

## The Effectiveness of an Educational-Learning Program Based on the Theory of Situational Learning in the Achievement of Environmental Education among Students in Colleges of Education

Asaad Musa Hashem<sup>1</sup>, Dr. Ismail Hassan Abdullah<sup>2</sup>

### Abstract

*The current research aims to:*

*1- Building an educational-learning program in the subject of environmental education based on the theory of situational learning for students in colleges of education.*

*2- Detecting the effectiveness of the educational-learning program in achieving the environmental education subject among first-stage students, College of Education for Human Sciences - Wasit University.*

*Out of the following goal emerged the following:*

*There are no statistically significant differences at the level of (0.05) between the average scores of the experimental group that studied the environmental education subject according to the educational-learning program and the average scores of the control group that studied the same subject according to the prescribed vocabulary (Deans' Committee) using the usual method in the test of Post-achievement.*

*To achieve the research goal*

*The researcher used an experimental design with partial control (designing the experimental and control groups with a pre-test "for the purposes of equivalence" and a post-test), which controls each other. The number of the research sample was (60) male and female students from the College of Education, University of Wasit - Department of Educational and Psychological Sciences. The researcher chose the research sample in a purposive manner, as the number of students in the experimental group reached (30) male and female students, who studied the educational material according to the existing educational program according to the theory of situational learning. The number of students in the control group was (30) male and female students, who studied the educational material according to the usual method. The researcher conducted equality in the following variables (chronological age calculated in months, gender, intelligence, general average).*

*For the purpose of achieving the research objective and testing its hypothesis, the researcher prepared an educational and learning program based on the theory of situational learning, which included educational objectives, various teaching strategies, accompanying activities, educational means, and multiple evaluation methods. To reach the results of the current research, the researcher prepared the research tool, which was the achievement test, which consists of (40) items, including (30) four-alternative multiple-choice items, and (10) essay-type, fixed-answer items, and it was presented to the experts and specialized arbitrators. .*

*The researcher studied the two research groups himself, in order to avoid making mistakes or differences in the professor's abilities. Before starting the experiment, both groups were rewarded. The researcher adopted two approaches, represented by the*

---

<sup>1</sup> Psychological Educational Sciences Department, Ibn Rushd College of Education, University of Baghdad, Iraq, Commousaasad131@gmail.com

<sup>2</sup> Psychological Educational Sciences Department, Ibn Rushd College of Education, University of Baghdad, Iraq

*descriptive approach, to build the educational-learning program for teaching the environmental education subject according to the sectoral vocabulary determined by the deans' committee. The second is the experimental approach to determine the effectiveness of the educational-learning program in achieving environmental education among the students of the research sample.*

*In light of the research results, the researcher reached a number of conclusions, recommendations and suggestions.*

*First - The educational program based on the theory of situational learning has proven effective in increasing the achievement of first-year students in the Department of Educational and Psychological Sciences at the College of Education for the Humanities at the University of Wasit in the subject of environmental education.*

*Secondly - The researcher concluded, through his observations, that the effectiveness of the educational program was not limited to increasing students' achievement, but also contributed to enhancing other aspects of knowledge.*

*In light of the research results, the researcher recommended a set of recommendations, including:*

*First - Adopting the existing educational program based on the theory of situational learning in teaching environmental education for the first stage in colleges of education due to its effectiveness and ability to raise the level of academic achievement among students.*

*Second: Benefiting from educational programs and using them to cover other educational courses.*

*As an extension and completion of the research, the researcher proposed conducting a number of studies, including:*

*First - Conduct a study similar to this study for other subjects such as social psychology or educational psychology.*

*Second - Conduct a comparative study between the educational program based on situational learning theory and educational programs based on other theories to identify the best educational programs in teaching environmental education.*

**Keywords:** *Environmental education, polar learning theory, educational programs, and colleges of education.*

## **I. Introduction**

First/feeling the problem:

Our world today is witnessing rapid changes. The advancement of science, technology, and the vast amount of information makes our era different from other eras in the past, which forces teachers to consider education as a basic process that is not limited to time or place, because it continues with the learner and is a necessary need to facilitate the process' adaptation to changes in the educational environment. The learner then gains skills in how to learn and think because they point to a very important future direction.

