The Effects of e-Learning on the Achievement of the First Intermediate Class in the Subject of Arabic Language and Enhancing Their Logical Thinking

Thuraya Ahmed Khales Shaalan Al-Shemary[a], Falah Saleh Hussein Al-Joboury[b], [a,b]Department of Educational and Psychological Sciences, College of Education, Al-Hamdaniya University, Email: [a*]thurayaalsmaree@gmail.com

The researchers have utilised an experimental methodology that contains equal groups and the reverse testing methodology, which have proved suitable for the present study. Furthermore, the methodology achieves the goals of the study, in which, the selected test subjects are the female students of the first intermediate class at Rafidah Al-Aslamiyah High School in Kirkuk, Iraq, during the first semester of the academic year 2018–2019. There were 79 students. The researchers have prepared a test, which has 30 items that are multiple-choice. The items are divided into five sections, consisting of six items per section. Every item is followed by the selections: 'It always applies to me', 'It sometimes applies to me', or 'It does not apply to me'. After the test, the results indicated that there is a possibility to apply the e-Learning strategy to the first intermediate class students in the subject of Arabic Language and developing their logical thinking. The test results indicate that e-Learning has encouraged the students to effectively participate in the class by reading the content material and analysing the ideas that are present within. Furthermore, developing questions and electronically including these questions.

Keywords: *e-Learning, Achievement, Logical Thinking, First Intermediate Schoolgirls.*

Problem of the Study

The obvious setback in teaching the subject of Arabic Language throughout the different classes is that it has a great and effecting role on speaking Classical Arabic (i.e. Fus-ha), which leads to a serious problem in teaching the Arabic Language. This leads to an issue in reaching the goals of the subject, which creates a disruption in developing a well-educated generation (Younus, 2001: 76). Furthermore, restriction to the traditional methods will only lead to degrading the students' levels, in this subject in particular, in which its aim is to deliver the content of the material to the students through memorisation and repetition, without creating any significant effect in their minds. These types of methods have ignored the scientific side of the material. Additionally, they do not deliver information through the interaction with the students' minds, eventually developing their logical thinking (Shahatah, 2004: 72). The First Conference for Science and Arts (2017) has ensured the importance of treating difficulties that teachers face while teaching the Arabic Language. Among them is the non-use of new strategies for teaching, and the poor implementation of the pedagogical principles in teaching situations.

E-Learning, however, can be used as a tool to deal with the weakness in teaching the Arabic Language, logical thinking, and reaching their goals. The researchers have asked the following question: "What is the effect of e-Learning over the achievement of the first intermediate class students and their logical thinking?"

The Significance of the Study

E-Learning is considered the systematical curve for designing, applying and evaluating the educational process according to certain goals, which stem from continuous research in the field of education and human communication. It uses human and non-human resources in order to make the educational process more efficient. Moreover, information technology means gaining, collecting, delivering, storing, showing and restoring information through modern technological means by the cooperate use of computers and modern communication media systems. E-Learning has multiple points of view, in which it can mean using any electronic device in education — using computers is one of them — in order to convey information to the learners, and giving them the chance to interact with it (Moussa & Al-Mubarak, 2004: 56).

The researchers find that e-Learning is a modern teaching strategy and testing it in teaching the Arabic Language may increase the schoolgirls' level of achievement, in which active learning depends on the students' role in teaching by being active in the educational process. Academic achievement, with all its diversity, has basic aims for education because of the importance it has in the students' lives. Educationally, academic achievement forms the basic

scale, which eventually leads to the students' transition in education or moving from one grade to another (Al-Dulaimy & Al-Hashimy, 2008: 38).

The first intermediate grade has been chosen, because of the importance of the grade. It is a continuity of the elementary stage in preparing the schoolgirls, shaping their personalities through discovering their talents and skills, and the professional and educational guidance. Furthermore, preparing them for high school or business fields and production (Hussein, 2006: 12). The Arabic Language occupies a significant place in education, which contains spiritual, moral, scientific and educational dimensions that are inspired from the Holy Quran and Sunna. Education aims at building a balanced and complete character and developing a generation of educated individuals who can translate knowledge through action. At the same time, gaining morality and knowledge in order to be a generation that is strong willed, well-mannered and efficient (Al-Joboury, 2015: 102).

Aims of the Study

The study aims to identify the effect of e-Learning over the achievement of the schoolgirls of the first intermediate grade in the subject of Arabic Language and their logical thinking.

Hypotheses

1. The study assumes that there is no significant difference in the GPA of the students who have studied Arabic Language using the e-Learning strategies and the students who studied using the traditional methods.
2. There is no significant difference in the GPA of the students' logical thinking.
3. The study presumes that there is no significant difference in the GPA of pre-test and post-test results.

