

The Effect of the ECOLA Technique on EFL Undergraduate Students' Reading Comprehension Achievement

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Abstract

The study aimed to investigate the effect of applying the ECOLA technique (Extending Concept through Language Activities) on the reading comprehension achievement of EFL undergraduate students. To achieve this aim, the researcher conducted a quasi-experimental study with non-equivalent group design; and a sample with a total of 75 participants was randomly selected from the second-stage Iraqi EFL undergraduate students enrolled in the English Department at the College of Basic Education in, Mustansiriyah University. The sample was divided into an experimental group with 37 students and a control group with 38 students. To attain the data of the study, both groups were subjected to the same pretest; then, the experimental group was exposed to the adopted technique; at the end of the experiment period, the same posttest has been administered to the study sample, and the tests results were calculated and analyzed via the t-test formula for two independent samples. In the light of the obtained results, the findings indicated that the mean scores of the experimental group were higher than those of the control group, which means that the adopted technique had a positive impact on the students' reading comprehension achievement. Furthermore, a number of conclusions, recommendations, and suggestions for further studies were presented.

Keywords: ECOLA technique, reading comprehension, EFL Students.

أثر استخدام تقنية ECOLA على تحصيل الاستيعاب القرائي لدى طلبة اللغة الإنكليزية الجامعيين

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الملخص

هدفت الدراسة الى معرفة اثر استخدام تقنية ECOLA (توسيع المفهوم من خلال الأنشطة اللغوية) على تحصيل الاستيعاب القرائي لدى طلبة اللغة الانكليزية الجامعيين. لتحقيق هذا الهدف، اجرت الباحثة دراسة شبه تجريبية ذات تصميم المجموعتين غير المتكافئتين ، وتم عشوائياً اختيار عينة تضم ما مجموعه ٧٥ مشاركاً من طلاب المرحلة الثانية العراقيين في الدراسة الجامعية الأولية من قسم اللغة الإنجليزية / كلية التربية الأساسية – الجامعة المستنصرية. تم تقسيم العينة الى مجموعة تجريبية تضم ٣٧ طالباً ومجموعة ضابطة تضم ٣٨ طالباً. للحصول على بيانات الدراسة، خضعت كلتا المجموعتين لنفس الاختبار القبلي، تم تعرضت المجموعة التجريبية للتقنية المتبناة، ونهاية فترة التجربة، تم اجراء نفس الاختبار البعدي على عينة الدراسة وتم حساب نتائج الاختبارين وتحليلها باستخدام صيغة الاختبار التائي لعينتين مستقلتين. وفي ضوء النتائج التي تم الحصول عليها، اشارت النتائج الى ان متوسط درجات المجموعة التجريبية كان اعلى من متوسط درجات المجموعة الضابطة، مما يعني ان تقنية ECOLA كان لها تأثير إيجابي على تحصيل الاستيعاب القرائي لدى الطلبة. بالإضافة الى ذلك، تم تقديم عدد من الاستنتاجات، التوصيات، و الاقتراحات لمزيد من الدراسات.

الكلمات المفتاحية: تقنية ECOLA، الاستيعاب القرائي، طلبة اللغة الإنكليزية.

1. Introduction

1.1 Statement of the Problem

Language is a means of communication. Today, English is considered as a global language that persons use for communication around the world. Besides, it is involved in many aspects of our daily life like education, businesses, technology, and others. Due that, English is one of the first foreign languages that are taught officially to students from primary school to college (Van Thao et al., 2020: 30). Duquette (2017: 2) and Pardo & Rodriguez (2008: 94) describe reading as an

essential aspect in language learning, especially for EFL students. It impacts their success since the greatest part of their studying reliant on their ability to read. While reading, students can receive the message beyond the text carried by the media in a form of written language; they attempt to understand, evaluate, attain information, and recognize the author's main idea of a given material.

