

An Evaluation to the Effect of Cooperative Learning on The Extent of Achievement to Successful Learning and Academic Progress of Zahedan Second District Female High School Student from Teachers Perspective in 2014-2015

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Abstract: The present study was conducted with the aim of evaluation the relationship between cooperative learning and the extent of achievement to successful learning and academic advances of Zahedan students. The study is descriptive with correlational approach and the statistical population included all teachers in girls' high school in Zahedan second district in 2014-2015. According to the latest statistics, the total volume of them was 420 persons and based on Morgan table, 201 individuals were taken as sample. Simple random sampling was used. The instrument of the study was a researcher made questionnaire, consisted of 29 items which its validity was confirmed by experts and teachers and then guiding professor and the other group professors. Its cronbach's alpha coefficient reliability was calculated 0.886. In order to analyze the data, descriptive statistics including frequency distribution, mean, standard deviation and t-test to analyze statistics and research questions were used which was conducted through SPSS software on data. The result of this study showed that the cooperative learning has an effect on the extent of achievement to students' successful learning and academic advances. The cooperative learning components including: the individual response of the students, social skill, face-to-face interaction, positive interdependence among the students and group processing, affect the extent of achievement to successful learning and academic advances of the students.

Keywords: Cooperative Learning, Learning Theory, Success in Learning, Academic Achievement.

Introduction

Teachers as human beings, who have always tried to train the best students, are faced with many diverse expectation from society, family and students and all of which has been to improve the quality and enhance student learning. If the teachers have the enough scientific knowledge in implementation of the role of teacher and use the methods which can be utilize to a better and more effective learning of the students, will be more prospers in their role (Qorbani, 2013).

Among the important issues related to education in all communities is teaching method. This problem in education wastes many resources that could be spent on education quality and its expansion every year.

Therefore, educational improvements in the education system is an issue that huge amount of research has been devoted to it and factors affecting it is in the focus of the attention of educational psychologists and other education professionals. Improving the efficiency of education system is largely consistent with students' academic achievement. Evidence from the finding of international tests (such as PIRLS and Thames) shows that the Iranian students' educational progress is not desirable and on the other hand the overall objective of the educational system is to reach the learner with a desirable level of academic achievement that can be deserved to the students' spending the years at school (Saburi Khosroshahi, 2010).

The use of learning theories in teaching greatly contributed to the progress of students. by stating this point that The purpose of education is to provide opportunities and situations and facilitate and accelerate the learning within the educational system, it is necessary by using the theories of learning in the educational process, leading to accelerate the growth of knowledge. Learning theories analyze attainment or non-attainment of learning conditions. And classified them in two major groups of behavioral and cognitive groups (Shabani, 2004).

Cooperative learning is a new approach in learning with the aim of thinking the group members about abstract matters and to solve them. In the past, by focusing to individual education and student-teacher relationship, the educational value of group interaction was ignored, and it was considered as discouraging effort in class. Newly, increasing the interest in learning process in social activity, lead to change the learning attitude and approaches, than in which the social nature of learning is emphasized. Cooperative learning was began in USA in early 70s. Cooperative learning is an innovative and effective theory and is based on new social psychology, sociology in education, humanism psychology with the study and application of relationships in the classroom, and is considered as a main point of collaboration for students, as the main driving force and the group success, and as evaluation standard. The purpose of cooperative learning is students' educational achievement, improving class atmosphere and help the students to quire social skills (Keramati et al., 2010).

Cooperative learning has 5 main elements and components: 1- the students' individual response: Understand that they have to be responsible for their share to group in order to the group not carry their burden and every person should cooperate in the group. 2- Social skills: is small group skills and interpersonal skills, including effective communication which is needed for cooperation. 2- face to face interaction: Includes work in small groups that students can see each other in order to have face to face interaction. 4- Positive interdependence: is established when everyone knows that the participation of each member is important in helping the group to achieve his goal. 5- Batch process: which point to the evaluation of cooperative learning and can be described as formative assessment and focus on students' learning process and reflect what the students still need to fulfill their goals (Pakdel, 2014).

