2-4 February 2015- Istanbul, Turkey
Proceedings of INTCESS15- 2nd International Conference on Education and Social Sciences

1347

THE IMPACT OF A PROGRAM BASED ON VIRTUAL CLASSES ON THE DEVELOPMENT OF ENGLISH READING SKILLS AMONG FEMALE STUDENTS AT THE COLLEGE OF LANGUAGES AND TRANSLATION, KSU

Aseel Ibrahim Bin Salamah*

*Mrs., Kingdom of Saudi Arabia, aseelsalamah65@gmail.com

Abstract

The current study aims at investigating the impact of a program based on virtual classes on the development of English reading skills among female students at the college of languages and translation, KSU. The researcher used the experimental method and the sample consisted of (55) female students at the college of languages and translation, KSU during the second semester of 1433-1434 . Two groups of "Interactions 2 Reading" course were randomly selected. The two groups were randomly assigned to be the experimental group (43) students and the control group (12). The experimental group were taught the forth chapter of the course virtually from their homes using the program based on virtual classes and the control group students were restricted to the regular class teaching. A pre- and a post-test in reading skills was designed and administered to all students in this study before and after the completion of the experiment. According to the study findings, a set of recommendations were formulated.

Keywords: Virtual learning, E-learning, Flipped Learning, Instructional Design, ADDIE, McCarthy Theory, Keller's model ARCS .

1. INTRODUCTION

The introduction of the Internet, virtual classes and Computer Assisted Language Learning) CALL, in the educational field along with the implementation of Instructional Technology methods has enabled educators and instructors to accomplish such a requirement. With new web 2.0 tools (e.g., virtual classes, social media, you tubes) developed to enhance language learning online and to advocate group motivated learning, it has become possible to improve language skills and techniques to foster further English practice among various student populations. Learning theories as well as Instructional design and technology together play a significant role in enhancing the learning process. "Deciding on a theoretical perspective early in the design process not only helps later when it comes to designing the instruction, but also serves as a guide for deciding how to analyze the learning tasks or content and how to assess learning" (Christensen, 2008, p. 25).

2. PURPOSE OF THE STUDY

 The current study aims at investigating the impact of a program based on virtual classes on the development of English reading skills among female students at the college of languages and translation, KSU.

3. HYPOTHESE OF THE STUDY

- There are no statistically significant differences at level (0.05) between the results of the experimental group and the control group in the pre-test.

- There are no statistically significant differences at level (0.05) between the results of the experimental group and the control group in the post-test in favor of the experimental group.

- There are statistically significant differences at level (0.05) between the results of the experimental group in the pre-test and post-test in favor of the post-test.

2-4 February 2015- Istanbul, Turkey
Proceedings of INTCESS15- 2nd International Conference on Education and Social Sciences

1348

4. METHODOLOGY OF THE STUDY

After taking into consideration the purpose of the current study which is to investigate the impact of an independent variable (a program based on virtual classes) on the dependent variable (the development of English reading skills), the researcher found that an experimental approach was the most appropriate approach to test its hypothesis in order to yield the most plausible and reliable evidence. The experimental group was virtually taught chapter four of Interactions 2 curriculum through virtual classroom-based program while the students are at home. On the other hand, the control group was traditionally taught chapter four of Interactions 2 curriculum inside the university classrooms. A pre-test and a post-test in reading skills was designed and administered to all students in this study before and after the completion of the experiment.

4.1 Instrument

A pre- and a post-test in reading skills was designed and administered to all students in this study before and after the completion of the experiment.

4.1.1 Validity of the Instrument

The test was validated before being administered. Two kinds of validation: content and face validity, were obtained. To achieve this, a specification of the test and its items was constructed. In addition, face validity was obtained. The test was shown to a group of 13 Specialists in the content measured by the instrument (two PH.D holders, four M.A. holders in the college of languages and translation in King Saud University, and three PH.D holders in Instructional Technology). They were separately asked to judge the appropriateness of the items on the instrument. Generally, they all agreed that the test is suitable to the level, and the items cover what they suppose to test. As such, their insights were taken into consideration, and their recommended modifications and corrections were carried out.

