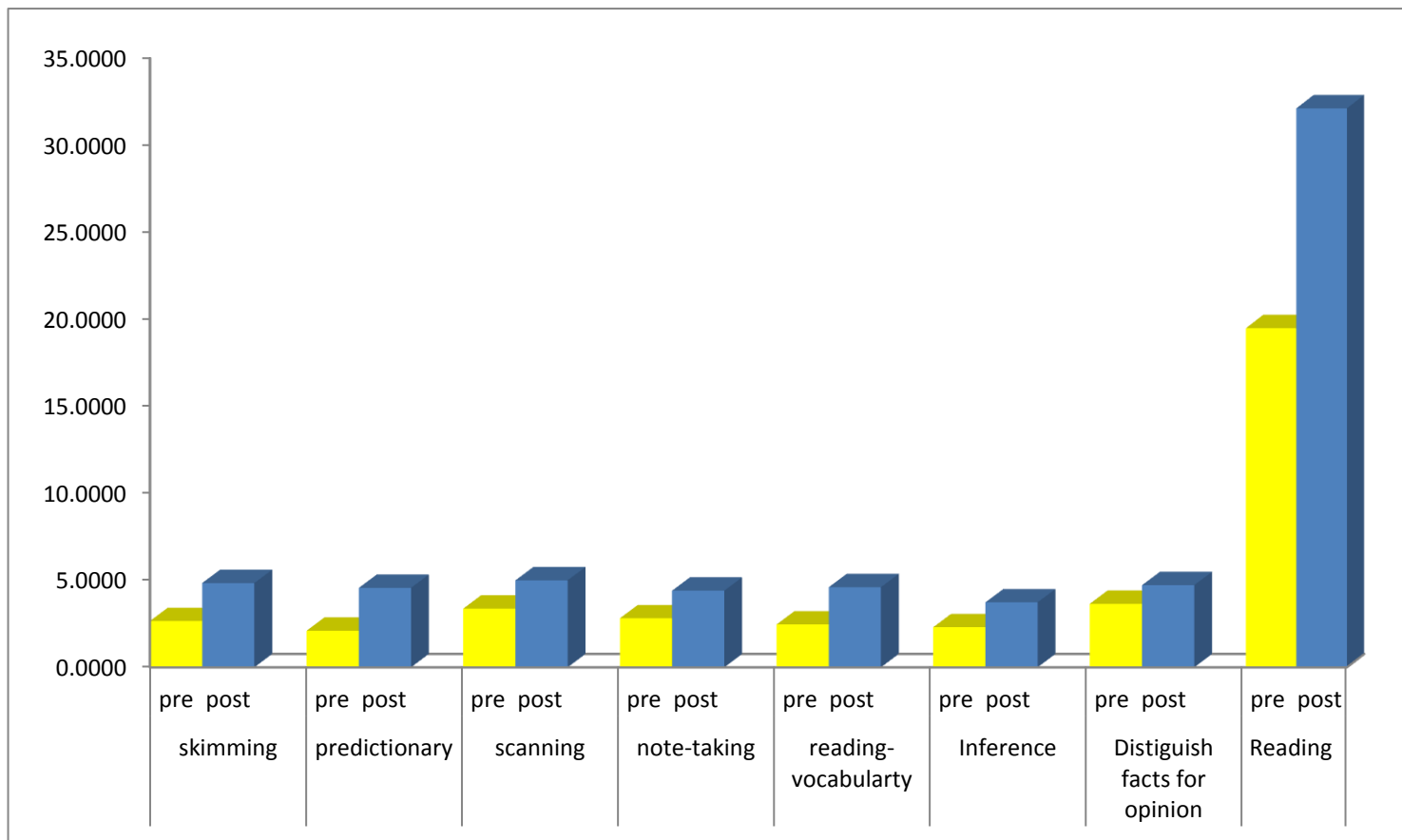


Fig. 1: Values of correct responses (out of 5) achieved by the learners in the individual reading sub-skills and the total score (out of 30)

$$2 = t_2 / t_2 + df$$

Table (9)

Mean values achieved by the learners for the pre- and the post- tests for the reading sub-skills

Test parts	Pre		Post		Df	T value	η
	Mean	St.dev	Mean	St.dev			Effect size
Skimming	2.68	.99	4.88	.97	24	7.94	.72
Scanning	3.40	1.22	5.04	.89		6.53	.63
Prediction	2.12	1.05	4.60	.82		10.69	.82
Note taking	2.84	.68	4.44	.82		8.00	.72
Reading vocabulary	2.48	1.04	4.64	1.18		8.03	.72
Inference	2.32	.80	3.76	.78		7.85	.72
Facts & opinion	3.68	1.07	4.76	.44		5.66	.56
Total	19.52	2.22	32.12	2.64		25.72	.96

Discussion of Findings:

The web based learning program proved to be effective in developing students' reading skills.

Difference between the **Reading sub skills** varied from a pre test mean value (out of 5) of 2.6 to 4.8 for the skill of skimming and from 3.40 to 5.0 for scanning acquisition and from 1.55 to 3.22 for note taking to 2.88 to 4.81 for reading vocabulary. This means that largest improvement following the application of the website program was in the area of scanning and skimming. The lowest improvement came in the skills of making inference and prediction acquisition respectively.

In the light of referenced table of Effect Size, table (9) above indicates the high Effect Size of the website TEACH ME ONLINE on developing the reading skills in English as a foreign language for English major students. Thus, the hypothesis is approved.

Recommendations

In the light of the results of the current study, the following recommendations can be made:

- Universities should adopt modern technology, such as computers in teaching languages.
- Multimedia technology would facilitate the effective development of listening skills more than the conventional devices.
- Time devoted to computer courses for EFL university students should be increased.
- Listening skill courses should include textual schemata, verbal stress and the manner in which the input is organized to influence how the listening material is interpreted.

- Multimedia should be used in organizing listening material; multimedia would help students learn at their own pace and they provide sufficient visual cues and immediate feedback for the learners.

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