

The Effect of Using the Strategy of Peer Teaching on Developing the Active Learning Skills of the Basic Sixth Grade Students in Arabic Language in Jordan

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Abstract

This study aimed at identifying the effect of using peer teaching strategy on developing active learning skills of sixth grade students in Arabic language in the second semester in the period between 9/5/2011 to 8/6/2011. The study included (61) students, (31) students representing the experimental group, and (30) students representing the control group, groups were selected randomly. For the purposes of the study, the researcher prepared an open – ended questions test (5 questions) in which developing active learning skills were taken into account. While formulating the test, the behavioral indicators of these skills were also taken into consideration. To answer the question of the study, data were entered into the computer, statistical and descriptive methods were used; represented in the averages, standard deviations, and the statistical analytical methods included analysis of covariance (ANCOVA) to estimate the effect of using the strategy of teaching peers in the development of active learning skills. The study showed the following result: the existence of statistically significant differences between the study groups – experimental and control for the favor of the experimental group which was taught by the strategy of peer teaching. In light of the study results, the researcher recommended a number of recommendations.

Keywords: strategy of peer teaching, active learning skills, the Arabic language.

1.Introduction

One of the most distinguishing characteristics of the present time is rapid knowledge explosion and accumulation of different fields of knowledge. People start to face a lot of difficulties in their daily life, which requires more and more understanding. Through the years of teaching, educationalists have focused on process of preparing students in an effective way that helps them to confront life challenges and difficulties. Nevertheless, not many have agreed upon such ways since the teacher's roles has been perceived an organizer of the knowledge that is presented in the educational material in logical units. Then, this knowledge is transformed to learners through practice and repetition as strategies that simplify their comprehension of information that is thought to be acquired by them.

The best way to learn something is to teach it to another person, this method has the same effectiveness for students who have weakness sides and for those who do not. Thus, peer teaching strategy is considered one the modern strategies in which a student trains another one with a lower educational level. Researchers have indicated that one of the effective strategies to enhance the learning chances for learners with learning difficulties is peer teaching strategy which involves student's teaching to another one under the supervision of the teacher. (Al- Kobaisi, 2009).

Peer teaching strategy is considered an effective one in the planning of teaching, lessons demonstration, and the analysis of the educational content, depending on clarity and comprehensiveness (Wilson, 2004, P. 187). Peer teaching strategy is beneficial for both the learner and the teacher; this is presented in addressing and meeting the individual needs of the learner through the assessment of the other peer; i.e. when a peer evaluates another peer's performance in learning tasks and educational formulas in which students learn cooperatively after being handed responsibility from the teacher (Johnson, 2004, P. 33).

There are some procedural guides in peer teaching strategy; the first one is constructing a lesson plan in which a plan is designed and developed for the whole lesson with indication to the suitable time and whole lesson with indication to the suitable time and place. The plan is allotted 10 minutes in which the whole group participate. Also, the topic of the lesson must be convincing with a clarification of the purpose of the strategy and the suitable time to use it. The second one is the analysis of the lesson plan in which the peer analysis the effectiveness of the plan which has been prepared through clarification, comprehensive influencing on learners, dictation and using multiple media such as video, computer, and cartoons (Townsend & Mohr, 2002).

1.2 Question of the Study

This study aims at investigating the effect of using peer teaching strategy on developing active learning skills. The study will answer the following question: What is the effect of peer teaching strategy on developing active learning skills of the sixth grade students in Arabic language?

1.3 Hypothesis of the Study

In light of the study question, the following null hypothesis is formulated: "There are no significant differences at the level ($\alpha=0.05$) on developing active learning skills due to peer teaching strategy".

1.4 Significance of the Study

The current study derives its significance from the importance of its topic which is related to the use of peer teaching strategy in developing the skills of active learning in Arabic language. It is hoped that the findings of this study will be used to contribute in developing the methods used currently in teaching, and in benefiting Arabic language male and female teachers.

1.5 Limitations of the Study

This study is limited to a sample of the basis sixth grade in the north- west educational directorate in the academic year 2010- 2011; it is also limited to some Arabic language topics (second semester).