Among the most important reasons for expanding collaborative learning approach, can be pointed to its positive effects on academic achievement, peer relations, self-esteem, social skills, attitudes and anxiety, and as well as its ability to encompass children with special needs (Keramati et al., 2010).

About leaning condition in education can be said that we are in a good condition in this respect unfortunately, so that the Department of Secondary Education says: learning promotion and educational quality should be considered an I ask the provinces to reach themselves above the average grade, in order with these measures we reach the education goals including promotion of education and learning. In order to promoting the education quality level, all the schools, regions, and provinces must have quality improvement programs, and education do not need to the false programs and formal scoring in order to compensate the lags. So according to what was mentioned, can be said that one of the present problems in education is weakness in learning that by promoting the teachers' awareness level and introducing teaching methods can greatly help to increase the students' learning. Therefore by research in this field can help the education to achieve its goals.

With regard to above mention statements, the researcher according to the studies which he has done aims to evaluate the effect of cooperative learning on the extent of achievement to successful learning and educational achievements of female high school students, so that provide scientific and practical recommendation to educational managers and planners.

The importance and necessity of research

Cooperative teaching leading to lower level of anxiety and stress, High self-esteem and positive and supporting relationships in students with other students and the students ability to create positive relationships with other to improve their future educational and career is important. Group work, real face to face communication, effecting coordination and share the duties, identify real life conditions. This is a real opportunity for schools to teach the facts o adult life to the students in a real way and make them ready to enter the adult life (Keramati et al., 2010).

Experience has showed that when the teachers put the student in groups and teams with several members, and do the teaching in cooperative way, lead to increase the students self-confidence and getting a better score in examination. Cooperative teaching is based on critical thinking. This method as a suitable strategy can make a

better contribution in learning the textbooks. Teaching theories in learning is very effective in directing the educational activities (Arefi et al., 2009).

So, in educational activity, and with the development of science and technology, we have to believe that our duty in the education process, is not only the transfer of science, but rather to provide a favorable position of meaningful learning and because of today society need to creative, critical and thoughtful, and necessity to change the teaching method and using the cooperating teaching method is feel more than ever. With regard to above mention statements, we can recognize the importance and necessity of research and evaluation about cooperative learning method.

Cooperative learning and its effect on educational advances

Cooperative learning has completely different methods, but encouraging students to work in small groups in order to help each other to learn the lesson, is the common part of all of these methods. In cooperative learning, providing the basis for discussion around the given data or practice the skill which was provided by a teacher, is the complementary to the teacher training. In some of the cases, cooperative learning necessitate the search and discovery by the student himself. Cooperative learning was implemented in all educational subjects from second to twelve grade and every day more than ever are used in colleges (Arefi et al., 2009).

Today, researchers around the world, are studying the practical applications of the principles of collaborative learning and many cooperative learning methods are evaluated in one or more the comparative/ experimental studies. The most successful methods that come out of these evaluation are explained in this study. These methods are as followed:

Four group named as students' group learning, dividing the subject to various part, reading together, and group research.

In recent years researchers have discovered a series of non-cognitive factors which can be effective in academic achievement and overall success. These researchers reach significant result in explaining the importance of non-cognitive factors in success and have shown that if no cognitive measures added for predicting the success to cognitive intelligence, predicting academic achievement is to be possible significantly and more likely, so that only cognitive intelligence ability measured is used. Learning approach as one of the individual differences sources in educational performance does not have any relationship with personal abilities and shows the preferred method to study and learn. It is more than 30 years that the researchers tend to study learning approaches in learners (Arefi et al., 2009).

In Biggs model consistent with Danykn and Biddle process-efficiency model in 1974, three components taken into consideration in the classroom. Background refers to some elements that are present before the learning take place. Process include those elements that are present within learning and ultimately, efficiency refers to the results after learning. Regarding this model, three learning approaches are distinguishable. Surface approach that include reproduction of the trained material in order to achieve the minimum requirements. In-depth approach that include the real understanding of the learned material and development oriented approach that some strategies was emphasized in them which lead to maximum possible score of the individual. In different studies result, the existence of a positive relationship between deep learning approach and academic achievement is emphasized (Estaki & et al., 2010).