Through these cognitive and technological developments that the world is going through, and the resulting active issues in the lives of members of society, modern systems seek to develop their educational programs to keep pace with rapid development and find appropriate solutions to keep society abreast of the learning movement: which are the social and economic issues of its development. That is, by organizing and building effective educational programs to prepare and enhance the performance of students in the College of Education and raise their levels of achievement.

Despite technological advancements, we believe that there are still weaknesses in the education system as our educational institutions remain below the standards required to

achieve comprehensive educational outcomes. Therefore, we found that courses need to create teaching and learning programs in order to educate to achieve highly effective outcomes. In these courses, environmental education is considered one of the most influential subjects in the development of students in the College of Education. (Al-Saeed, 2006: 35)

The research question revolves around the topic of environmental education in the College of Education, Department of Educational and Psychological Sciences. In the first stage, teaching environmental education is limited to content consisting of separate vocabulary because there is no specificity to their subject. They have a binding form approved by the Deans Council. We also found that students were poor in receiving, retrieving and processing materials in a timely manner. Therefore, the current trend in teaching most educational subjects, including environmental education, is to present ready-made ideas. That is, teaching students without using their minds, as evidenced by some studies related to teaching environmental education in Iraq, such as the study (Al-Obaidi, 2010), which relied on teaching the subject traditionally. This study showed that there is a decline in the level of learners' achievement in this subject. Likewise, a study (Al-Kinani 2019), as this study also showed the lack of interest of college students in the environmental education subject. We also find that there is a lack of interest on the part of professors because they consider it a secondary subject.

Second: The importance of the problem:

The importance of the current research can be summarized in the following points:

1. The importance of modern environmental education lies in its primary position between the sciences and literature that it studies, and it has become a stand-alone educational subject that can cover all educational courses.
2. The importance of educational programs in increasing educational intensity, developing learners' educational competencies, and improving their performance in college.
3. The importance of the role of situational learning theory, which emphasizes that learning occurs in certain forms of shared social participation. Instead of searching for types of cognitive processes and conceptual structures, it emphasizes the types of social participation in which learning occurs.
4. Achievement is one of the basic educational goals, and it represents the results that occur in educational institutions in the multiple learning processes of different skills, sciences and knowledge that refer to the activities of ethnic learners.
5. The importance of environmental education in educational institutions to highlight the role of learners in protecting the environment.
6. The importance of the university level and the necessity of integrating educational programs into university teaching.

Third: Research objective:

The current research aims to find out:

The effectiveness of an educational-learning program based on the theory of situational learning in the achievement of the environmental education subject among students in colleges of education.

Fourth: Research hypotheses:

The researcher formulated the following null hypothesis:

There are no statistically significant differences at the level of significance (5 0,0) between the average grades of the experimental group students who studied the environmental education subject in accordance with the educational educational program

and the average grades of the control group who studied the same subject in accordance with the vocabulary prescribed by the deans' body for collection.

Fifth / Limits of research:

The research was applied during the academic year 2022-2023.

The research was applied in the Republic of Iraq, Wasit Governorate, Wasit University / College of Education for the Humanities / Department of Educational and Psychological Sciences / first stage.

Sixth: Defining terminology:

a. Effectiveness:

- Defined by (Ibn Manzur): "It is what is derived from the article (fa'l): The verb: is a metaphor for every transitive or non-transitive action. The verb does"--- The fa'l is a characteristic that dominates the work of clay, digging, and the like, because they do (Ibn Manzur, 2002: 528).

B. Learning Tutorial:

- (Al-Samarrai et al., 1988) that:-

"An integrated system of knowledge, information, processes, skills, experiences, activities and teaching strategies that help develop learners' knowledge and scientific thinking skills." (Al-Samarrai et al., 1988: 17)

C. Situational learning: Defined by:

- (Zarra') that:-

"These are interconnected, meaningful, and purposeful activities that occur in the usual practices of our lives, and these situations include activities in which all individuals participate through problem-solving situations." (Zaraa, 2009: 19)

D. Achievement was defined by: (Abu Jado, 2009) as:

The learner's learning outcome after a certain period of time, and can be measured by the degree the student chooses. (Abu Jado, 2009: 425).