1.6 Operational definitions

Peer teaching strategy

A set of practical procedures that aim to showing the student's ability to change and modify the concepts and skills of his/ her peer (Kobaisi, 2009). Operationally, it is defined as: teachers' mandating students who are capable of communicating with other students in dealing with an educational situation in order to achieve the ability of half of the learners at least to master a skill that is implied in the educational situation. Then learners train in pairs and immerse in active learning in order to master a skill and encourage each other to cooperate. Feedback and evaluation have a decisive role since it is described as the most important element suitable in peer teaching. The effort of the peer teacher always leads to more effectiveness because of the good relation among peers.

Active Learning

Giving students the opportunity to participate in some activities that encourage them to think and comment on given information for discussion (Roth – man, 2000). Active learning is operationally defined as: The students' possession of learning operations and participation in generating knowledge in a way that learners do not only listen but they also have to improve certain skills in order to deal with different concepts in several knowledge fields. This can be achieved through their analysis, synthesis, and evaluation of skills through discussion with others, asking various questions, or doing writing activities. Students should involve in activities that make and force them respond to the given opinion and thoughts and how to apply them.

2. Review of Related Literature

2.1 Theoretical Literature

Clark & Rafman (1997) assert that peer teaching strategy is used in lecture, discussions, especially probing ones (Socratic), which uses prepared investigation in the case of large numbers. It is also used in computer labs, photographic art, personal experience generalization, and displaying model works. It provides the learner with an enormous knowledge wealth within a number of objectives and content; and it suits the nature of the learners, personalities and levels (Mckeachie, 1986).

Dueck (1993) believes that peer teaching strategy improves the learning of the learners through enabling them to revise properly, organize information, foster knowledge, understand basic concepts, fill knowledge gaps, find additional meanings, and reformulate knowledge in a new perceptive frame. Delaloye (2000) emphasizes that this strategy is a method for applying peer teaching in a certain topic from one person to another or one group to another, through presenting examples and then suggested formulas, some work sheet, some studies, or showing some internet pages or games. Moreover, the peer teacher should choose the suitable teaching method. Whitman (1998) define it as a teaching – learning method in which a student or a group of students with no additional knowledge information are exposed, in this interaction and communication, to two educational situations, the first in a teaching one that is managed by the teacher, the other is a teaching situation interacted by peers.

Farivar and Webb (1994) believe that peer teaching method helps learners through the interaction with their peers to rely on themselves instead of relying on their teachers. This makes learners gain larger opportunities to develop the process of learning through cooperation and working within a group system in order to enhance their own performance through confronting with their peers. Thus, such teaching is the best teacher. It is sometimes difficult to teach abstract concepts; therefore, peer teaching can be a suitable solution to meet the behavioral and physical needs of the students in classrooms and enhancing future tendencies for research and practice (Maheady, 2001, P. 4). Peer teaching develops skills in a greater degree that individual guided learning, it is also considered a way to strengthen group knowledge and develop skills (Zebrack, 2005, PP. 513- 514).

The concept of peer teaching includes helping a small group in building their knowledge and tendencies, and enhancing their knowledge via organized cultural activities performed by a group of young people who have been trained in this field. The strategy of teaching peers is based on the assumption that people can make change

because of a personal judgment for a close peer who is reliable and has passed through this experience and adopted the manner of change; he also played the role of the convincing and good ideal for the desired change. Peers also know what is happening within the targeted group and they use the same language and idioms; in addition to using the same expression and non – verbal language that let their peers feel relaxed when they talk about any topic (Al- Kobaisi, 2009).

The strategy of peer teaching meet active learning in pertaining material and information in a higher percentage, and learning focuses on mental operations; furthermore, the learner is considered the center of the teaching- learning process in which he concentrates, participates, more in activities, cooperates with others clearly, and always focuses on experience, steps, and practice. Active learners efficiently participate in class discussions and are responsible for their learning by themselves. Active learners prefer learning individually and collaboratively, and through thinking and initiating for gaining knowledge and different skills (Bailey, 2003, P. 63).

Active learning is the educational environment which permits the learners to speak, listen, read, write, and profoundly contemplate using several styles and techniques. From these are problem solving, small groups, mimicry, case study, role playing, and many other activities that require students to apply what they learn (Boyle, 2005, P. 5).

