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Research Article

Impact of Using Scaffolding Strategy on Educational Integration among Sociology Students at Al-Balqa Applied University

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Abstract

This study aims to identify the impact of using scaffolding strategy on educational integration among sociology students at Al-Balqa Applied University. To achieve the aims of the study, a questionnaire consisting of (29) items is distributed to the faculty members majoring in sociology at Al-Balqa Applied University. The research's study sample of 100 faculty members is randomly selected. The results of the study show that the responses of the respondents to the items of the questionnaire are of a high degree with a total arithmetic mean of (3.69). In light of the results of the study, the study recommended the necessity of directing the attention of those in charge of the teaching process to use the educational scaffolding strategy because it helps students to integrate into learning and make the learner the center of the educational process.

Keywords: Educational Scaffolding Strategy, Integration into Learning, Sociology Students.

1. Introduction

The learning process and its methods are among the important requirements and foundations that contribute to building a distinguished knowledge society. The issue of interest in education is a matter of concern to developing and developed societies alike as educational-learning institutions at all levels seek permanently to develop the educational learning process, raise its efficiency and improve its scientific outcome through preparing various and advanced programs for teachers and learners to achieve the best results. The scientific and technological revolution has led to wide developments in all fields, and this is reflected in the educational-learning process, so the education specialists shall reconsider the educational methods, approaches, and strategies that fit this development (Obeidat, 2009).

Education is based on the formation and preparation of the human forces of any society in the political, economic, social, and religious aspects, as education is the link between all these aspects, so the individual is prepared and supplied with the information contained in the various

academic subjects. Among these subjects is the subject of sociology, which is closely related to scientific and technological innovations, and contributes to their progress. Therefore, more attention shall be paid to teaching and learning sociology to contribute to the scientific and technological advancement of their societies (Issawi and Munir, 2008).

Among the most prominent foundations and assumptions in teaching is to create a state of integration and involvement of students in the learning process. Rather, learning does not occur without this active integration and meaningful involvement in the learning environment (Abu Rajab, 2012). Instructors agree that the ability to integrate into learning is one of the key skills that shall be developed for students to help them adapt to the realities of their daily lives in an easy and accessible way so that they can deal with unfamiliar problems and issues (Oleimat, 2019).

Integrate into learning requires the use of effective teaching methods that contribute to activating their participation in thinking to find possible solutions and learn independently instead of using the traditional methods that depend in most of their implementation procedures on receiving knowledge and emphasizing the requirements for new learning, whether this learning is related to a specific skill, concept or generalization. With that, teaching methods are regarded as the strongest factor that would contribute to integration into learning among students (Mahmoud, 2017).

There is of great importance to apply the scaffolding strategy in education, and the most important of which is that it helps to achieve the degree of comprehensive and deep understanding of all scientific subjects and courses taught to students, and then develop the student's ability to understand, perceive, and move to a higher educational stage. This strategy also helps to move students from the stage of receiving information from the teacher to the stage of themselves analyzing the scientific material and proposing solutions to various problems, issues, and various topics presented to them by themselves and with a kind of independence. As a result, students are provided with an environment and a framework of cooperation and teamwork between each other and between students and teachers as well and thus getting rid of the traditional form of the students' relationship with each other in the classroom and the student-teacher relationship, too. The gradual acquisition of skills helps to take into account the individual differences in the ability of each student to attain and acquire different skills so that all students are qualified to the higher education stage scientifically, intellectually, and psychologically as well (An, 2010).

The advantage of educational scaffolding is that it is not limited to the aspect of theoretical knowledge. Rather, it can be applied in all areas of applied and practical life. The use of the educational scaffolding strategy leads to the participation of most of the students in the educational process, along with feeling that the student has achieved success before moving to a new concept (Issawi and Munir, 2008).

Educational scaffolds are divided into three main types: cognitive, motivational, and mixed. As for the cognitive educational scaffolds, they include three levels, starting with knowledge by explaining the information contained in the lesson, then moving to the application of that

knowledge and linking it to various aspects of life, and then ending with the level of composition and innovation achieved by the student as a result of raising the level of his cognitive skills (Mahmoud, 2017). Motivational Scaffolds consist of the main parts of the educational material in addition to the subsections where these parts are linked in an interesting way that motivates the student to research, study and learn more information about that educational subject (Vaige, 2014). As for the mixed scaffolds, they consist of a group of diverse educational pillars that combine the teaching of modern technologies, social behaviors, the ability to self-learning, and individual skills (Mutawq, 2016).