## **A conceptual framework and previous studies**

First: The educational - learning program:

The main purpose of building and designing the educational program is to develop and improve the required performance, as well as improve the selection of modern teaching methods appropriate to the new curriculum in order to bring about a change in behavior and develop performance. (Ashour, 2019: 81)

The educational program consists of a series of activities planned to develop an educational process for a specific purpose and within a specific period of time, so it focuses on the practical aspect, that is, the (applied) aspect. (Salama, 2001; 58).

Educational programs are characterized by problem-solving approaches, the use of feedback and reinforcement, and also include program design, improvement and development, development of assessment processes based on feedback, and selection of learning theory. (Al-Nashif, 2003: 29)

Foundations for building educational programs:

First/philosophical basis:

Most educational programs rely in their construction on a philosophical foundation because it provides a framework for the “objectives of an educational program” because it represents the starting point from which any educational program is built, and expresses philosophy as a philosophical basis for mentality. Planning is not only the starting point for educational planning (Sharadqa, 2001:33).

Second: The cognitive basis:

The knowledge base represents the core of content heuristic thinking. It emphasizes the interconnection between the various knowledge, values, attitudes and skills on which the educational curriculum is based. (Jabir, 2006: 12)

Third - The social foundation: The social foundation is viewed as a set of pillars and components that are related to the society in which learners live. (Al-Halmouz, 2004: 132)

Fourth - The psychological basis:

Psychological foundations: targeting learners, community members, their characteristics, and educational programs must take into account the stages of learners’ development as reflected in their abilities, aptitudes, readiness, and psychological needs. (Batayneh, 2004:69)

Principles of building educational programs:

The process of building an educational program is based on a number of principles, including:

1. Working to improve the quality of learners’ learning outcomes by developing educational programs and providing learners with teaching and learning resources.
2. The experiences in the educational program must be basic experiences related to the learner’s life.
3. Developing learners’ use and interaction with higher cognitive skills over time.
4. All processes in the educational program must be linked to achieving the learning outcomes
5. Educational programs increase learner motivation. (Meyers, & Nulty, 2009, p. 565))

Educational software components:

The educational program consists of a set of elements:

- 1- Objectives: They are the focus of an educational program because they represent the main starting point of the learning process in relation to the other elements. (Ibrahim, 2013, 135)
- 2- Educational content: Educational content is one of the components of a successful educational program because it includes a set of generalizations, facts, information, values, concepts, attitudes, beliefs, and skills that the curriculum carries. (Al-Mutalas, 2001, 54)
- 3- Teaching strategies: Considered as an important part of the educational plan, the teaching strategy plays a pivotal role in building the educational plan, because the strategy is closely linked to the goal and content. (Al-Issawi, 2012: 39)
- 4- Educational technologies and accompanying activities: Educational technology and educational means play a prominent and important role in achieving the objectives of the

educational program, as learners move from the reality of abstract experiences to the reality of concrete experiences. (Marai and Al-Hila, 2000: 259)

5- Evaluation:

Evaluation is very important in developing educational programs, through which the desired educational goals can be determined, which helps us improve the educational process (Zaytoun, 2005, 542).

The second axis: (Situational Learning Theory):

This theory was originated by Fred Edward Ferler in 1967. He was one of the prominent researchers in the field of industrial and organizational psychology. The situational theory is considered one of the prominent theories that relies primarily on the principle of adaptation and adjustment in different situations. It was given this name because it depends on the situation as well as on the circumstance, which enables learners to understand the appropriate method to solve any learning problem by taking advantage of any circumstance of the situation that directs them. Abdul Hadi, 2011: 48).