4.1.2 Reliability of the Instrument

To check test reliability, a pilot study was conducted before the beginning of the experiment on 12 students. Cronbach's alpha test was rerun to measure the internal consistency and the reliability of the pre- and post-test administered to a pilot group of 12 test takers enrolled in the Department of English at King Saud University.

Table 1. Alpha coefficient for the overall test

overall test	Number of items	Alpha
	20	0.8452

The alpha coefficient for the overall test (20 items) was at 0.8452, which is considered a high level of reliability. Thus the pre- and post-test can be considered reliable and can be safely administered to both the experimental and control group.

4.2 Participants

The participants consisted of (55) female students at the college of languages and translation, KSU during the second semester of 1433-1434 . Two groups of "Interactions 2 Reading" course were randomly selected. The two groups were randomly assigned to be the experimental group (43) students and the control group (12) students.

5. DESIGNING AND PLANNING OF THE PROGRAM

The program based on virtual classes was designed according to the ADDIE model. The ADDIE model is actually a frame work that lists the generic process traditionally used by instructional designers and training developers (Morrison, 2010, p. 28). Most of the current instructional design models are variations of the ADDIE process (Piskurich, G.M., 2006). ADDIE is an abbreviation that stands for the five phases of the instructional design model —Analysis, Design, Development, Implementation, and Evaluation as shown in fig. 1.

2-4 February 2015- Istanbul, Turkey
Proceedings of INTCESS15- 2nd International Conference on Education and Social Sciences
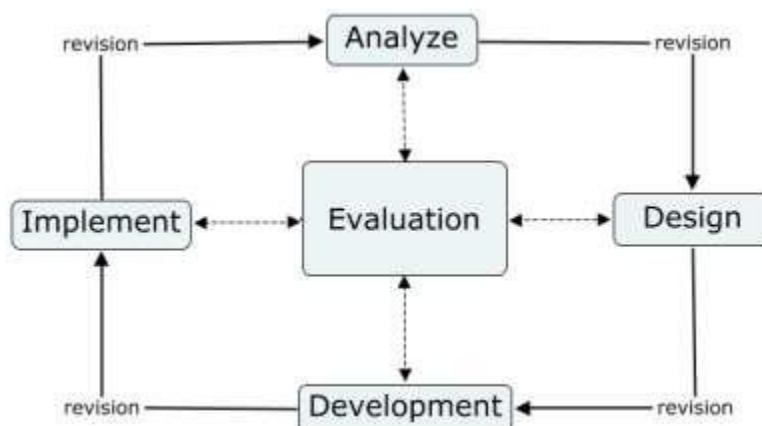
1349

Fig. 1. The five phases of ADDIE model

In order to achieve the desired degree of the program based on virtual classes, the researcher has included the following:

- Introducing the experimental group to the program based on virtual classes through applying McCarthy theory for a more engaging learning (why should I learn? What should I learn? How should I learn? What if I learned?).

- Applying Keller's (1983) model of motivation design ARCS (Attention, Relevance, Confidence and Satisfaction).

- Designing the program by using constructivist learning theory.

- Conducting a "flipped classroom" model. "The flipped classroom: Students watched recorded lectures for homework and completed their assignments, labs, and tests in class with their teacher available." (Bergmann & Sams, 2012, p. 3 – 5).

6. DATA ANALYSIS

In order to test the hypotheses of the study, the researcher has analysed the given data.

Hypothesis 1: There are no statistically significant differences at level (0.05) between the results of the experimental group and the control group in the pre-test.

To determine the initial equivalence between the two groups before the commencement of the experiment, a t-test was applied on the mean scores of the two groups on the reading skills pre-test. Therefore, For the pre-test analysis, the researcher used a t-test to determine the differences between the experimental and control groups, if any.