Integration into learning is a broad concept that includes the behavioral, emotional, and cognitive dimensions. The behavioral dimension refers to participation in learning activities such as exertion, perseverance, and cognitive interest. The emotional dimension refers to the student's feeling of enthusiasm, interest, lack of anger, boredom, and anxiety while the cognitive dimension refers to the student's use of active self-regulation and advanced learning strategies (Reeva & Tseng, 2011).

Numerous studies, such as (Doering, 2007), (An, 2010), and (Molenaar, 2011) confirm that learning occurs through interaction and participation in the way of thinking and the ability to interpret situations positively, so it is necessary to develop modern and novel methods and teaching strategies. One of these effective strategies is the educational scaffolding strategy, as this strategy is one of the educational applications of constructivism theory, which assumes that deep learning takes place by allowing students to link new knowledge with what they have previously learned. This strategy is also a direct application of Vygotsky's theory of social learning (Sociocultural Theory), as it indicates that learning occurs through participation with others and that the learner's interaction with others who are more knowledgeable or skillful affects his way of thinking and his interpretation of different situations (Hafez, 2006).

It has been shown that teaching based on constructivism theory makes learning more effective and interesting, as the use of the educational scaffolding strategy as a model of constructivism models helps to convey scientific concepts to the majority of students, achieves deep learning, and provide them with skills, attitudes, and habits that traditional education does not achieve, such as self-reliance and self-confidence (Khawaldeh, 2007). Saudi (2015) defines the educational scaffolding as all forms of verbal or non-verbal assistance provided by the teacher to his students temporarily so that they can acquire new skills, processes, and experiences, and perform tasks that are difficult for them to acquire without the help of the teacher, where this support gradually increases as their capabilities grow, leading to students' performance of these skills, processes, and tasks independently without assistance.

For that reason, the use of educational scaffolds gives the learner the skills and abilities that enable and qualify him to continue the rest of his learning individually, as education achieves its goals when it provides the learner with tips, information, guidance, and aids for thinking more than he is left alone to explore new concepts and knowledge. The educational scaffolding is a constructive strategy that aims to provide the learner with information through support and guidance to achieve further learning, after which he is left to complete the rest of his learning independently, relying on his abilities. The educational scaffolding strategy includes the

introduction stage, group practice, individual learning, and feedback, shifting responsibility to the learner, and increasing the burden on the learner (Shih, Shen & Kao, 2010).

2. Problem of the Study

In light of the previous literature on the subject of the study such as Okasha (2019) and Shaqah (2019), and Mutawq (2016), and the researcher's teaching experience of sociology subjects, it is noticed that many students have difficulties integrating into learning the educational tasks and not enjoying their performance as the researchers maintain that the teaching method may be one of the reasons behind this, especially since many teachers still use the traditional method of teaching that depends largely on the teacher and does not consider the students' previous experiences. Therefore, relying on modern teaching strategies has become essential to gain students' involvement in learning. Accordingly, the problem of this study lies in identifying the impact of using scaffolding strategy on educational integration among sociology students at Al-Balqa Applied University.

3. Questions of the Study

In light of the problem of the study, the following question is articulated.

* What is the impact of using scaffolding strategy on educational integration among sociology students at Al-Balqa Applied University from the viewpoint of the faculty members at the Sociology Department?

4. Objectives of the Study

The following objective is formatted to answer the question of the study.

Explore the impact of using scaffolding strategy on educational integration among sociology students at Al-Balqa Applied University from the viewpoint of the faculty members at the Sociology Department.

5. Significance of the Study

The significance of the study appears in its expected results in the field of higher education, as it is hoped that the decision-makers will benefit from the results of the study by drawing the attention of workers in higher education and universities to the need to use modern teaching methods, including the educational scaffolding strategy that contributes to the integration of students in learning. Moreover, it is expected that this study will be one of the references and sources for other subsequent studies of the same topic. This study may also help researchers and those interested in this field by opening a new door and venue to conducting and developing future studies in the same field.

