

Iraqi EFL Students' Ability in Acquiring English Vocabulary by Peer Instruction Technology

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Abstract: Today's learners are driven and inspired by technology in their everyday lives, so it is no longer enough to firmly grip the same old traditional teaching. To raise the learners' awareness of the material being presented, we need to integrate technology and innovation into our teaching routine. Peer Instruction Technology or Smart Phone Responses have gained tremendous worldwide success in teaching as an innovation in the classroom. "This study intends to investigate the effects of clickers on the acquisition of English-language vocabulary in the context of Iraq". The study was using the method of quantitative research. The study samples were randomly selected from the students at the fourth preparatory school. The study adopted pre-test design-post-test. The study results suggested that in both the overall achievement and the acquisition of a vocabulary item, Smart one Responses were better than conventional teaching.

Keywords: Vocabulary, ability, Peer Instruction Technology

1. Introduction

The process of education and learning is developing at an increasing pace because of technological advancements in all educational fields which calls for innovation in the way we teach and interact with our learners. Learners today are driven and inspired by technology in their daily lives, so firmly gripping the same old traditional teaching is not enough anymore. We need to integrate technology and innovation into our teaching routine to raise the consciousness of learners towards the material being presented.

One form of technology is Clicker devices or **Peer Instruction Technology (smart phone technology)**, which are being implemented all around the world, and their use is increasing by the day in almost all levels of teaching and education. Studies on the device show promising results as they can enhance the dynamics of the classroom and make it more engaging and interesting. Caldwell (2007) concluded that clickers had an advantageous impact on student's performance and they proved to be more engaging and interesting to the students. Much of the success obtained from the Smart Phone Responses are reliant on the way they are utilized and the extent of their use in the classroom since they can develop a more favorable environment within the classroom, which results in outright leverage in the learning process (Martyn, 2007).

Presenting Peer Instruction Technology as a way to monitor and present collaborative learning or peer instruction techniques is really helpful, especially in large classroom environments; in fact, pupils and teachers who have used this gadget are generally positive and enthusiastic because of the effects the device has on them. Likewise, instructors and experts stretch the tremendous ability of clickers in extending pupils' learning (Beatty, et al. 2006). clickers tend to be seen as an apparatus that can enhance students' motivation and engagement amid lessons.

1.1 Statement of the Problem

The English language is viewed as the most broadly utilized language on the planet. It is used in both social life and business savvy. Its use is building up every day by occupying the most prominent roles of our lives. The mastery of English requires incredible teachers and dynamic pupils eager to collaborate to grow their abilities and enhance their capability. There are various factors that could discourage language learning, which Iraqi understudies experience. One of those difficulties is the insufficient size of vocabulary knowledge, which can influence the way they talk, read, listen, and compose. When they attempt to read, they would experience understanding issues, experts say that these perception troubles are happening because of the words that students don't comprehend when they face them in ordinary circumstances (Nation, 2009) & (Kareem, et al., 2019).

Moreover, language students frequently find themselves incompetent when delivering legitimate English when interacting in the target language in the classroom with their companions or instructor; an issue that occurs

because of their exceptionally restricted lexicon. Iraqi language students may likewise experience challenges with interpretation, remembrance in light of their constrained vocabulary and poor language acquisition (Hammad,et al.,2018).

A number of language specialists refer to the significance of vocabulary knowledge. For instance, Nation (2009) beholds vocabulary as a central segment of foreign language students' competency and a necessity of lucrative correspondence. Also, Richards and Renandya (2002) view vocabulary as the spine of language on the basis of which students speak, listen, write, and read.

According to a document form the Kids Learning HQ (2014), students face challenges in acquiring new vocabularies due to certain factors that hinder their acquisition, and these include: 1) Poor reading skills which make acquiring new vocabulary items troublesome.

2) Lack of affixation knowledge (prefixes, infixes, suffixes) which are crucial for building new vocabulary

3) Not being able to guess the meaning of words from contexts or sentences; thus, resulting in blank gaps of information.

4) Not writing down the new vocabularies they encounter in the lessons.

5) Not being able to retell or rephrase sentences or stories.

6) Communication struggles when using the target language.

7) The insufficient amount of descriptive words.

These factors can be remedied by the continuous assessment of new words that the students take in each lesson. Therefore, we tested the pupils at the end of each lesson by using Smart Phone Responses to get instant feedback and gain an understanding of their progress on the basis of which we altered our instruction accordingly (Chilap, et al.,2020).