As a matter of fact, understanding of reading is as important as the process of reading activity itself. Thus, students involve in the reading activities not merely to skim the text without understanding but also to read with comprehension skills to attain a deeper understanding and knowledge from the given text (Silalahi et al., 2022: 1854). Effective reading comprehension (henceforth RC) should be extending beyond the surface-level of understanding to cover all the six cognitive levels of Bloom's Taxonomy, these levels are ordered from the lowest to the highest ones as follows: a) literal level that refers to understanding the text externally within the initial information presented including detecting the main characters, scene, and plot, b) inferential level which means understanding beyond the external one when the students associate the presented information with their previous knowledge, then they have to draw a conclusion, make predications, and interpret the text, and c) critical level that comprises analyzing the text, evaluating the writer's message, and thinking intensely about the text to reflect another points of view (de-la-peña & Luque-Rojas, 2021: 2).

The majority of Iraqi EFL undergraduate students encounter difficulties in developing their RC skills, such as finding the main idea, giving supported details, making inferences, evaluating the writer's message, and judgment; due to a lack of higher-order RC skills, English language proficiency, and effective strategies for RC instruction. Hence, these difficulties hinder the students' ability to comprehend the texts and impact their academic achievement in RC (see Ahmed, 2016; Karam,

2019; Razaq & Ahmed, 2024; and Alabbaichy et al., 2024). Although many studies have explored these issues, solutions remain restricted in the Iraqi educational context.

To handle difficulties that mentioned above and to improve RC achievement, a new instructional reading technique namely Extending Concept through Language Activities (henceforth ECOLA) should be experimented. It has gained attention for its interactive and concept-driven methodology, as it encourage students to engage collaboratively in active learning through a variety of comprehensive language activities aim at enhancing understanding of the text. As mentioned by Simamora (2018: online), “the base core of this technique is that readers can develop their comprehension skills actively engaging with the given text throughout creative writing exercises and group discussions that entail them to consider on the text and reflect critically about its denotation instead of passively reading it.” Many studies have been conducted in international contexts and proved the effectiveness of using the ECOLA technique to enrich students’ RC skills, such as that by (Haerazi & Irawan, 2020; Pratama et al., 2022; Maharani, 2023; and Azisiyah, 2024).

In spite of its pedagogical potential, there is an evident absence of researches exploring the use of the ECOLA technique within Iraqi EFL context specially, university students. To the best of the researcher’s knowledge, no published studies in Iraq have been investigated this reading technique regarding RC skills of EFL undergraduate students yet. Hence, the current study aims to fill this gap in the field of EFL teaching and learning. Accordingly, it seeks to answer the following research question: “Does the application of the ECOLA technique improve the RC achievement of Iraqi EFL undergraduate students?”

1.2 Aim of the study

The objective of the present study is to investigate the effect of applying the ECOLA technique on the RC achievement of Iraqi EFL undergraduate students.

1.3 Hypotheses

To address the objective of the present study, the researcher formulates the study's hypothesis as follows:

The null hypothesis states that there is no statistically significant difference between the mean scores of students taught RC using the ECOLA technique and those taught using the conventional technique.

1.4 Limits

The study is confined to second-stage male and female Iraqi EFL undergraduate students enrolled in the English Department at the College of Basic Education/ Mustansiriyah University, in the second semester of the academic year 2024–2025.

1.5 Value

This study targets to obtain results with a great value for EFL students and instructors along with the scholars since it is hoped to:

- 1– Encourage EFL undergraduate students to enrich their RC skills and to progress the other basic language skills (speaking, listening, and writing).
- 2– Offer effective strategies to build and improve students' ability to work collaboratively.
- 3– Guide EFL instructors to upgrade their teaching of RC with implementation of the ECOLA technique for better undergraduate students' achievement in RC.
- 4– Add an extra insight to scholars concern RC via the ECOLA technique and to be an orientation to other scholars to do further researches about using ELT activities to enhance EFL students learning.