6. Previous Studies

The following is a review of some previous studies related to the use of scaffolding strategy on educational integration chronologically arranged from earliest to newest. Hamada's study (2011) aims at measuring the effectiveness of using educational scaffolds in developing reflective thinking, writing performance, and achievement in mathematics for first-grade middle school students with deep and superficial learning methods and measuring the effectiveness of the educational scaffolding strategy in developing the writing performance

and achievement in mathematics for first-grade middle school students with different learning methods. Due to the nature of the study, the descriptive and analytical approach is used. The study sample consists of (30) pupils from the first grade of middle school at Al-Salam Preparatory School of the Educational Hoqba Directorate in the Kingdom of Saudi Arabia. To achieve the objectives of the study, the test is used as an instrument based on the T-test in measuring the differences between groups. The results of the study show that the students of the experimental group taught by the educational scaffold strategy outperformed the students of the control group taught by the traditional method, where the strategy has allowed the possibility of dealing with ideas and situations that require comprehension and memory**.**

Vaige's study (2014) aims at investigating the relationship of integration into the study with both academic ambition and the discovery of future professional specialization among a sample of adolescents. The study is conducted on a sample consisting of (685) Portuguese students distributed over grades (sixth, seventh, and ninth). Due to the nature of the study, the 2012 Veiga scale is used to measure integration into the study. The level of ambition is measured by asking an open question about the academic year that the student aspires to attain upon completing his studies. The Portuguese version of the Professional Specialization Discovery Questionnaire is used. The study indicates that there are three professional profiles derived from integration into the study and professional aspirations. The first profile includes (135) students who are unintegrated and look for other opportunities out of the total sample. Their score is below average in the four dimensions of integration (cognitive integration, emotional integration, behavioral integration, integration with personal authorization). They also have low academic ambition scores and do not wish to continue their academic education. The second profile includes 281 self-confident students from the total sample who have high values in academic ambition and have a desire to continue their university education. The third profile includes (269) students who are partially consistent without other options from the total sample and have obtained medium values in the two dimensions (cognitive integration, integration with personal authorization) and the level of academic ambition. They have also obtained scores above average in the two dimensions of integration (emotional, behavioral) and do not have any ambition to complete their university studies**.**

Mutawq's study (2016) aims at identifying the effect of using the educational scaffolding strategy in attaining concepts and skills to solve the mathematical problem and the attitude towards mathematics among the tenth-grade students in Gaza. In this study, two approaches are used: the descriptive approach to content analysis, and the quasi-experimental approach to measure the effect of the educational scaffolding strategy on the acquisition of mathematical concepts and skills for solving a mathematical problem, and the attitude towards mathematics. The study sample consists of (80) students of the tenth grade basic at Osama School Bin Zaid Secondary School for Boys belonging to the Directorate of Education in North Gaza for the academic year 2016/2015. Due to the nature of the study, three instruments are prepared, namely: the mathematical concepts test, the mathematical problem-solving skills test, and the attitude towards mathematics scale based on the T-test in measuring differences among groups. The results of the study show that the use of the educational scaffolding strategy has

achieved a great influence on gaining mathematical concepts for tenth-grade students in Gaza, acquiring mathematical problem-solving skills among tenth-grade students in Gaza, and developing the attitude towards mathematics among tenth-grade students in Gaza**.**

Mahmoud's study (2017), aims at identifying the concept of the academic self, level of academic ambition, and its relationship to academic integration among a sample of university students. To achieve the objectives of the study, the descriptive approach is used, where the study sample consists of (150) female students of the sixth level at the Department of Psychology at the Faculty of Education of Qassim University. Due to the nature of the study, the Self-Academic Concept Scale, the Academic Aspiration Scale, and the Academic Integration Scale are used based on the T-test in measuring the differences among groups. The results of the study show that there are no statistically significant differences between the mean scores of the female students (highs and lows) concerning the self-academic concept in academic integration. The study also shows that there are statistically significant differences between the mean scores of female students (highs and lows) for academic ambition in academic integration in favor of female students with a high level of ambition**.**

Accordingly, it is worthy of note that previous studies are used to design the theoretical framework and develop the instrument. Importantly, the current study differs from previous studies, as it deals with the impact of using scaffolding strategy on educational integration among sociology students at Al-Balqa Applied University. Besides, according to researchers' knowledge, this study is considered one of the first studies addressing this topic and area in Jordan.

6. Terms of the Study

Due to the nature of the study, the following term is adopted:
Scaffolding educational strategy: "It is a strategy to provide the learner with support based on constructive theory and consists of six phases: the introduction stage, organizing the gradation of task difficulty, supporting the learner with varied educational content, feedback, increasing learner's responsibility, and providing independent practice to the learner" (Yassin and Raji, 2012: 107).