Learning according to situational learning theory occurs through three visions:

- The first vision emphasizes the individual aspect and means (practices), i.e. the participation of individuals in society.
- The second vision emphasizes the community aspect and means employing new individuals by developing and improving community practices.
- The third vision emphasizes the organizational aspect, by which we mean maintaining relationships and community cohesion. (Al-Khouli, 2011: 41)

## **Research Methodology and Procedures**

First: The descriptive approach to building the educational-learning program:

The descriptive method is a set of research procedures in which the researcher collects information, sorts and organizes it, then classifies, analyses, processes and extracts evidence to obtain research results and generalize the phenomenon investigated. (Attiya, 2009: 142)

Stages of building an educational – learning program:

The process of building an educational-learning program proceeds according to the theory of situational learning in three stages:

First/Planning step:

The planning stage consists of a set of procedures, steps, and measures that the researcher relies on to ensure that his task is facilitated by organizing and arranging data, information, facts, and experiences in advance in order to achieve the desired, pre-planned goal. (Allam, 2010: 29)

The planning process goes through two secondary stages:

1- Analysis stage 2- Design stage:

The design process is considered one of the important and main stages in building an educational program, and it is necessary to organize the educational process and implement it in a way that suits the cognitive abilities and characteristics of the learners.

Second: Implementation stage (implementation of the educational-learning programme):

### 1/ Experimental design:

Experimental design is defined as a program of work and planning for the conditions and factors surrounding the experiment, where the researcher, through the experimental design, can develop hypotheses and test them to reach results that show the extent of the influence of the independent variables on the dependent variable. (Al-Jubouri, 2013: 163)

### 2/ Research methodology:

In the stage of building an educational program, researchers rely on descriptive research methods, which are considered one of the most important research methods in the educational and psychological sciences, as they are one of the most common and used methods because they have contributed to the interpretation, analysis, and research of a particular phenomenon or problem. (Asil, 2016: 71)

In the implementation and application phase of the educational program, the researcher followed the experimental approach to determine the extent of its effectiveness in achieving (students of the first stage of the College of Education / University of Wasit. (Al-Jabri and Daoud, 2013: 85))

One of the most important procedures carried out by the descriptive and experimental methods is to determine:

#### A/ Research community:

The process of defining the population is considered one of the important steps, as the research design, its procedures, and the adequacy of its results depend on it. Community represents aggregate elements that have common characteristics that can be measured and observed. (Mansour, 2014: 209)

Perhaps the first step that can be taken into account in selecting a sample is identifying the original population for the research. The current research community is determined by all students of the first stage, Department of Educational and Psychological Sciences, in the colleges of education in all Iraqi government universities (morning study) for the academic year (2022-2023).

#### B/ Research sample:

The sample is that part that represents the original population sufficiently so that its results can be generalized to it in order to identify characteristics. (Allam, 2000: 54).

The researcher purposefully selected the research sample, Department of Educational and Psychological Sciences, first stage, College of Education / Wasit University, for the following reasons:

- 1/ The College of Education building is close to the researcher's residence.
- 2/ Facilities provided by the Department of Educational and Psychological Sciences, represented by the Head of the Department.
- 3/ The number of students is appropriate for the research conducted.

The sample of the current research was (60) male and female students distributed into two groups. The researcher randomly chose Group (A) to represent the experimental group, and Group (B) to represent the control group, with (30) male and female students for the experimental group and (30) male and female students for the control group, and Table (1) shows this.

Table (1) the distribution of the research sample

Group	Class	Total No.
Experimental	A	30
Controller	B	30

C - Equivalence between the two research groups: The researcher conducted statistical equivalence between the two research groups before starting the experiment in some variables, as indicated in the literature, previous studies and research.

## **Recommendations and Conclusions**

First: Display the search results:

The purpose of presenting the results is to ensure that two goals are achieved:

The first goal: (Building an educational and learning program based on the theory of situational learning in the achievement of environmental education subject for students of the College of Education for Humanities, University of Wasit).

The second goal: is (to measure the effectiveness of the existing educational program based on the theory of situational learning in the achievement of the environmental education subject among students of the College of Education for Humanities, University of Wasit).