2. Literature Review and Previous Studies

2.1 Smart Phone Responses

Classroom response system or clickers are gadgets used as an easy assessment tool providing teachers with immediate feedback on the performance of thier students in lessons. They have been used for various purposes, such as producing classroom discussions, executing a peer-instruction technique, or taking absentees in a large lecture hall or classroom among other uses that the device offers. The gadget has three parts, namely a receiver connected directly to a computer, a handheld remote that is given to the pupils to transmit their responses to the receiver through Bluetooth or Wi-Fi signal and a PC program that records understudies' answers and analyzes them (Hatch, Jensen & Moore, 2005) . The instructor is tasked to construct multiple questions related to the presented materials, and present them to his students. Then, the learners are required to press the right answer on the remote control. When voting is done, the instructor will show the results for the class as (e.g., graphs, diagrams, visual bars, or pie charts) to produce discussions, give input and decide whether his teaching style is effective or needs a few adjustments or amendments(ibid). Simpson and Oliver (2006) pertain that these tools can be used in most of the educational fields and provide the benefits and oversee students' communication and cooperation within the class. They can provide an understanding of learners' progress and any miscomprehensions that might occur during the presentation of the material; monitor the content coverage and oversee learners' thinking; - provide the instructor with the ability to manage, experiment, and encourage his students' learning (Ali, et al.,2018) & (Abbas, et al.,2018).

2.2 Peer Instruction

The researcher has previously discussed the implementation of Smart Phone Responses in everyday instruction. The term Peer instruction and the way it can influence the execution of Smart Phone Responses in the classroom and help in propelling better results .

Mazur developed his model of this instructing strategy to try to help his understudies in applying their knowledge to practice. In Mazur's technique, the teacher constructs various multiple-choice questions and asks his students to answer them at different time periods of the lesson (Wiggins. McTighe.2006) . If a large portion of the pupils' answers were not right, they would be requested to take the advice and discuss the possible answers with their peers until they reached an agreement over the right choice. Eric Mazur's technique is based upon the presumption that students that have comparable levels of comprehension could sometimes explain the material in a more suitable way than that of the teacher (Wiggins, McTighe,2006). Mazur believes that his technique applies well if students prepare the materials ahead of lessons and try to apply what they have studied in use a short time later, where there is ample opportunity for positive feedback from the teacher, classmates and themselves which can significantly enhance their learning process (ibid). The concept of peer instruction was used by one of the

researchers daily to test the students twice in each lesson by using Clickers' devices to get an instant feel for class progress.

2.3 Vocabulary Acquisition

Vocabulary is defined as the best possible way to transport meaning to the receiving end (Hubbard, 1983). Furthermore, Nation defines it as the capacity to comprehend, fathom completely, and perceive the word when it is experienced in a specific setting instead of merely speculating its meaning (Nation.2009). while the acquisition is defined as the unconscious process of internalizing the principles of the target language as a result of the direct contact to comprehensible meaning, a process that is more frequent in a second language or foreign learning (Richards,Schmidt, 2010) &(Zehraa, et al.,2019) .

2.4 The importance of Vocabulary in Language Learning

Vocabulary and lexical units are highly significant in learning a language and communicating them . Without enough vocabulary knowledge, it is not possible to employ grammatical or other types of linguistic knowledge in communication or discourse . Folse's study (2003) states that without syntax, the meaning is hindered; but without vocabulary, the meaning is impossible . It is also emphasized that vocabulary is needed for every language skill and grammar . It can be regarded as the core of the four skills; speaking, listening, reading, and writing . Chastain (1988) states, the lack of required vocabulary is the most common cause of students' inability to express themselves during communication activities . To clarify the importance of vocabulary in the development of other skills in terms of testing, Heaton (1988) points out that the tests of vocabulary often provide a good guide to reading ability .

As it is seen, unless the language learner has a sufficient amount of word knowledge, s/he can neither express her/himself as intended nor understand the speaker . Without sufficient word knowledge, a learner cannot write or read in the desired way . In such a case, when the learners are confronted with situations where they feel they lack the knowledge of vocabulary, their motivation to learn language decreases.(see: Rahoomi, et al.,2019) .

2.3 Previous Studies

By using clickers to promote dependable learning and instruction, previous researchers have produced mixed reviews, which are inconsistent in terms of the bona fide points of interest of utilizing this advancement in classrooms to help the learning process. Therefore, the inquiry into whether clickers make observable leverage to students' learning must be examined.

A couple of studies proposed that clickers enhance understudies' outcomes, for instance, test marks, succeeding rates, learners' observation and perception, and that students appear to like clickers (McDermott. Redish,1999; Roschelle et al., 2004; Duncan, 2005) . Rohwer, in his research, specifies that the execution of the clicker technology incited a sensational increment in pupils' enthusiasm for the class, as understudies were given a safe zone to answer questions without the dread of being embarrassed before their partners . This is especially proper in such a large classroom environment, where it can be challenging to produce an intuitive discussion (Rohwer. 2015) . In any case, to date, most of the studies conducted on the effects of clickers are not sufficient to permit legitimate choices about the benefits of clickers in the classroom (Roschelle. Penuel.and Abrahamson, L. 2004) .

Researchers specialized in the field of education surmise that the coverage of content alone is not adequate to show how this dynamic engagement prompts more dependable learning (Draper. Cargill and Cutts, 2002; Knight & Wood,2005) . In this regard, the researcher tested the use of Smart Phone Responses on students' vocabulary acquisition to determine how viable the device is in an Iraqi setting .