Table 2. T-test: for the difference in the pre-test of reading skills between the two groups

Group	N	Mean	Std. Deviation	t-Value	Sig. (2-tailed)
Experimental	43	11.81	3.438	1.342	0.185
Control	12	10.42	1.975		

The results of the t-test, as illustrated in table 2, indicates no statistically significant differences at level (0.05) between the results of the experimental group and the control group in the pre-test. This means that subjects' reading ability level in both groups was equal before undergoing the experiment.
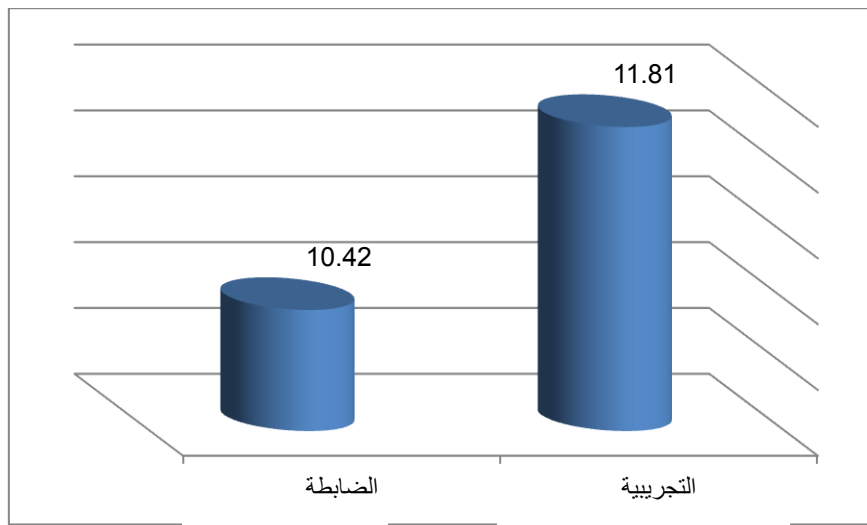
2-4 February 2015- Istanbul, Turkey
Proceedings of INTCESS15- 2ⁿᵈ International Conference on Education and Social Sciences

1350

Fig control group mean sco experimental group

Hypothesis 2: There are no statistically significant differences at level (0.05) between the results of the experimental group and the control group in the post-test in favor of the experimental group.

To investigate the gains the experimental group made in their reading skills after undergoing the treatment, a t-test was applied to the scores of the two groups on the reading skills post-test.

Table 3. T-test: for the difference in the post-test of reading skills between the two groups

Group	N	Mean	Std. Deviation	t-Value	Sig. (2-tailed)
Experimental	43	17.91	2.486	7.461	0.000
Control	12	11.50	3.119		

The results of the t-test, as illustrated in table 3, indicates that there are statistically significant differences at level (0.01) between the results of the experimental group and the control group in the post-test in favor of the experimental group.
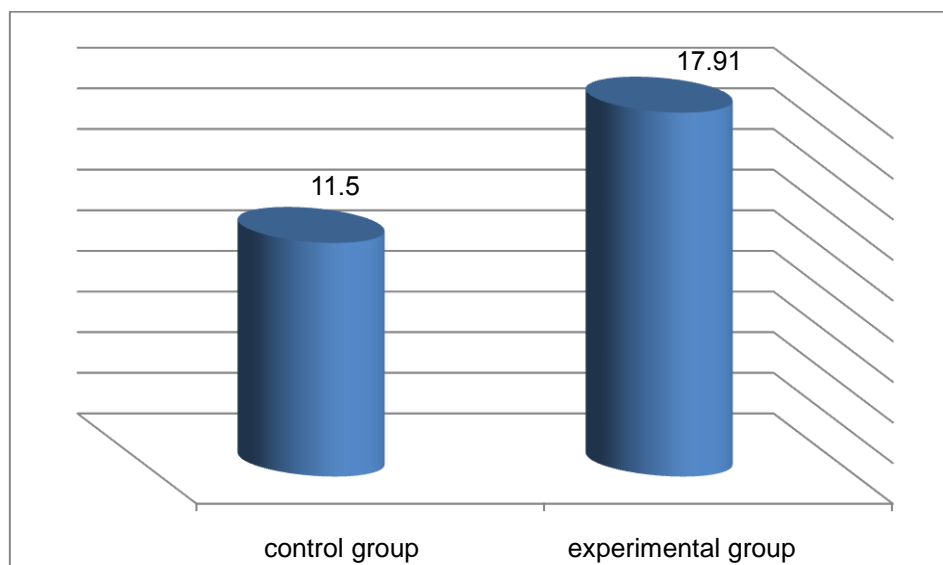

Fig. 3. The post-test mean score for the two groups

2-4 February 2015- Istanbul, Turkey
Proceedings of INTCESS15- 2nd International Conference on Education and Social Sciences

1351

Hypothesis 3: There are statistically significant differences at level (0.05) between the results of the experimental group in the pre-test and post-test in favor of the post-test.