1.6 Definition of Basic Terms

1.6.1 The ECOLA Technique

Tierney & Readence (2005: 154) describe the ECOLA technique as a reading technique, created by Smith–Burke (1982), which based on integration the four basic language skills: listening, speaking, reading, and writing with the aim of achieving RC. It is a strategy used to monitor and analyze the progress of learners' skills in understanding the reading contents (Abidin, 2016 as cited in Setyowati & Susilawati, 2023: 172).

Operationally, the researcher defines the ECOLA technique as a sequence of comprehension activities and principles that are designed for the purpose of assisting EFL undergraduate students to upgrade their levels in RC.

1.6.2 Reading Comprehension

RC can be defined as “an essential skill that helps students to gain information from a variety English language sources that entail reading process. It is described as the ability to identify the meaning and purpose a long with target readers of a written text.” (Lustyantie & Kasan, 2020; and Sirait et al., 2020 as cited in Azisiyah, 2024: 13).

Operationally, the researcher defines RC as the process in which EFL undergraduate readers at the second stage attempt to determine the meaning, obtain, interpret and evaluate information, convey the message beyond the given text, etc. through a specific sequence of language activities.

1.6.3 Achievement

According to Ali et al. (2013: 283), achievement is a measure that indicates the level of students' accomplishment in performing a given skill in a subject after a learning experience. In language learning, achievement indicates how much of the language students have

successfully learned regarding a specific course of studying (Richards et al., 1985: 2).

Operationally, achievement can be mentioned as the scores obtained by the experimental group students in the RC achievement test.

2. Theoretical Background

2.1 The Concept of the ECOLA

The ECOLA technique stands for Extending Concept through Language Activities. The word *Extending* means that learners can extend their RC via the technique. *Concept* shows that the technique is based on an explicit idea aimed at improving RC. *Language Activities* are the reading tasks that learners perform to practise and develop their reading skills. It is an inventive teaching method that requires incorporating language activities for the purpose of RC instruction (Maharani, 2023: 19). As Setyowati & Susilawati (2023: 172) mentions, the based core of this technique is that language activities like group discussions, argument, or storytelling can spread students' knowledge and understanding of the texts they read, thus enhancing their comprehension skills.

This technique, developed by Smith Burke (1982), strives for incorporating the four basic language skills (listening, speaking, reading, and writing) to improve only reading skills in a way that optimizing and the progress of these skills can be interpreted and supervised (Smith, 1991: online). This is similar to what Haerazi & Irawan indicate (2020: 66); this approach involves a discussion process for tracking the results of understanding. Besides it encourages students to talk about effective methods to comprehend the notions. This process aims to reinforce and improve their abilities for collaboration. Teamwork is an intended stage to improve and comprehend reading.

Following the same line of thought, Nurhidayati & Pardimin (2021: 21–22) describe ECOLA technique as one of the most efficient approaches among EFL teachers and instructors for teaching RC. It involves a number of practical language activities that stimulate active text engagement and improve RC skills, such as group discussions in which students can engage in the text discussion, exchange thoughts to deepen their comprehension, improve their critical thinking skills, and extend their perceptions about the text. The other activities are related to creative writing drills in which students are encouraged to appear their understanding using their own words, construe the text innovatively as well as improve their writing skill. As a result they can engage intensively with the contents and meaning of the given text.

2.2 Stages of Implementation

According to Tierney & Readence (2005: 154), the ECOLA learning framework focuses on the learning experiences that mentioned below:

- a) Read for a definite purpose: The target beyond reading the text should be concluded by the students themselves. Nevertheless, this purpose is constructed in accordance to the author's intent and the reason behind the educator's choice of the given text.
- b) Write responses: Students are anticipated to perform their own interpretations that are conveyed in the writing exercises. Subsequently, these interpretations can be revised after the discussion.
- c) Discussion activities: Discussion is considered as the base source for creating thoughts, investigating objectives, evaluating concepts, and exploring the efficiency of the strategies used while reading.
- d) Self-monitoring: Students are stimulated to express their misunderstanding, to interpret individually, as well as to involve in groups of discussions about strategies for comprehension the reading texts.