In general, the factors that affect academic achievement can be divided into three categories:

A. Physiological factors: These factors include physical variables of learners such as malnutrition and physical health.

B. Psychological Factors: These factors include psychological variables such as intelligence, talent, creativity, self-concept, self-esteem, attitudes toward education, achievement motivation, place of control and personal traits.

C. Environmental Factors: These factors include exogenous variables, including socio-economic status (income, education, location) variables of family (the number of family members, parenting style , family cultural values) and variables related to school environment (school conditions, school management, teacher attitude characteristics, culture and school atmosphere).

Research hypotheses

First hypotheses: Students' individual response affect the extent of attainment to students' successful learning and educational achievement.

Second hypotheses: Social skills affect the extent of attainment to students' successful learning and educational achievement.

Third hypotheses: Face to face interaction affect the extent of attainment to students' successful learning and educational achievement.

Fourth hypotheses: Positive interdependence among students affect the extent of attainment to students' successful learning and educational achievement.

Method and Methodology

Research method is descriptive and correlational.
 Statistical population included all teachers in girls' high school in Zahedan second district in 2014-2015 with 420 teachers.
 The sample of 201 was selected based on Morgan table.

Results

In this section we evaluate the hypotheses and implement the experiments.

First hypotheses: students' individual response affect the extent of attainment to students' successful learning and educational achievement.

In order to examine the first hypotheses, one sample t-test was used. In this test the obtained average was compared with an average limit i.e. 3 for individual response variable.

The results of this test is summarized in the table below.

Table 1. One sample t test results for individual response variable.

variable	average	T value	df	Sig.	Lower limit	Upper limit
Individual response	4.40	33.504	200	0.00	1.3195	1.4845

According to the table above because the level of significant is lower than the error level of 5%, and also the lower and upper limits are positive, so the hypotheses of the mentioned average variable being more than 3 is approved. As a result students' individual response affect more than the average the extent of attainment of students' successful learning and educational achievement.

Second hypotheses: social skills affect the extent of attainment to students' successful learning and educational achievement.

In order to examine the second hypotheses, one sample t-test was used. In this test the obtained average was compared with an average limit i.e. 3 for social skill variable. The results of this test is summarized in the table below.

Table 2. One sample t test results for social skills variable.

variable	average	T value	df	Sig.	Lower limit	Upper limit
Individual response	4.43	56.08	200	0.00	1.3793	1.4799

According to the table above because the level of significant is lower than the error level of 5%, and also the lower and upper limits are positive, so the hypotheses of the mentioned average variable being more than 3 is approved. As a result social skills affect more than the average the extent of attainment of students' successful learning and educational achievement.

Third hypotheses: face to face interaction affects the extent of attainment to students' successful learning and educational achievement.

In order to examine the third hypotheses, one sample t-test was used. In this test the obtained average was compared with an average limit i.e. 3 for face to face interaction variable. The results of this test is summarized in the table below.

Table 3. One sample t test results for face to face interaction variable.

variable	average	T value	df	Sig.	Lower limit	Upper limit
Individual response	4.32	48.142	200	0.00	1.2654	1.3734

According to the table above because the level of significant is lower than the error level of 5%, and also the lower and upper limits are positive, so the hypotheses of the mentioned average variable being more than 3 is

approved. As a result face to face interaction affect more than the average the extent of attainment of students' successful learning and educational achievement.

Fourth hypotheses: positive interdependence among students affect the extent of attainment to students' successful learning and educational achievement.

In order to examine the fourth hypotheses, one sample t-test was used. In this test the obtained average was compared with an average limit i.e. 3 for positive interdependence variable. The results of this test is summarized in the table below.

Table 4. One sample t test results for positive interdependence variable.

variable	average	T value	df	Sig.	Lower limit	Upper limit
Individual response	4.27	42.109	198	0.00	1.2094	1.33283

According to the table above because the level of significant is lower than the error level of 5%, and also the lower and upper limits are positive, so the hypotheses of the mentioned average variable being more than 3 is approved. As a result positive interdependence affect more than the average the extent of attainment of students' successful learning and educational achievement.