Table 4. T-test: for the difference in the pre-test and the post-test of reading skills among the experimental group

test	Mean	Std. Deviation	t-Value	Sig. (2-tailed)
Pre-test	11.81	3.438	9.707-	0.000
Post-test	17.91	2.486		

The results of the t-test, as illustrated in table 4, indicates that there are statistically significant differences at level (0.01) between the results of the experimental group in the pretest and post-test in favor of the post-test.
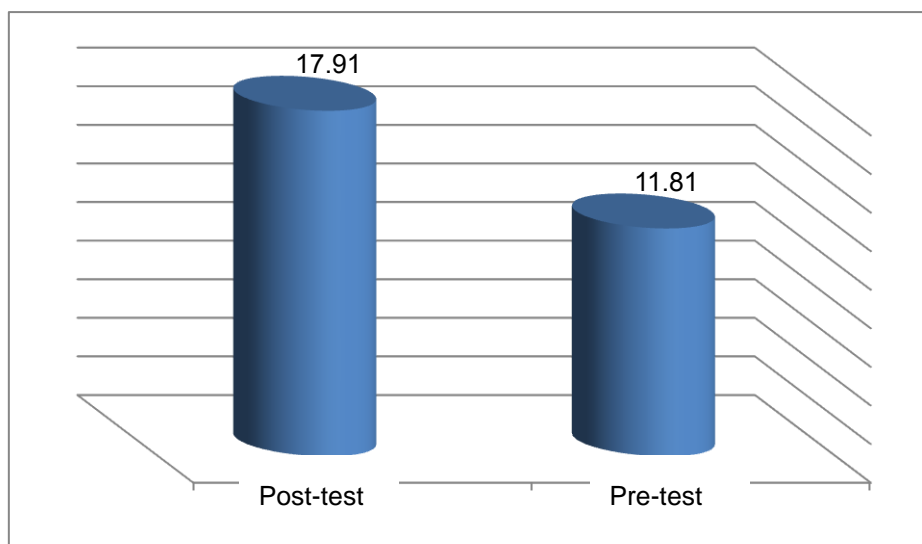

Fig. 4. The pre-test and post-test mean score for the experimental group

The study findings shows that:

- There are no statistically significant differences at level (0.05) between the results of the experimental group and the control group in the pre-test.

- There are statistically significant differences at level (0.01) between the results of the experimental group and the control group in the post-test in favor of the experimental group.

- There are statistically significant differences at level (0.01) between the results of the experimental group in the pretest and post-test in favor of the post-test.

All in all, the findings of the study stated above clearly shows that the implementation of the program based on virtual classes has a great impact on developing reading skills among the experimental group. In relation to previous studies, the positive findings of this study on the impact of virtual classrooms were stated in the following studies (Mohan, 2010; Chen et al.,2005; Samour, 2011; Hamed, 2010; Al-Mentashri, 2011; Kodur, 2010; Mohammad, 2012). However, the findings of this study on the impact of virtual classrooms were different than the negative findings on the impact of virtual classrooms stated in the following study (Mubarak, 2005).

7. Conclusion

According to the study findings, a set of recommendations were formulated. It is recommended that:
- "Flipped classroom" model be Conducted in English reading courses.

2-4 February 2015- Istanbul, Turkey
Proceedings of INTCESS15- 2ⁿᵈ International Conference on Education and Social Sciences

1352

– Constructivist learning environments be developed in educational programs.
– McCarthy theory Keller's model of motivation design ARCS be applied in the process of implementing an instructional design.
– ADDIE model be adopted as an effective instructional design model of educational programs.
– The treatment of this study "The program based on virtual classes" be used since the findings have shown a positive impact of the program on improving the students reading skills.