Integration into learning: "It is a description of students' desire to participate in learning activities and the way they use their time, perform the required work, follow the teacher's directions in the classroom, create responses and actions when given the opportunity, make an intense effort to implement learning tasks, and show positive feelings when performing these tasks, including enthusiasm, optimism, curiosity, attention, interest, and enjoyment" (Abu Rajab, 2012: 16). Procedurally, integration in learning is defined as the way students use learning time and includes their desire to participate in activities, follow the teacher's directions, their attention, curiosity, optimism, enthusiasm, and their enjoyment in performing tasks. In this study, it is measured by the Integration in Learning Scale prepared for this purpose after implementation of educational scaffolding strategy.

7. Limitations of the Study

This study is limited to identifying the impact of using scaffolding strategy on educational integration among sociology students at Al-Balqa Applied University. The study is also limited to a random sample selected from the faculty members at Al-Balqa Applied University, as it is applied in the first semester of the academic year 2020/2021.

8. Methodology of the Study

To achieve the objectives of the study, the descriptive approach is used for its suitability for the study.

Population Study

The study population consists of all faculty members at Al-Balqa Applied University for the first semester of the academic year 2020/2021.

Study Sample

The study sample consists of (100) male and female teachers selected by the simple random method.

Study Instrument

The study instrument is developed concerning the theoretical literature and previous studies such as (Vaige, 2014) and Mahmoud (2017) to develop the study instrument in its initial form to identify the impact of using scaffolding strategy on educational integration among sociology students at Al-Balqa Applied University, where items of the study instrument consist of (29) items designed on the five-dimensional Likert scale.

Instrument Validity

To verify the validity of the content of the study instrument, it is presented in its initial form to a group of validators with specialization in the field of curricula and educational psychology in Jordanian universities to express their views on the items of the questionnaire in terms of clarity of meaning, linguistic structure, and any other appropriate modifications and notes. (80%) of the validators 'observations are taken into account to achieve the objectives of the study without neglecting to make the proposed amendments to any amendment to the linguistic structure of the items.

Instrument Reliability

The reliability of the study instrument is verified by calculating the internal consistency using Cronbach's alpha formula, and the value of the study instrument's reliability coefficient is (0.87).

Statistical Processing

To answer the study question, the arithmetic means and standard deviations of the responses of the respondents to the items are calculated through the five-dimensional Likert scale by

giving each dimension one of its five degrees (strongly agree, agree, neutral, disagree, strongly disagree), which is represented numerically (5, 4, 3, 2, 1) respectively. The statistical processing of the data in this study is performed using the Statistical Package for Social Sciences (SPSS). The criterion for judging the items of the study instrument is determined by dividing them into three degrees: low, medium, and high according to the following formula:

The equation**:**

Category Length = Highest Category - Lowest Category / Number of Categories.

1.33= 3÷ (5-1) =

Accordingly, the following scale is adopted to evaluate the arithmetic means of the study sample responses**:**

- 1 - less than the 2.33 is a low degree**.**

- 2.33 - less than 3.66 is a medium degree**.**

- 3.66-5 is a high degree.

9. Results and Discussion

This section gives insight into the results related to the study question "What is the impact of using scaffolding strategy on educational integration among sociology students at Al-Balqa Applied University from the viewpoint of the faculty members at the Sociology Department?

To answer the study question, the arithmetic means and standard deviations are calculated as shown in Table (1).

Table 1

The Arithmetic Means, Standard Deviations, and Rank of the Respondents' Answers about The Impact of Using Scaffolding Strategy on Educational Integration among Sociology Students at Al-Balqa Applied University Arranged in Descending Order

No.	**Item**	**AM**	**SD**	**Degree**	**Rank**
12	Avoids making quick judgments on any topic.	4.20	1.08	High	1
6	Deals with various sources to obtain information on the topic.	4.19	0.83	High	2
9	Listens carefully to understand what other people are saying.	3.98	0.85	High	3
7	Tries to provide an accurate answer in the teaching assignments presented.	3.95	1.03	High	4
5	Thinks before making any decision to solve the teaching assignment.	3.93	0.87	High	5