Many researchers summarize the core phases for teaching RC using the ECOLA technique, (Zuchdi, 2018), (SULKIFIL, 2013), (Haerazi & Irawan, 2020), (Maharani, 2023), and (Azisiyah, 2024) describe these stages clearly as follows:

Stage 1: Identifying the communicative objectives for reading

During this stage, the teacher has to encourage students to form small discussion groups to specify the objective behind reading the text. While the students are trying to determine this purpose, the author's intention and the reason behind delivering them with this text have to be taken into their consideration. By identifying the purpose of reading at this stage, students can recognize what the author is trying to convey (Maharani, 2023: 22).

Stage 2: Reading silently

Specifying the reasons of reading and reminding students of them direct students in this stage to be aware of their needs to what ideas have to be supported and interpreted while reading based upon their reasons or knowledge background. Additionally, it is worth to read silently in the class because this procedure can improve students' ability to read independently (Zuchdi, 2018: 162).

Stage 3: Writing activities to realize understanding

The teacher helps students to write questions about what they find confusing in the text. This phase aims to motivate students to raise questions about what they can't comprehend as well as to ask each other about theirs. At the end of this stage students have to write responses to all these questions as well as to those related the purpose of reading (Haerazi & Irawan, 2020: 66).

Stage 4: Discussion

The teacher divides students into groups of four members at maximum, and gives them a limited time and instructions for discussion. They are encouraged to discuss their responses, compare their

answers, evaluate their interpretations, clarify how they arrived at their results, and revise their conclusions. This phase also encourage students to work collaboratively and enrich their comprehension (Azisiyah, 2024: 10).

Stage 5: Writing and comparing

The final stage is to arise with other interpretations in groups or individually. If it is carried out in groups, the consensus should be augmented by discussion and contract. After that, the concluded interpretations have to be revised (SULKIFII, 2013: 7).

By such means of languages activities (discussions and writing), students can engage with the text all the time to achieve better understanding the text and to link between the given text and their own experiences. Additionally, through practicing discussion, they can construct their ability to work collaboratively in teams or groups. The established teamwork is an intentional pace to accomplish a progressive reading with comprehension (Nurhidayati & Pardimin, 2021: 22–23).

2.3 Steps for Application

The implementation of the ECOLA technique can be carried out through a set of steps, in which the roles of both the teacher and students are clearly described as follows:

- 1– Through questioning about the reading text, the teacher sheds light on the learning objectives of the presented lecture and directs students to determine the purpose of reading the given text.
- 2– After detecting the aim of reading, students start reading the text silently to look for the main idea, support details based upon their prior knowledge, and identify what they can't understand. Also they can use the dictionary if it is necessary.
- 3– While students read independently, the teacher reminds them about their desired goals and gives clues to those who have questions. The teacher has to monitor this activity to ensure its efficiency.

4– Subsequently, students engage in the writing activities to state their responses related to the purpose of reading as well as the issues that hinder their comprehension. Meanwhile, the teacher encourages them to share these issues with their classmates and to write interpretations to all the shared issues.

5– Before discussion, the teacher assigns students into groups of three or four members at maximum, and provides them with the discussion rules.

6– The groups discuss their answers about the reading purpose and the main idea; along with their interpretations of the issues they failed to understand while reading. While discussion, students can revise their conclusions written individually.

7– The teacher invites students to talk over their concluded interpretations. Then, they present, compare, evaluate, and revise their results after the discussing activity.

8– Finally, the teacher evaluates the students' results and gives them the suitable feedback. (Azisiyah, 2024: 9–11, and SULKIFII, 2013:9–10)

2.4 Benefits and Limitations

The ECOLA technique offers a number of benefits that enhance the teaching and learning experience. These benefits are highlighted as follows:

1– It helps students to build deeper understanding of reading texts as well as to upgrade their comprehension levels from remembering to creating.

2– It is consistent with the recent educational philosophy that emphasizes critical thinking and creativity, and supports learner-centered instruction.

3– It is considered as a flexible teaching technique for RC as it can be integrated with traditional approaches as well as modern ones.