Active learning might be a way in which the student involves in different classroom activities instead of being a passive individual receiving information from others. This kind of learning encourages students to participate and interact in working groups, asking various questions, participate in social projects, and do exercises based on problem solving; which gives them the chance to use critical thinking skills and acquire creative thinking skills (Baldwin, 2006, P. 156).

Mayers and Johns (Yushau, 2006, P. 176) indicate that when students are encouraged to participate in activities that lead to discussion and asking questions, this will result in a better retention of information related to the subject matter. This also helps them to develop their thinking abilities which achieves the basic goal of active learning in evoking the students' daily thinking habits, with their attempting to increase the level of responsibility for teaching themselves by themselves.

Rothman (2000, P. 17) asserts that it is easy to define objectives, but the most important thing is how to achieve these objectives. This depends on basic rules from which learning is not a passive activity, not effective when being under the control of the teacher; in addition to the importance of the practical applications and defining the required performances, and the relation between teacher and students. Thus, active learning depends on the actions and the activities of the students and offering them opportunities. It takes into consideration pre assessment that is based on evaluating the learners' needs and the teacher's planning which includes a mechanism to achieve the objectives, students' abilities, class activities, and a summative evaluation.

Active learning occurs when learners possess the processes of learning and the participation in generating it, not only receiving knowledge. In the atmosphere of active learning, the teacher is only a facilitator more than a source or a presenter of information. In active learning, students perform most of the work; they use their minds effectively, study ideas well, work on solving problems, practice what they learn, write questions about debatable issues, involve in description and explanation and writing tasks within small work groups that solve problems and ask questions (Yushau, 2006, P. 177). Active learning includes an educational environment in which the student is capable of seeking new experiences that he relates to previous ones (Baldwin, 2006, P. 159).

2.2 Empirical Studies

Some studies emphasized the existence of statistical differences between the means of the experimental group that was taught by using peer teaching strategy and the mean of the control group in achievement and developing some skills. The following are some of these studies.

Steven (2002) conducted a study that investigated the effectiveness of several strategies: lecture, discussion, personal experiences, and peer teaching. A study was conducted on (48) male and female students. Results showed that students' feeling of challenging educational obstacles and their acquisition of educational experience were developed by the strategy of peer teaching.

Tang (2004) conducted a study that aimed at defining the effectiveness of peer teaching strategy in achievement, developing competence, promoting situations and knowledge, and developing medical skills among the fourth year students in the medicine college in the two advanced levels. To apply the experiment, peer teaching strategy was used to simplify discussions and personal exploration of health welfare. Results showed that there is an enormous efficiency of peer teaching strategy in teaching topics related to cultural and social medicine.

Kenner (2004, P. 124- 144) investigated the assessment of the students' acquisition of more than one language. Six- year old students from London were selected to learn the different reading and writing skills. Three students were exposed to Spanish learning where they learned through peer teaching strategy, and three

were left to learn through traditional ways. Results showed that students who learned by the strategy of peer teaching excelled the others in acquiring the different skills of reading and writing.

Hinn (2005, PP. 665- 671) conducted a study to assess the effect of the obligatory medicine directory (Evidence – based medicine – EBM) of the third year students in the medicine college. The strategy of peer teaching was used on the experimental group (23 students). All the students in both groups were tested in an achievement test of 20 questions in acquiring knowledge and skills in the obligatory medicine directory in Frankfort university in the academic year 2003. Results showed that the experimental group gained a higher grade of (99.7%).

3. Methodology of the Study

This section includes: participants, instrument, validity and reliability of the instrument, procedures, design of the study, and the statistical tools.

3.1 Participants

The participants of the study consisted of (61) students from the basic sixth grade in the North- West Badia Educational Directorate in the second semester in the period between 9/5/2011 to 8/6/2011. The experimental group consisted of (31) students, and the control group consisted of (30) students; both groups were selected randomly.