Study Limits

This study is limited by:
1. The human limitation: the subjects are the first intermediate grade schoolgirls in the high schools of Kirkuk, Iraq.
2. The spatial limitation: one of Hawija, Kirkuk, Iraq.
3. The informational limitation: some of the topics in the curriculum of the first intermediate grade Arabic Language.
4. Temporal limitation: the first semester of the academic year 2018–2019.

The researchers found e-Learning is an interactive educational environment that has multiple resources that are synced within the semester or are not synced without any restrictions and commitments of the place and depending on the self-learning and the interaction between the

teacher and the learner. It increases the possibility of connections collectively between the students and the teachers. The students' connection with their teachers through e-mails, and chat rooms encourages them to participate more and interact with the topics at hand. They help in exchanging points of view, which increases the benefits of the suggestions. This helps in shaping the girls' personal views and building a strong base for learners (Al-Haresh, 2004: 97).

Social media gives each student the chance to contribute at any time and without any disturbances, unlike the regular classes that prevent them from contributing because of poor arrangement of the class, the weakness of the student's voice, shyness or various other reasons (Jamil,1998: 79). Furthermore, e-Learning makes finding and contacting a teacher much easier. E-Learning can derive the teaching methods, in which it presents the materials for the student in the most efficient way and that is more suitable for the student (Al-Moussa & Al-Mubarak, 2004; 156). Moreover, e-Learning does not mean cancelling the teacher's role in the educational process, but it gives the teacher a great importance. Nowadays, the teacher has become a combination of a leader, a project manager, a critic, and a guide (Al-Sharqawi, 1997: 121).

The academic achievement has an important position in the learning process (Shwahin et al, 2008: 133). It also is used to indicate the range of success that the learner has achieved in a certain topic or area (Zair & Turky, 2012: 153). Achievement plays a great role in defining the learning process, but this does not mean it is the only factor in the learning process (Abo-Deqah, 2008: 78).

Logical thinking has had a special care among specialists, which is the most elevated mental activity for humans to do. Furthermore, the scientific method of thinking helps to earn more time in order to solve problems. Without it, thinking would be subject to error, mistakes, and a waste of time and effort (Abo-Jado & Mohammed, 2007: 56). Thinking has multiple features:

1. Having a purpose for perceiving the basic connections.
2. It contains the element of insight, which rearranges the suitable expertise to achieve the intended goal.
3. It contains the element of creativity, which creates a new compound that solves problems (Al-Atoum, et al., 2009: 18-19).

Methodology

This section contains the procedures, which have been followed.

Research Design

For the present study, an equal-group design has been chosen, in which it is a pre-test and post-test. At the end of the experiment, the post-test and the summative assessment have been conducted over two groups of schoolgirls; Group A: the experiment's students, and Group B: the traditional students.

Group	Pre-Test	Independent Variable	Post-Test (Dependent Variable)
A	Logical Thinking Scale	E-Learning	• Logical Thinking • Summative Assessment
B		Traditional Learning	

Participants

The participants of the study are the first intermediate grade schoolgirls from the high schools in the Little Zab, Hawija, and Kirkuk, in Iraq, for the academic year 2018–2019. The participants are from Rufaidah Al-Aslamiah High School for Girls, in which the participants have been chosen randomly. The number of students who participated was 79, of which 40 formed Group A (experiment students) and 39 formed Group B (traditional students).

The Summative Assessment

The summative assessment has been based on the topics in the curriculum of the Arabic Language. Furthermore, three levels of cognition from Bloom's Taxonomy have been chosen because of their suitability. These levels are 'Remember', 'Understand', and 'Apply'. The assessment is based on 30 objective questions, which contained four-scale multiple-choice answers.

Logical Thinking Scale

The research sets a special test for logical thinking, in which there are five sections. Each section has six items and each item has three choices: 'It always applies to me', 'It sometimes applies to me', and 'It does not apply to me'.

Analysis

In this paper, the statistical analysis used is based on the T-test for each of Chi-Squared test and Cronbach's Alpha. The results show the following:

1- The first hypothesis states that there is no significant difference in the GPA of the students of both Groups A and B.

Table 1: T-test results for the students' degrees of both groups in the post-test

Group	No.	Mean	Std. Deviation	Degrees of Freedom	T-Value		0.05 Significance Level
					Calculated	Table	
A	40	24.7500	2.66747	77	4.89	2.00	Statistically Significant
B	39	20.3846	4.69098				

In which, the value has reached 0.24. Comparing this value with the level, it is found that the affect is significantly large. Table 2 clarifies the significance:

Table 2: Affect Value Reference

Affect Size	Minimum	Medium	Large
Affect Value	0.01	0.06	0.14

2- The second hypothesis assumes that there is no significant difference between the students' logical thinking in the pre-test.