29	Uses the information learned in new situations.	3.90	0.90	High	6
21	Discusses the lessons after completing studying of them.	3.89	0.80	High	7
18	Likes to ask questions to understand the teaching assignment presented.	3.87	0.92	High	8
4	Tries to understand the instructions well.	3.84	0.91	High	9
1	Keeps trying when doing the assignments and doesn't give up	3.81	0.81	High	10
8	Enjoys engaging others in solving educational assignments.	3.78	0.90	High	11
17	Expresses the inner self to others clearly and precisely.	3.75	0.97	High	12
3	Makes sure of the proficiency of the work assigned to him/her.	3.75	0.93	High	12
23	Wants to be aware of what is going on around him/her.	3.68	0.89	High	13
25	Needs to give more attention to the world around him/her.	3.65	0.89	High	14
14	Sees that there is only one solution to any problem.	3.64	0.85	Medium	15
28	Learns better by watching.	3.60	0.98	Medium	16
13	Looks for new ideas.	3.59	0.91	Medium	17
2	Prefers minor effort matters.	3.57	0.87	Medium	18
27	Remembers things by seeing them.	3.55	0.96	Medium	19
11	Listens well to the ideas presented.	3.52	0.95	Medium	20
10	Understands diverse perspectives.	3.51	0.93	Medium	21
15	Solves problems in more than one way.	3.49	1.02	Medium	22
26	Needs to collect data through his/her senses.	3.48	0.92	Medium	23
19	Asks for information that he/she does not understand.	3.46	0.89	Medium	24
16	Can speak and discuss in front of others.	3.44	1.09	Medium	25
20	Plans the questions to ask.	3,41	0.85	Medium	26
24	Uses more than one sense in the learning process.	3.38	1.06	Medium	27
22	Understands the importance of continuing learning in life.	3.36	0.95	Medium	28
Total		3.69	0.92	Medium	

Table (1) indicates that the responses of the sample members on the questionnaire items are of a high degree with a total mean of (3.69) and a standard deviation of (0.92), and the arithmetic means have ranged between (3.69-3.36). This result, represented by the high degree, is attributed to the apparent impact of the educational scaffolding strategy on students'

integration, preoccupation, and enjoyment in the learning process and making learning more effective and interesting, as the educational scaffolding strategy is one of the modern teaching strategies differing from the traditional teaching strategies used in the schools. It is also enjoyable for students because it is based on the positive interaction between students and the teacher, and between students and their peers.

Teaching using educational scaffolds has provided students with support and assistance by directing them to sources of knowledge and sources of good learning to reduce the confusion experienced by students during the educational situation, which led to the integration of students into the learning process. The educational scaffolding has also contributed to providing students with assistance and the skills that enable them to deal with the educational situation and interact with it positively to achieve the desired educational goals.

This result is attributed to the fact that the use of the educational scaffolding strategy introduced an element of excitement to the educational environment, which pushes the learner to integrate and be strongly motivated towards education, as this strategy relies on independent practice by students. What students learn is cemented and confirmed in their minds through experience and everyday practice, such as their use of the mental process, so students find pleasure and practice this in a useful way instead of receiving skills and information through books or direct instruction and this contributes to increasing students' integration in the learning process.

This result can also be explained by the fact that students' learning using the educational scaffolding strategy makes the learners the focus of the educational process, helping them discover the information through it by themselves instead of being given to them ready-made, providing the students with a drive, motivation, and an incentive to continue learning, which makes them search for knowledge and discover it for themselves, and employ it in life. This can also be attributed to multiple reasons, the most important of which is that students of this particular stage tend to implement the methods and approaches included in the educational scaffolding strategy.

Moreover, it is noted that this educational scaffolding strategy is carried out according to specific steps and leads to the development of a good experience among students. With that, the teacher can transfer all responsibilities to the students and eliminate the support provided to them, taking into account the review of the learner’s performance periodically to reach mastery of learning, which is one of the important stages in student learning and increases their enjoyment and integration in the learning process.

Besides, teaching using educational scaffolds reduces the gap that arises between the teacher and students because it is based on the principle of assisting the teacher or from any available source of knowledge to achieve educational goals. Teaching using educational scaffolds has also led to more continuous and effective communication between students and the teacher on the one hand and between students and their peers on the other hand, which reflected positively on learning. Through this productive and healthy interaction, the teacher can identify the students' needs of all kinds, and transfer his knowledge and skill experiences to them, and this is consistent with Hamada’s study (2011) and study’s Mutawq (2016).

11. Recommendation

In light of the results of the study, the current study recommends directing the attention of those in charge of the teaching process to use the educational scaffolding strategy because it helps students integrate into learning and make the learner the center of the educational process and conducting more future research and studies on other teaching strategies that lead to the integration of students into the learning process in other classes and specializations.

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