For further research that merit further investigation in issues related to this study, The followings are some suggestions for studies:

– The impact of a program based on second life virtual classes on the development of English reading skills or other different skills.
– The effectiveness of classroom 2.0 blended with web 2.0 tools in Teaching English as a second language.
– Designing a program based on virtual classes enhanced with web 3.0 tools.
– The impact of a program based on virtual classes using 3D wiki on students' performance in different fields.

REFERENCE LIST

Al-Mentashri, Halima Joseph (2011) A Training Program Based On Virtual Classrooms On Developing Effective Teaching Skills Among Teachers Of Religious Sciences. Master thesis, King Abdul-Aziz University. Jeddah. (Arabic thesis)

Bergmann, Jonathan and Sams, Aaron (2012) Flip Your Classroom: Reach Every Student in Every Class Every Day. United States of America: IST.

Chen, H., Kao, P.Y. & Yang, C. (2005) An Examination of The Interactive Strategies in Virtual Classrooms, Proceeding of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2005. Pp. 3066-3069. Retrieved October 18, 2012 from http://www.editlib.org/p/20552

Christensen, Trudy K. (2008) The Role Of Theory In Instructional Design: Some Views Of An ID Practitioner. Wiley Inter Science, vol. 47.

Hamed, Abdullah (2010) Improving virtual classrooms For Hearing Impaired Students In Light Of The Latest Global Trends And Their Impact On Their Attitudes Towards E-learning. Master thesis, Helwan University, Instructional Technology. Helwan. Retrieved November 10, 2012 from http://main.eulc.edu.eg/eulc_v5/Libraries/Thesis/BrowseThesisPages.aspx?fn=PublicDrawThesis&BibID=11065654

Keller, J. (1983). Motivational Design of Instruction. In: C.Reigeluth (Ed.) Instructional Design theories and models: an overview of their current states. Hillsdale, NJ: Lawrence Erlbaum Associates.

Kodur, Ahmad (2010) Employing Virtual Classrooms In Training Students On The Skills Of Business Communication Course In English And Measuring Their Effectiveness. Master thesis, Helwan University, Instructional Technology. Helwan. Retrieved November 10, 2012 from http://main.eulc.edu.eg/eulc_v5/Libraries/Thesis/BrowseThesisPages.aspx?fn=PublicDrawThesis&BibID=11050730

Malachowski, Michael J., PhD. (2002). ADDIE Based Five-Step Method Towards Instructional Design. Retrieved November 19, 2012 from http://fog.ccsf.cc.ca.us/~mmalacho/OnLine/ADDIE.html

Mohammad, Ahmad (2012) The Impact Of Virtual Classrooms Among , Instructional Technology Students In The College Of Education On Developing Skills Of Producing Multimedia Programs In The Light Of Design Criteria. Published master thesis, College of Education, Fayoum University. Al Fayoum. Retrieved November 19, 2012 from http://main.eulc.edu.eg/eulc_v5/Libraries/Thesis/BrowseThesisPages.aspx?fn=PublicDrawThesis&BibID=11237413

Mohan, F. (2010) Using Social Networking Software to Increase Student's Participation in a Virtual Classroom. Proceeding of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2010. Pp. 2091-2098. Retrieved October 18, 2012 from http://www.editlib.org/p/34923.

2-4 February 2015- Istanbul, Turkey
Proceedings of INTCESS15- 2nd International Conference on Education and Social Sciences

1353

Morrison, Gary R. Designing Effective Instruction, 6th Edition. John Wiley & Sons, 2010.

Piskurich, George M. (2006). Rapid Instructional Design: Learning ID fast and right. Pfeiffer: San Francisco.

Samour, Sahar Mahmud Abdulfattah (2011) The Impact of Utilizing Virtual Classes on Acquiring Concepts of The Islamic Doctrine Related To "Immaculacy" And Their Attitudes Towards It. Master thesis, College of Education, Islamic University. Gaza.