4– It contributes to improve students’ language skills along with their RC.

5– It encourages students to build their ability to work collaboratively in teams or groups through discussions which makes the learning atmosphere more dynamic and enjoyable.

6– It allows both the teacher and the students to monitor learning; while the teacher tracks students’ progress, the students check their understanding.

7– It functions not merely as an innovative educational reading technique, but also as an integrated constructivist and interactive frameworks. (Andriani & Marlina, 2020: 8; Puspitasari, 2021: 43)

Despite its positive impact on EFL students’ performance in RC, ECOLA technique has a few challenges, such as time consuming for both preparing and classroom implementation, especially in designing languages activities. Besides, some students face difficulty to engage actively in collaborative discussions activities due to their limited vocabularies and a lack of their confidence when speaking English. Furthermore, the efficiency of using this technique is highly reliant on the teacher’s role to be an assistant and a monitor group dynamics. Thus, the teacher can be hindered to implement it in large classrooms (Putri & Suhartono, 2022: 39).

2.5 Related Previous Studies

2.5.1 Haerazi & Irawan (2020)

This study investigated the effect of utilizing ECOLA technique to enhance RC among EFL students at the English Department of Mataram University regarding their motivation and self-efficacy. It study was a quasi-experimental study with a non-equivalent group. The participants were two sections that are randomly selected and assigned as (an experimental group was taught using the adopted technique) and (a control group was taught using brainstorming technique) with a total

of 29 students. To attain the data, the researchers administered pretest–posttest and employed motivation and self–efficacy questionnaires to the assigned sample. Afterwards, the data were analyzed using Two Ways ANOVA and the findings indicated that the adopted technique was very effective than the brainstorming technique in RC instruction, and the increase implied that there was a significant difference in the achievement of students exposed to the adopted technique viewed from motivation, and self–efficacy; in motivation addition, there was a significant interaction between the technique and self–efficacy towards students’ RC, whereas there was no significant interaction between the technique and motivation.

2.5.2 Maharani (2023)

Maharani conducted his study with the aim of investigating the impact of using the ECOLA technique on enhancing RC among tenth–grade students at SMKN 2 Palopo, as well as to explore their perceptions its use for RC instruction. The researcher adopted a mixed–methods approach (that combines a RC test and an interview) and randomly selected 28 students from SMKN 2 Palopo in Indonesia to participate in a pre–experimental research using a one–group pretest and posttest design. Quantitative data were analyzed using the T– test formula, and the qualitative data were examined thematically. The findings demonstrated a substantial improvement in the scores of students in the posttest (36.96) compared to their scores in the pretest (23.39). Although three students found the technique difficult and boring, the majority (25 students) reported that the ECOLA technique positively contributed to improving their RC.

2.5.3 Azisiyah (2024)

Azisiyah (2024) conducted his research entitled “Using Extending Concept through Learning Activity (ECOLA) Technique to Improve Students’ Reading Comprehension” to investigate whether using the

ECOLA technique could significantly improve RC at the literal level among tenth-grade EFL students at a senior high school in Indonesia. For this purpose, the researcher applied a pre-experimental design using Quantitative approach. A sample with a total of 17 students from MA Al-Hidayah Lemoa participated in this study, and was subjected to both the pretest and posttest, from the type of multiple choice items, to collect the study data. The results were analyzed by means of a paired sample t-test using SPSS program, and indicated that after exposing the students to the treatment, there was a considerable enhancement in the students' comprehension at the literal level; thereby it proved the effectiveness of the ECOLA technique.

3. Research Method

3.1 Study Design

To accomplish the objective of the study, a quasi-experimental study with (pretest-posttest) non-equivalent group design has been conducted. According to the based core of this experimental design, the selected groups have to be given different treatments (Kothari, 2004: 33). The researcher organized the same pretest in both the experimental and control groups and the result was statistically calculated and analyzed. Then, the experimental group was treated using the ECOLA technique in RC instruction; meanwhile, the control one was taught RC using the traditional technique. At the end of the experiment, both groups were exposed to the same posttest to discover the students' achievement in RC after the different treatments were provided (see Table 1).