Discussion and Conclusion

About the first hypotheses which is "students' individual response affect the extent of attainment to students' successful learning and educational achievement" shows that students' individual response affect the extent of attainment to students' successful learning and educational achievement. The result of this research is different from Rasuli and et al research named as comparing the effect of cooperative learning method and lecture on creative thinking and educational advances of career an technology course for the third grade female students in Yazd which showed that strong, average and weak students are different in academic achievement in terms of intervention in creative thinking. The extent of change in weak students because of intervention is more than strong and average students. Strong, average and weak students are different in academic achievement in terms of intervention in creative thinking.

About the second hypotheses of the study which is "social skills affect the extent of attainment to students' successful learning and educational achievement" shows that social skills affect the extent of attainment to students' successful learning and educational achievement. The result of this study was consistent with the result of the study conducted by Eslamian and et al named as comparing the effectiveness of group discussion teaching method and lecture on students' learning and satisfaction of teaching in theology and way of life course shows that average learning score of the students in group discussion method was significantly more than lecture. The average satisfaction score of students from teaching in discussion group method was significantly more than lecture.

About the third hypotheses of the study " face to face interaction affect the extent of attainment to students' successful learning and educational achievement" shows that face to face interaction affect the extent of attainment to students' successful learning and educational achievement. The result of this study is consistent with the study conducted by Sheikhi Fini and et al named as the effect of cooperative teaching method with focus on students are learning on students' educational achievement in theology and way of life course shows that cooperative learning lead to students' educational achievement and the differences between boys and girls students' educational achievement average score was significant.

About the fourth hypotheses of the study "positive interdependence among students affect the extent of attainment to students' successful learning and educational achievement" the result shows that positive interdependence among students affect the extent of attainment to students' successful learning and educational achievement. The result of this study is consistent with the result of the study conducted by Yazdanpur named as the effect of cooperative and project teaching on Foulad shahr experiential science female students' educational achievement in statistics and mode king course shows that the statistics and mode king course based on cooperative and project teaching was very effective on students' educational achievements.

Recommendations

Regarding the result of this study the following recommendation is given:

- 1- Teachers should try to, by encouraging the students to answer in class, increase their educational achievements motivation
- 2- Evaluating the effect of continuous questioning and answering in relation to one issue to increase students' self confidence

- 3- Enhancing the teachers' lecturing power (by counseling and training classes) in order to effective learning of students
- 4- Try to create effective communication between teachers and students in order to increase students' interest in learning
- 5- Utilizing the questioning and answering method for students' better learning
- 6- Implementing the group discussion in class and evaluating its effect on students' learning
- 7- Creating an intimate atmosphere in the class in order to promote students' learning
- 8- Evaluating the effect of common interest in class on increasing the students' learning

Conflict of interest

The authors declare no conflict of interest.

References

- Arefi, M., Fathi Ajargah, C., & Naderi, R. (2009). Theoretical knowledge and professional skills of primary school teachers of learning theory: primary school teachers in Hamadan, *Journal of Educational Innovations*, 8(30).
- Keramati, D., Heidari, A. Enayati Novinfar, A. S., & Hedayati, O. R. (2010). The effect of cooperative learning on academic achievement and test anxiety science, *educational innovations*, 11(4), 83-98.
- Pakdel, L. (2014). Compare the effectiveness of traditional methods of active teaching and academic achievement in high school entrepreneurship class 6.
- Qorbani, S. (2013). New ways of teaching and learning with an emphasis on primary school, accessible in <http://sale-sheshom.blogfa.com/post/163>
- Saburi Khosroshahi, H. (2010). Education in the era of globalization, challenges and strategies to deal with it, *Islamic Azad University plains uprising*, Article 6, 1(6).
- Shabani, H. (2004). *Educational skills*, Tehran side, the eighteenth edition 6
- Stacky, M., Koushki, S. H., & Vaez, E. (2010). The relationship between thinking styles and motivation in students' math achievement, *Journal of Psychological Research*, 6.