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The Impact of Active Learning Strategies on Developing EFL College Students' Self-efficacy and Academic Achievement

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Abstract

The goal of this study was to see how active learning practices affected self-efficacy and academic accomplishment. Total of (59) male and female students from Imam AlKadhum University College's English department were chosen from the third year, (29) male and female students for the experimental group and (30) male and female students for the control group. To achieve the aims of the study, a scale of self-efficacy and an achievement test in the educational guidance material were used. Appropriate approaches were used to verify the scale's validity and reliability. The study's findings found that there were statistically significant differences in self-efficacy and academic accomplishment between the two groups of students, favoring the experimental group. The study's findings suggest that active learning methodologies should be used in a variety of subjects and at various academic levels.

Keywords: Active Learning, Strategies, EFL College Students , Self-efficacy, Academic Achievement

المستخلص

أثير استراتيجيات التعلم النشط في تطوير الكفاءة الذاتية والإنجاز الأكاديمي لطلاب كلية اللغة الإنجليزية كلغة أجنبية

كـان الهـدف مـن هـذه الدراسـة هـو معرفـة كيفيـة تـأثير ممارسات التعلم النشط على الكفاءة الذاتيـة والتحصيل الأكـاديمي. تـم اختيـار (59) طالبـاً وطالبـة مـن السـنة الثالثـة مـن قسـم اللغـة الإنجليزيـة بكليـة الإمـام الكـاظم الجامعيـة وبواقـع (29) طالـب وطالبـة للمجموعـة التجريبية و (30) طالب وطالبة للمجموعة الضابطة . ولتحقيـق أهـداف الدراسـة تـم اسـتخدام مقيـاس الكفاءة الذاتية واختبار التحصيل في مـادة الإرشـاد التربـوي. تـم استخدام الأساليب المناسبة للتحقق مـن صـحة وموثوقيـة الميزان. توصلت نتائج الدراسة إلى وجود فروق ذات

دلالـة إحصـائية فـي الكفـاءة الذاتيـة والإنجـاز الأكـاديمي بـين مجمـوعتي الطـلاب لصـالح المجموعـة التجريبيـة. تشـير نتـائج الدراسـة إلـى أنـه يجـب اسـتخدام منهجيـات الـتعلم النشـط فـي مجموعـة متنوعـة مـن الموضـوعات وعلى مختلف المستويات الأكاديمية.

الكلمات المفتاحية: التعلم النشط ، استراتيجيات، طلبة الكليـة دارسـي اللغـة كلغـة الانكليزيـة، الكفـاءة الذاتيـة ، التحصيل الدراسي

1. Introduction

Self-organized learning constitutes a new and important direction in the study of students' academic achievement, as it was previously viewed through its relationship to ability, quality of teaching or family environment. On the contrary, the theory of self-organized learning focuses its attention on answering the following question: How can the learner pay attention and carry out learning practices in specific situations? According to this approach, students with high mental capacity do not achieve optimally because of their failure to use or control each of the learning processes. Cognitive, emotional, or behavioral. Hence, theories of self-organized learning focus on her interest in questions such as: why and how learners discipline their learning (Purdie, et al, 1996).

Furthermore, self-organized learning theories argue that there is no environment that ensures learning, because optimal learning environments necessitate modifications in the selection and building of learning scenarios (Zimmerman, 2002).

There is no doubt that there has been a noticeable shift in studies related to learning and education in the last quarter of the twentieth century, after psychologists and educators focused on the principles of behavioral theory in their interpretation of the learning and teaching processes, they began to focus on the principles of cognitive theories at the beginning of the seventies, where the behavioral theory views the learning process as measurable observation responses. The information presented, as well as its awareness, absorption, memory, and application in similar situations (Darwaza, 2004).

Due to this change in the interpretation of the learning process, the concept of the education process has changed on the one hand, and the role of both the teacher and the learner on the other hand. After the education process focused on how to organize the stimuli of the external educational environment in a way that

gradually leads the learner to the required responses, and then supported them through immediate and intermittent reinforcement, this process became concerned with creating educational situations and presenting them to the learner in the form of problems that require him to think about these situations and use Its cognitive processes in processing, coordinating, organizing, and categorizing the information it contains into meaningful cognitive patterns that lead to a solution the problem (Watson,2008).

As for the role of the learner in the educational learning process, after he was expected to make individual, fragmented, noticeable and measurable responses as a sign of learning.

Teachers not only assist students retain information about the subject by encouraging them to participate in activities that lead to conversation by asking questions and explanations regarding the substance of the course, but they also help them enhance their thinking powers (Myers and Jones, 1993). Another reason for the importance of active learning is that active participation improves active learning by requiring students to exert mental effort while also

providing them with resources, capabilities, and tools. It aids in the practical application of valuable and successful learning while also influencing their views. (Harasim, et al. 1997).