Conclusions:

From the results presented, the researcher concluded the following:

1. The educational learning program based on situational learning theory has shown its effectiveness by improving the performance of first-year students in the Department of Educational and Psychological Sciences, College of Education for the Humanities, in environmental education.
2. Adopting an educational program based on the theory of situational learning, as it facilitates, organizes and increases the educational process, and recognizes, on the one hand, linking knowledge to the reality that the learner lives.
3. The program encourages learners to actively participate in discussions, allowing them to freely express their opinions, ask questions, participate actively, develop competitiveness and adopt a problem-solving approach.
4. An educational educational program that includes exercises, activities, educational examples, shapes, pictures, colors, charts, and the use of means and technology to present and explain educational materials, as it has an impact in enhancing the educational achievement of learners in the subject.

Fourth: Recommendations:

Based on the above-mentioned review of the results and conclusions of this study, the following scientific educational recommendations can be made:

1. An educational learning plan based on situational learning theory is adopted in the College of Education, as it increases the adequacy of the educational process and helps organize the educational process to achieve its goals.
2. There is a need to bring out the best in the learner because it represents the focus of the educational process and encourages their active participation in education.
3. Diversity in the use of teaching methods, activities, and educational means. Attention must be given to the characteristics of the learners and their needs when formulating educational plans, in order to increase the enthusiasm and enthusiasm of the learners in the educational process.
4. Holding training courses for teachers of the School of Education to train them in using educational programs, training teachers of measurement and evaluation subjects to



practice educational programs, and training them to discover and develop the creative abilities of learners.

## References

The Holy Quran

- Ibrahim, Mahmood Jawad, (2009): A Dictionary of Terms for Learning and Teaching Concepts, World of the Book Publishing, Cairo.
- Ibn Manzur, Abi al-Fadl Muhammad bin Makram Jamal al-Din. (1999): Lisan al-Arab, Part 8, 3rd edition, Arab Heritage Revival House for Printing, Publishing and Distribution, Beirut, Lebanon.
- Abu Jado, (2009): Educational Psychology, 7th edition, Dar Al-Maysar, Amman, Jordan.
- Abu Hatab, Foua'd, Othman, Sayed Ahmed and Sadiq, Amal. (2008): Psychological evaluation. 4th edition. Anglo-Egyptian Library, Cairo.
- Abu Al-Dayaat, Zakaria Ismail. (2009): Preparing and qualifying teachers, educational and psychological foundations, 1st edition, Dar Al-Fikr for Publishing and Distribution, Amman, Jordan.
- Aseel, Sabbar Mohammad. (2016): Job immersion and its relationship to self-confidence among educational counselors. Anbar University, Al-Ustath Magazine, Issue 211, Volume Two.
- Bajeer, Abdul Qader Awad Mohammad. (2006): Designing a computerized program in environmental education according to the systems and self-education curve and studying its effectiveness in Yemeni teachers' acquisition of knowledge and attitudes related to issues, concepts and problems. Yemen
- Al-Bayati, Abdul-Jabbar Tawfiq. (2010): Statistics and its applications in educational and psychological sciences. University Library for Publishing and Distribution, Ghman, Jordan.
- Bin Fares, Mahmood Jumaa Salem. (2009): Environmental education in school curricula. Foundation of the World Educational Organization.
- Obaid, Magda Al-Sayed and others. (2001): Basics of teaching design. 1st edition, Dar Safaa for Publishing and Distribution, Amman, Jordan.
- Mansour, Hoda Kamel. (2014): Self-engineering and its relationship to misuse of the Internet among university students. Al-Ustath Magazine, (Volume 2, Issue 211).
- M., Abada, A. A., & Jasim, K. J. (2020). Ethnographic research method for psychological and medical studies in light of COVID-19 pandemic outbreak: Theoretical approach. *Journal of Public Affairs*, 20(4), e2404. doi:org/10.1002/pa.2404
- Sabri, Dowood A. and Radhi, R.I. (2021). The effect of the SAMR Model on Acquiring Teaching Skills for Students of colleges of Education in the Subject of teaching Applications. *International Journal of Early Childhood Special Education*, Vol. 13, No (20), 2021, PP: 1289-1296.
- Sabri, Dowood A. and Rahman R. Y (2022) Impact of Google workspace for Education platform on developing self-learning skills for applicators of Arabic language departments in colleges of education in Kurdistan region *Baltic Journal of Law & Politics* 15:2 (2022): 751-762.