3.2 Instruments

The two researchers prepared an achievement test of multiple choice and open – ended questions. The test consisted of five questions in which developing active learning skills was taken into consideration; the test sections were formulated according to the behavioral indicators that refer to these skills, Appendix (1). The test was revised by Arabic language and methodology instructors in order to validate its content and items, Appendix(2). Reliability was established by applying the test to a group of the basic sixth grade students from outside the sample. It was applied twice with an interval of 10 days. By using Koder Ritchardson equation (KR-20), reliability was estimated. Reliability equation estimation was (0.86) which is considered acceptable for the purpose of this study.

3.3 Procedures

Schools that form the population of the study were defined, then a meeting was held with the teachers who will teach the experimental and the control groups in order to acknowledge them with peer teaching strategy. The pre- test was taken by the study participants (it is also the post – test), then the experimental group was exposed to the peer teaching strategy. This was applied in the second semester between 9/5/2011 to 8/6/2011. After that, the post – test was held, after four weeks from the beginning of the treatment.

3.4 The Study Design

Quasi – experimental design was used in this study, as follows:

X1 G1 : O1
 X0 G2 : O1
 G1: the experimental group.
 G2: the control group.
 O1: the pre – and post – test.

X1: the strategy of peer teaching for the experimental group.
 X5: the conventional method for the control group.

3.5 Statistical Treatment

The two researchers used descriptive statistics represented in means and standard deviations. They also used analytical statistical methods that included the analysis of co- variance (ANCOVA) to investigate the effect of using the peer teaching strategy on developing active learning skills of the basic sixth grade students in Arabic language.

4. Results and their Discussion

To know if there were any significant differences at the level (0.05) of the effect of using peer teaching strategy in developing active learning skills of the basic sixth grade students in Arabic language means and standard deviations for the achievement of the study sample groups were estimated as in Table (1).

Table 1 :Means and standard deviations for the experimental and control groups' achievements

Group	Mean	Standard deviation	Number
Experimental	26.93	6.44	31
Control	15.60	5.81	30
Total	21.36	8.35	61

The results in Table (1) shows the mean and the standard deviation of the achievement of the experimental group as (26.93) and (6.44) respectively; whereas in the control group, the mean and the standard deviation are (15.60) and (5.81) respectively.

To show if these are any significant differences between the two groups. ANCOVA was used to reveal the effect of using peer teaching strategy on developing active learning skills of the basic sixth grade students in Arabic language, Table (2) illustrates that:

Table 2 : Results of the analysis of co – variance (ANCOVA) for the effect of peer teaching strategy

Source of variance	Ss	d.f	Ms	F	Sig.
Co (pre)	686.321	1	686.323	25.802	0.087
Group	2547.936	1	2547.936	95.790	0.000*
Error	1542.749	58	26.599		
Total	4188.066	60			

Table (2) shows that there are no statistically significant differences due to the pre co – variant, this can be explained by the fact that the students who responded to the pre – test were not trained to teach according to the strategy of peer teaching, which confirms the equivalence between the study groups; the control and the experimental. This that the participants had similar educational and mental abilities before being exposed to training for using peer teaching strategy.

Table (2) shows that there are statistically significant differences between the experimental and control groups in favor of the experimental one that taught by using peer teaching strategy. This can be interpreted by the fact that peer teaching imposes the teaching responsibility on the shoulders of the students, and this is a strong change that has its effect on the weak students or those with low achievements who are usually described as passive learners.

When students have the chance to be taught by their peers, they will involve in their learning; moreover, peer teaching encourages the students to confess that they have weakness in understanding, which sets the suitable chance for discussion, inquiry, practice, and evaluation of the process of learning with direct feedback.

Peer teaching strategy grants learners more opportunities to practice what they learn by doing the required activities. This increases the feeling of responsibility and self – confidence. This result is congruent with the findings of Steven’s study (Steven, 2002), Tango’s (Tang, 2004), Kenner’s (Kenner, 2004), and Ginn’s (Ginn, 2005) in the effectiveness of peer teaching strategy in developing what it was presented for.

5. Recommendations

In light of the results of the current study, the two researchers recommend the following: teaching by using the strategy of peer teaching in developing active learning skills, and conducting similar studies to investigate and show the effect of teaching by using peer teaching strategy in other educational materials or other educational stages.

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* significant at the level $\alpha = 0.05$.

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