3. Methodology

The research method includes a presentation of the procedures used to achieve the objectives of the study, starting from selecting the population and samples, neutralizing the variables of both samples, designing the instruments and tools of the study, conducting the experiment and analyzing the results.

3.1 Experimental Research Design

The experimental design contains one independent variable (Smart Phone Responses) and a dependent variable (the test scores); thus, the experimental design was adopted on two equivalent groups, one the experimental and the other one is the controlled group.

3.2 Participants

The population of the presented study is the fourth-grade preparatory school for boys in the province of Karbala for the educational year (2017-2018). An Al Balagh preparatory school located at the heart of the province was chosen to represent both samples, the control and the experimental one, which we randomly selected as class (A, 37 students) to represent the experimental group that received Clicker based instruction and class (B, 39 students) to represent the control group which received traditional teaching.

3.3 Samples Equivalence

The researcher conducted a statistical equivalence between the experimental and control groups in some variables that could affect the results of the experiment. Although the researchers chose the two groups randomly, the students of the research sample were from similar social and economic status and studied in the same school. We were keen to make parity by making the equivalence between these variables (the age measured by months, first course scores, and parents' academic achievement). The statistical results demonstrated that the two sets were equivalent in all the aforementioned variables.

3.4 Extraneous Variables Equivalence

Although the researchers verified the equivalence of the two sets of research in some variables that are believed to affect the course of the experiment, we also tried to avoid the effect of some extraneous variables in the course of the experiment. Some of these variables and how to control them are presented as follows: Accidents associated with the experiment. There were no accidents during the execution of the experiment. No students left the school or got transported to another one. The sample was chosen intentionally, and the two sets were equalized accordingly. The maturity factor: Since the duration of the experiment was unified between the two research groups, and the age of students in the two groups grow at the same level, this factor did not have an impact on the research. The impact of experimental procedures: the researchers worked to reduce the impact of experimental procedures that can affect the dependent variable during the experiment).

3.5 Preparing the Material

The teaching materials used in conducting the experiment were in English for Iraqi syllabus, and the content that was taught during the second course of the educational year (2017-2018) was set to be from (Unit 5- Unit8). In which the researchers set a number of behavioral objectives to be expected from the test sample. As for the lesson plans, the researcher prepared a total of (30)lesson plans for each sample set based on the fourth preparatory grade book (English for Iraq).

3.6 Instrument

The first question depends on levels three and four of the taxonomies (applying\analyzing). It expects pupils to analyze the statements into parts of speech and, after that distinguishing the parts of speech that these words belong to. We particularly request one of each of the following (Noun, Verb, Adjective, Adverb, Auxiliary). The second question depends on the second level of the taxonomy (comprehension\understanding) in which we request that learners state in a single word the meaning that fits the definition that they are given, it tests their understanding of the meaning of words and relating them to what they have studied. The third question depends on the first and second level (remembering and understanding); we ask them to recall the meaning of the given words, and after that understanding which fit the context of the given sentences. We chose these levels because they fit better with the students' level in the English language. The questions design principles followed the instructions of the teachers' guide and the works of McCarthy and O'Dell (1994). The material used in the pretest questions were taken from unit 5.

Test scoring: the scoring of the test was done by giving one mark to each right answer in the first question and a zero to each wrong answer and giving two marks for each right answer in the following questions and a zero for the wrong answer. The highest score was set to be (40) and the lowest to be (0).

- **Test validity:** the test was validated by jury members of language teaching specialists who gave some recommendations and amendments that the researchers took into consideration and altered the test accordingly. The test was also validated in a pilot study.

2) Pilot study testing

The researchers chose the students of two schools located near the main school on which the experiment was conducted. The two schools were Karbala preparatory school and Otmsn Bin Saeed which each included (50) students . The test items were statistically analyzed and it was found that the item difficulty ranged from (0.76-0.31) by which the test items were considered valid in terms of item difficulty . The item discrimination ranged from (0.82- 0.33), which is also considered as acceptable

3) Conducting the test

The students of both groups were notified a week ahead of the exam. One of the researchers supervised both of the exams personally at the same time.

4. Results and Conclusion

The students of the experimental group who studied according to the Smart Phone Responses were superior to the students of the control group, who studied according to the traditional method in the achievement test; thus, rejecting the first null hypothesis and accepting the alternative null hypothesis: (There is a statistically significant difference at the level of (0.5) and the average score of students in the control group who study according to the traditional method in the English test) . This is consistent with the studies that confirmed the superiority of the experimental group studied according to Smart Phone Responses to those of the control group, which was taught according to the traditional way which is in line with the studies of (Caldwell,2007; Roschelle, et al,2004) .

Table (1) Group Statistics

Group	N	Mean	Std.Deviation	Std. Error Mean
Pretest				
Control	39	14.10	5.04	.713
Experimental	37	14.04	6.401	.905
Posttest				
Control	39	14.32	6.507	.920
Experimental	37	19.98	8.952	1.266

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