Students learn through being engaged in the content, according to Edwards (2015). Students recall knowledge more effectively when they are immersed in learning activities that demand them to be academically, socially, and physically engaged. Active learning is more likely to result in meaningful learning that will benefit pupils for the rest of their life.

Active learning, according to Bell and Kahrhoff (2006), is a process in which students actively participate in the development of skills, concepts, and facts through various tasks and activities supervised by the instructor. It can be any activity that engages pupils in the learning process.

In light of the massive information explosion that we are witnessing these days, developing a learning method that encourages students to take responsibility in dealing with this limitless amount of knowledge is required, which can only be accomplished through active learning that emphasizes the principle of learning by doing and encouraging deep learning that

helps the student better understand the educational material and is expected to be able to explain or clarify it in his or her own words.

Some proponents of active learning add additional benefit: the numerous tasks that this form of learning relies on diminish negative learning practices like passive listening, taking and taking notes throughout the class period, hence increasing students' motivation to learn and absorption in it (Carroll and Leander, 2001).

If active learning is necessary and important for the student, it is also necessary and important for the teacher, who assists him in selecting outcomes and questions of varying levels of difficulty in order to account for individual differences among students and provide timely help, advice, and guidance. Both the student and the teacher benefit from active learning since it allows them to relax and enjoy their work and thinking while avoiding boredom and routine in their everyday activities (Shenker, et al. 1996).

Active learning is also seen as the process of engaging students actively and directly in the learning process, especially in terms of reading, writing, thinking and reflection (Felder and Brent, 1997).

Also, Paulson and Faust (2006) define it as any activity in which a learner in a classroom does not passively listen to what the teacher says in a lecture, but rather engages in positive listening to help them understand what they hear, write the most important ideas contained in the sayings, opinions or explanations, comment or comment on them, and deal with group exercises and activities in a manner in which it is applied and learned in various life situations.

Saadeh, et al. (2011) indicate that active learning is characterized by a set of the most important characteristics are its focus on the responsibility of the student and his initiatives in learning and acquiring skills.

According to Gibran (2002), active learning focuses on the learner's positivity and engagement, and he has become the educational process's focal point. The learner's position in an active educational scenario can be defined as follows:

1- The student in the active educational situation enjoys positivity and effectiveness

2- The student is involved in planning and implementing the lessons

3- The student searches for information on his own from multiple sources

4- Participates in self-evaluation and determines the extent of his goals

5- Pupils practice a variety of educational activities

6- The student participates with his colleagues in group cooperation

7- The student initiates asking questions, commenting on what is being said, or presenting new ideas or opinions

8- He can discuss and manage dialogue

1.1 The Problem of the Study

In view of what the educational and psychological literature in the subject of active learning reveals, it is critical to train students in active learning and the application of its strategies through specially designed programs or training embedded in the curriculum. The study problem was discovered in the investigation of the impact of active learning techniques on increasing the self-efficacy of students at Imam AlKadhum university college and their academic accomplishment because of the relevance of teaching students on active learning strategies.

The current study attempted to answer the following two questions:

1. What is the effect of the active learning strategy on developing self-efficacy among students?

2. What is the impact of the active learning strategy on developing the academic achievement of the students?

The previous two questions yielded two null hypotheses:

1. In the post-test, there are no significant differences in the average performance of the experimental group that was exposed to the active learning technique and the average performance of the control group on the self-efficacy scale.

2. There are no significant differences in the academic achievement in the educational counseling subject between the average performance of the experimental group exposed to the active learning strategy and the average performance of the control group in the post-test.

2.2 The Importance of the Study

The significance of the current study stems from the nature of the topic it seeks, as the search for an effective method of teaching continues to occupy researchers, as the teaching method is the main pillar on which the educational process depends for its success, as long as the method is appropriate for the

educational situation. The targeted educational goals are met, which has an impact on the resolution of challenges connected to curriculum implementation and student achievement,

and in solving other problems that may get in the way of the teacher.

The significance of this research stems from several theoretical and practical justifications, as recent trends emphasize the learner's active role in the educational process, rather than a future, passive recipient, consuming knowledge, and waiting for the stimulus to respond, but rather an initiator, planner, and performer.

2.3   Procedural definitions

Active learning: a method of learning and a method of teaching at the same time, in which students participate in the activities, exercises and projects observed during the teaching of the educational guidance course, through a rich and diverse educational environment that allows them to listen positively, constructive dialogue, rich discussion, and sound analysis of everything that is done Reading, writing, or presenting opinions, issues and topics to one another, while encouraging their teacher to take responsibility for their own education under his strict supervision, and push

them to achieve the ambitious goals of the subject.

course, which focuses on building the integrated personality of the learner.

Self-efficacy: It is defined as the degree that the learner obtains on the academic self-efficacy scale used in this study (Bandura, 1997).