Table (1) The Study Design

Groups	Independent Variable	Test
Experimental group	The ECOLA Technique	Post-test
Control group	Conventional Technique	Post-test

3.2 Population and Sample

The population of this study comprises the whole second-stage Iraqi EFL undergraduate students enrolled in the English Department at the College of Basic Education/ Mustansiriyah University, during the second semester of the academic year 2024–2025. It consisted of four sections (A, B, C, and D) with the total number of (150 students). The sample involved two sections (A and B) that are selected randomly, with the total number of (75 students). The selected sections are assigned into two groups: Section A as an experimental group with 37 students and Section B as a control group with 38 students.

Table (2) The Sample

Group	Section	Subjects No.
Experimental group	A	37
Control group	B	38
Total		75

3.3. Experiment Application

The experiment began on February 3rd, 2025 and continued for ten weeks to end on April 14th, 2025. Both groups were taught by the researcher herself with an average of two lectures per week. They have been taught the same instructional material from Passage 14 *A Noble Gangster* to Passage 20 *Pioneer Pilots* that are selected from the students' textbook, "*Developing Skills*" by Alexander, in the course of comprehension. These passages are of narrative, descriptive, or Persuasive text types to enable students improve a variety of RC skills.

The experimental group was taught based on the concept of the adopted technique (ECOLA). The procedures followed to implement this technique include the following:

- 1– Introducing the group with the new technique (ECOLA) and explaining the procedures of its application in the learning process.
- 2– Warming up the students before presenting the passage.

- 3- Determining the learning objectives along with the purpose for reading the given text.
- 4- Giving the reading passage to the students to be read silently.
- 5- Reminding them to identify the purpose for reading and providing assistance while reading.
- 6- Asking the students to write what they comprehended from the passage as well as what they couldn't understand, and to share what they found confused with their classmates.
- 7- Dividing them into groups of 3 or 4 members at maximum.
- 8- Conducting discussion groups about their questions and responses. While discussion, they can revise their responses.
- 9- Presenting, comparing, and revise the students responses after the discussion.
- 10- Evaluating the students' responses by the researcher, giving an appropriate feedback, suggestions or conclusions.

Meanwhile, the control group was taught using the traditional technique typically employed for RC instruction. After warming up, the researcher read the passage loudly in a normal speed, and asked the students to read it silently. Then, the researcher, explained the content of the passage in detail throughout translating difficult vocabularies, giving synonyms, clarifying the main ideas, and asking comprehension questions to be answered by the students. Finally, a little emphasis is given to critical thinking through discussion.

3.4 Research Instruments

In this study, the researcher utilized the RC test as an instrument to obtain the outcomes regarding the students' achievement in RC of the texts. This test consisted of 30 items, it involved 25 items conveyed in the form of multiple choice items (MCQ), and the other 5 were formulated in the essay form. The same RC test was delivered as both a pretest and a posttest to the assigned sample to confirm consistent

measurement of students' performance before and after the treatment. To validate the test, it was exposed to expert members in the field of TEFL, while its reliability was estimated using the Alpha-Cronbach Formula which yielded a reliability coefficient of 0.84 which is considered acceptable.

The pretest was administered on the 3rd of February 2025 in order to determine the students' preliminary knowledge in RC before the treatment. While the posttest was conducted on the 14th of April 2025 to identify the enhancement of students' RC after the treatment was implemented.

The results of both tests were calculated and analyzed to examine the study's hypothesis via the t-test formula.

4. The Results and Discussions

To achieve the objective of this study at investigating the effect of applying the ECOLA technique on the RC achievement of Iraqi EFL students at undergraduate level, and to examine its null hypothesis, the researcher conducted his experiment and collected the data by using the RC pretest-posttest to identify the students' comprehension in both groups before and after the treatment. Then, the statistical procedures were applied to test the study's hypothesis.