Table 3: T – Test results for the students' logical thinking

Group	No.	Mean	Std. Deviation	Degrees of Freedom	T – Value		0.05 Significance Level
					Calculated	Table	
A	40	80.1750	5.96093	77	3.67	2.00	Statistically Significant
B	39	75.4359	5.51455				

3- The third hypothesis states that there is no significant difference in the results of the pre-test and post-test for the test group.

Table 4: Results of the pre-test and post-test

Group	Mean	Std. Deviation	Difference Mean	Deviation Mean	Degrees of Freedom	T – Value		0.05 Significance Level
						Calculated	Table	
Pre	71.7250	6.71771	8.45	6.72	39	7.96	2.04	Statistically Significant
Post	80.1750	5.96093						

Conclusions

1- The study has concluded that the strategy of e-Learning is applicable when teaching the subject of the Arabic Language.
2- E-Learning has encouraged the students to effectively participate in the class, by reading and extracting the ideas within the given material, as well as asking questions.

Recommendations

1- Taking an interest in e-Learning when teaching the Arabic Language of the first intermediate class because of its influence in increasing the levels of achievement and logical thinking.
2- Starting workshops and courses for teachers in order to provide them with the necessary knowledge on how to teach in an e-Learning context.

Suggestions

1- Consider the effects of e-Learning on the philological concepts of the second intermediate schoolgirls and increasing their creative thinking.
2- Consider the e-Learning effects on the first intermediate schoolgirls in grammatical terms acquisition and developing their critical thinking.

REFERENCES

Abu Allam, R. M. (2014) Educational and Psychological Methodologies, University Press, Egypt.

Abu Al-Sil, M. S. & Abu Al-Anaz, M. A. (2013) Building the Favorable Values Standard in the Jordanian Universities Students, Association of Arab Universities Journal for Education & Psychology, *11*(2).

Abu Daqah, S. (2008) Proper Measuring and Evaluating (Concept and Procedures for Effective Learning), Dar Afaq Publishing, The Islamic University, Gaza, Palestine.

Abu Jado, M. & Mohammed, B. (2007) Teaching Logic: Theory and Application, Dar Al-Massira Publishing, Amman, Jordan.

Al-Attom, A. Y. et al (2009) Developing Thinking Skills: Concepts and Applications, Dar Al-Massira Publishing, Amman, Jordan.

Al-Harash, A. H. (2004) Developing Software and their Educational Applications, Dar Al-Massira, Amman, Jordan.

Al-Hashimy, A. A. & Al-Dulaimy, T. A. H. (2008) Modern Strategies in Teaching, Curriculum Publishing, Amman, Jordan.

Al-Jadiry, A. H. & Abu Hilu, Y. A. (2009) Basic Methods and Statistical Uses in the Educational Human Sciences, Athraa Publishing, Amman, Jordan.

Al-Joboury, F. S. H. (2015) Arabic Language Teaching Methods in Quality Standards, Dar Al-Radhwan Publishing, Amman, Jordan.

Al-Sharqawi, A. M. (1997) Psychology of Education, The Anglo Egyptian Library, Cairo, Egypt.

Hussein, D. T. (2006) The Effect of Corrective & Expository Feedback over the Second Intermediate Grade Schoolgirls in the Subject of Orthography, Master Dissertation (Unpublished), University of Babylon, College of Basic Education.

Jamil, A. A. (1998) Self-Education Using New Models (Modern Trends), Curriculums Publishing, Amman, Jordan.

Jrwan, F. A. (2009) Teaching Logic: Concepts and Application, Dar Al-Fikr Publishing, Amman, Jordan.

Moussa, A. & Al-Mubarak, A. (2004) E-Learning: Basics and Application, Dar Al-Radhwan Publishing, Amman, Jordan.

Shahata, H. (2004) Teaching Arabic Language between Theory and Applications, Dar Egyptian-Lebanese Publishing, Cairo, Iraq.

Shawahin, K. et al (2008) Teaching Students with Special Needs, Al-Jidar International Publishing, Amman, Jordan.

The First International Conference for Science & Arts (2017): Teachers' Point of View on the Difficulties of Teaching Arabic Language in Emigrants' High Schools in Iraq, A Study Published by the First Conference for Science & Arts, Erbil, Iraq.

Younus, F. (2001) Strategies in Teaching Arabic Language in High School, Modern Book Publishing, Cairo, Egypt.

Zair, S. A. & Turky, S. D. (2012) Modern Trends in Teaching Arabic Language: Part One, Dar Al-Murtadha Publishing, Baghdad, Iraq.

Zair, S. A. et al (2016) Sustainable Education: Educational Applications, Dar Al-Wadah Publishing, Amman, Jordan.