Academic achievement: Academic achievement is the result of a student's ability to retrieve, understand, and apply what he has learned after a period of study, as measured by the student's score on a multiple-choice achievement test prepared by the research team, which measures the expected outcomes to be achieved in the educational counseling course.

2. Methodology

2.1 The sample of the study

The participants were 30 students (59 males and females). Calculating the stability coefficient was the use of the Couder Richard Son-20 equation (20-KR). The internal consistency coefficient was 0.89, which is high and acceptable for the purposes of the current study. Finding and distinguishing the difficulty coefficients of the test items. The coefficients of difficulty ranged between

(0.32 and 0.78), except for one paragraph that was classified as difficult, whose difficulty factor was 0.21, and another that was classified as easy, whose difficulty factor was 0.87, and the discrimination coefficients ranged between (0.16-0.68).

2.2 The Procedures

The study subjects were selected from the students of the University College of Imam Al-Kadhum in the academic year 2021/2022.

There were (59) students in the study, divided into two divisions to reflect the two study groups. In the first exam for Teaching Method for the second semester of the academic year 2021 / 2022, which was held at the end of the first month, the arithmetic mean of the scores of each division was used. These arithmetic averages are shown in Table 1.

Table (1)

Distribution of study members according to people, number of students, arithmetic averages, and standard deviations of students' scores in the first exam in Teaching Methods

Section	N.	M.	S.D
A	29	15.14	2.36
B	30	15.97	1.73

A t-test for independent samples (Table 2) was used to compare these participants and confirm that their averages were equal. The apparent discrepancy between these averages did not reveal any statistical significance.

Table (2)

The results of the T-test to indicate the differences on the averages of the two study groups on the first exam in Teaching Methods

Group	N	T-test	Indication level
Experimental Control	29 30	1.54 -	0.131

After applying the pre-exam and the self-efficacy scale to the two groups, the control group was taught using the lecture method, while the experimental group was taught using the question-asking method, brainstorming, field visits, and projects method of active learning strategies, which is the strategy adopted by this study. A description of the teaching and learning method, as well as instructions

directions and discussion questions.

When writing educational material for this strategy, attention was taken to

reorganize each subject's educational content in accordance with the active learning strategy, to determine the previous requirements necessary for new learning as they are presented, to provide feedback to students as needed, and to guide them during the presentation of the use of material from the Teaching Methods book in various missions. After the trial was completed, the control and experimental groups were given a post-test and a self-efficacy scale.

2.3 Instruments

1. The self-efficacy scale: This study used the self-efficacy scale developed by Ghanem (2007) in a doctoral thesis, and it consists of (30) paragraphs distributed on a five-like Likert scale (highly applicable, moderately applicable, hesitant, not applicable to a large extent, not absolutely applicable), and each of these categories is given the following scores in order (5, 4, 3, 2, 1), and the items in this scale measure two dimensions: general self-efficacy and self-efficacy

Indicators of validity were extracted using two methods: apparent honesty (arbitrators), and discriminatory honesty. Indicators of the scale's stability were also extracted using two methods: stability by repetition, where the stability

coefficient was (0.85), and stability by internal consistency, as the total reliability coefficient was (0.82 For further scrutiny, the scale was applied in the current study by the research team on a survey sample of second-year students in the college outside the study sample. The number of its members was (20) students, and the stability coefficient was found by the method of internal consistency, and the Cronbach coefficient reached Alpha (0.86), which is an appropriate value for the current study.

In order to ensure that the two groups of the study were equal on the self-efficacy scale, the scale was applied before the study was carried out to the two groups, and the arithmetic means, standard deviations and results of the t-test were extracted to indicate the differences between the means on the scale, and Table (3) shows these results.

Table (3)

The results of the (t) test to indicate the differences on the averages of the two study groups on a scale self-efficacy

Group	N.	M	S.D	T-test	Indication level
Experime	2	73.	33.	1.1	0.261

ntal	9	69	78	4	
Control	3	66.	11.		
	0	10	95		

Table No. (3) Shows that there are no statistically significant differences at the level of significance. ($\alpha \geq 0.05$) on the tribal scale of self-efficacy, which means that the two groups are equivalent.

2. Academic Achievement Scale

Following the experience, an achievement test was utilized in the subject of educational counseling to assess the impact of techniques on academic accomplishment at the first three levels of Bloom's classification (knowledge, understanding, and application). The twenty paragraphs were distributed as follows: six paragraphs at the level of knowledge and remembering, ten paragraphs at the level of understanding and comprehension, and four paragraphs at the level of application.

The steps that were followed in building this test are as follows:

1- Determining the objectives included in the teaching plans, analyzing the content and preparing a table of specifications based on determining the relative weight of the objectives and content.

2- Drafting 20 paragraphs to form the test in its initial form.