Subsequently, a comparison was made between the average scores that were obtained by the experimental and control groups in both the pretest and posttest through conducting the t-test formula for two independent samples (see Tables 3 and 4).

Table (3) T-test Results for the Study Sample in the Pretest

Group	N	Mean	SD	DF	t-value		Level of significance
					Computed	Table	
Experimental	37	29.501	5.25	73	1.21	1.99	0.05
Control	38	28.027	5.40				

Table (4) T-test Results for the Study Sample in the Posttest

Group	N	Mean	SD	DF	t-value		Level of significance
					Computed	Table	
Experimental	37	37.362	5.35	73	4.29	1.99	0.05
Control	38	32.056	5.50				

In the pretest, the students in the experimental group obtained a mean score of (29.501) which was a little advanced compared to that of the students in the control group (28.027), with a computed t-value of (1.21) which less than the tabulated one with (1.99) at the 0.05 significance level and (73) degrees of freedom. This indicates that there is no statistically significant difference between the achievements of the two groups before the treatment.

In the post test, the mean score of the students who treated via the ECOLA technique was (37.362), whereas that of students who are treated using the traditional one was (32.056). The t-test analysis yielded a t-value of (4.29) which is significantly higher than the tabulated t-value of (1.99) at the 0.05 level of significance and (73) degrees of freedom. This result evidences that there is a statistically significant difference between the two groups in favor of the experimental group.

Accordingly, the study results lead to rejection of the null hypothesis and acceptance of the alternative one.

In the light of the statistical analysis that mentioned above, the results report that the adopted technique (ECOLA) had a positive effect on students' RC. Furthermore, the implementation of this technique contributed to enrich RC and enhanced the higher levels of understanding in the experimental group. Hence, they align with those of previously reviewed studies, reflecting a convergence of evidence regarding the effectiveness of using the ECOLA technique in teaching and learning RC among EFL students.

5. Conclusions, Recommendations, and Suggestions

5.1 Conclusions

Based on the obtained results, the following conclusions have been put forward:

The ECOLA technique has been proven effective as a reading strategy in language teaching contexts, as it offers opportunities for active interaction, collaborative knowledge building, and connecting texts to students' real-life experiences. This finding indicates that the principal objective of this study, which is "to investigate the effect of applying the ECOLA technique on the RC achievement of Iraqi EFL undergraduate students", has been successfully achieved.

The results also contribute to answer the main question of the study, as it proved that the adopted technique (ECOLA) is more effective in teaching RC than the conventional one. This result indicates that the use of integrated language activities to extend concepts significantly contributes to improving students' levels of RC. Hence, this technique is considered not just as an educational tool, but also as an integrated framework that contributes to develop the students' ability to think critically, and to analyze and interpret information.

It should be noted that the study was conducted in the higher education context and focused on a specific sample of the second-stage Iraqi EFL undergraduate students enrolled in the English Department at the College of Basic Education/ Mustansiriyah University, which limits the generalization of the results to broader populations. However, it provides a strong basis from which future studies aim at generalization the technique to other language levels and skills can be launched.

5.2 Recommendations

Regarding the results of the study, some recommendations are addressed to both EFL instructors and students below:

1– There is a necessity for instructors to adopt the ECOLA technique in their teaching contexts due to its effectiveness in improving students' achievement in RC. It also encourages students to be more motivated to learn and actively involved in questioning and expressing their viewpoints.

2– Students should learn and improve their RC skills through self-motivation and adequate readiness. Also, they have to actively engage in language classroom activities and share their knowledge with peers of lower English proficiency. In addition, consistent practice of all language skills is required to get the benefits of using the ECOLA technique in developing their basic language skills simultaneously.

5.3 Suggestions

Considering the findings of this study, the following studies are put forward:

1– A similar study can be carried out using different samples at intermediate or secondary grades.

2– A survey study can be conducted to investigate the attitudes of EFL teachers and learners towards using the ECOLA technique for teaching RC along with the challenges they face.

3– An experimental study can be conducted to evaluate the impact of using blended ECOLA model on improving RC among Iraqi EFL students.

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