3- Presenting the test in its initial form with its twenty paragraphs and the specification table

It was presented to the panel of arbitrators and asked them to arbitrate the test paragraphs in terms of safety.

Paragraphs from a scientific and linguistic point of view show the extent to which each paragraph is related to the level of its intended goal, to make any other observations they deem appropriate, and discussing their observations and suggestions. Considering this, the tests paragraphs were formulated in their final form, and thus were completed validate the content for this test.

4- Calculation of the test stability coefficient by applying the test to an exploratory sample of a

2.4 Study Design

Since this study is quasi-experimental, it attempts to study the effect of active learning on the development of self-efficacy and academic achievement, the study variables can be classified as follows: 1. The independent variable: It represents the teaching strategy and has

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two levels: a) active learning. b) regular teaching.

2. Dependent variables: There are two dependent variables in the study:

a) self-efficacy

b) academic achievement

Table (4) shows the quasi-experimental design of the study and represents a pre-post design

for unequal groups.

Table 4

The quasi-experimental design adopted in the study

Experimental group	self-efficacy scale	Active learning	self-efficacy scale	Academic achievement scale
Control group		Traditional Learning		

Results and Discussion

First hypothesis: There are no significant differences on the self-efficacy scale between the average performance of the experimental group exposed to the active learning strategy and the average performance of the control group in the post-test. To test the hypothesis of the study, the arithmetic means and standard deviations of the scores of the students of

the two groups were extracted in the post application of the self-efficacy scale, then the results of the t-test for independent samples were extracted, to reveal the significance of the differences between the means. Table (5) shows these results.

Table (5)

Arithmetic averages and standard deviations of the scores of the students of the two groups in the post application on the self-efficacy scale and the results of the t-test to indicate the differences between the means

Group	N.	M.	S.D	T-test	Indication level
Experimental	29	108.55	14.33	3.45*	0.001
Control	30	90.73	23.99		

* Statistically significant at the level ($\alpha \geq$ 0.05)

Table (5) The presence of statistically significant differences at the level of significance

($\alpha \geq 0.05$) on the dimensional self-efficacy scale, and by referring to the arithmetic

averages, we can see that these differences favor the experimental group, thus we reject the null hypothesis and accept the alternative hypothesis, which states that active learning practices positively enhance students' self-efficacy development. On the one hand, active learning tactics have increased students' confidence in themselves and their skills; on the other hand, active learning strategies have decreased students' confidence in themselves and their abilities., and increased confidence between them and the subject teacher on the other, and they can choose and work independently, as well as reflect on their practice, thinking, and expression of their experiences. They grew more interested in carrying out the tasks and assignments that had been assigned to them, and they put in more effort and time to complete them. They appeared to be actively engaged in their work, and they seemed to enjoy and value their learning achievement.

The second hypothesis: There are no significant differences in academic achievement in the educational counseling material between the average performance of the experimental group

exposed to the active learning strategy and the average performance of the control group in the post-test.

The arithmetic averages and standard deviations of the scores of the students in the two groups were extracted from the post-achievement test in the educational counseling material to test the study's hypothesis, and then the results of the T-test were extracted to reveal the significance of the differences between the means. These results are shown in the table.

Table (6)

Arithmetic averages and standard deviations of the scores of the students of the two groups in the application

 The post test on the achievement test and the results of the t-test to indicate the differences between the means

Group	N.	M.	S.D	T-test	Indication level
Experimental	29	18.17	1.44	6.04*	0.001
Control	30	14.97	2.51		

* Statistically significant at the level ($\alpha \geq$ 0.05)

Table No. (6) The disparities between the experimental and control groups on the post-achievement test in the educational counseling course are shown, and it is noticed that these differences benefit the experimental group using arithmetic averages. As a result, we reject the null hypothesis and accept the alternative hypothesis, which states that active learning practices improve students' academic attainment.

This is due to the fact that the students in the experimental group who participated in active learning were active participants in the teaching-learning process, and they had the opportunity to develop positive attitudes toward learning and encourage them to explore their attitudes and values, as well as develop their internal motivation to motivate them to learn, and facilitate their learning by going through practical experiences related to it in their lives, raising their attention, raising their classroom interaction, and increasing higher-order thinking skills of the participants. All of which lead to raise in students' achievement of what they learn; especially since the individuals studied are university students who take responsibility for their learning, realize their goals, and effectively participate in the lecture.

3. Recommendations

Several ideas can be made in light of the findings of this study, which are summarized as follows:

- Encouraging instructors at all levels of education to embrace active learning practices because of their favorable outcomes.

Teachers should be able to apply active learning practices in a helpful and encouraging setting.

- Conducting additional research and studies to examine the impact of active learning practices at various academic levels, including school and university.

- Conducting additional research and studies to check the effects of active learning tactics on other teaching-learning characteristics such as motivation to learn and attitudes toward learning.

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