International Journal of Business, Human and Social Sciences
ISSN: 2517-9411
Vol:4, No:6, 2010

The Effect of Cooperation Teaching Method on Learning of Students in Primary Schools

Fereshteh Afkari [1] and Davood Bagheri [2]

Abstract**—**The effect of teaching method on learning assistance Dunn Review .The study, to compare the effects of collaboration on teaching mathematics learning courses, including writing, science, experimental girl students by other methods of teaching basic first paid and the amount of learning students methods have been trained to cooperate with other students with other traditional methods have been trained to compare. The survey on 100 students in Tehran that using random sampling ¬ cluster of girl students between the first primary selections was performed. Considering the topic of semi-experimental research methods used to practice the necessary information by questionnaire, examination questions by the researcher, in collaboration with teachers and view authority in this field and related courses that teach these must have been collected. Research samples to test and control groups were divided. Experimental group and control group collaboration using traditional methods of mathematics courses, including writing and experimental sciences were trained. Research results using statistical methods T is obtained in two independent groups show that, through training assistance will lead to positive results and student learning in comparison with traditional methods, will increase also led to collaboration methods increase skills to solve math lesson practice, better understanding and increased skill level of students in practical lessons such as science and has been writing.

.

Keywords**—**method of teaching, learning, collaboration

I. Introduction

TODAY, the cognition and taking advantage of a new method of teaching is a very important issue, which increases the efficiency of education and plays an effective role in improving the amount of learning. Students in classrooms are taught using methods which were at work 50 years ago. To get prepared as future work force, today's students should, through the application of new and innovative teaching methods, be equipped with complexities and capabilities so that when facing new and complex problems, be able to offer new and appropriate solutions. In Active and interactive teaching, the objective is to acquire scientific facts through research, thinking, discussion and logical reasoning, improving and strengthening of thinking skills. Methods suitable for interactive learning provides opportunities for the learners and allows them reflect on their own learning experiences and therefore are able to understand the contradictions between their existing understandings and new experiences and consider alternative understandings.[1]. Cooperative learning raised in the beginning of the twentieth century by John Dewey has changed to one of the permanent discussions in the area of teaching in recent years and numerous researches have been conducted in this regard. In recent decades, one of the debates among educators is how to facilitate learning and how to increase its effectiveness. Teacher is the final operator of the training programs and is considered a focal element in educational process. During training, the teacher has the opportunity to activate the students or make them passive learners.

The main role of the teacher is to create participation, cooperation, collaboration and friendship among a group of students and to teach them how to conduct effective researches. Also, teachers should focus all their efforts to make students understand that their success depends on the success of other students. [3]. Another research [4] refers to cooperative learning as a teaching technique in which students work together in small groups to achieve a common goal and not only are responsible for their own learning, but also feel responsible toward learning of others[1] . According to Cohen [4] collaborative learning doesn't mean grouping students based on their similar abilities. On the contrary, the more heterogeneous is the group in terms of race, language, culture, intelligence and academic achievement, the more effective the cooperative approach to learning would be, so that students can work together and maximize their own learning and others' learning and also take pleasure from learning. [5] Based on the review of the results obtained from more than 500 research studies on methods of education, assistance is an effective teaching strategy and the best argument for the efficacy of this approach is that individuals increase cognitive skills through it [5]. Some teachers are not satisfied with the strict environment of their classes and complain about lack of motivation and interest in their students. The proposed suggestion to improve this condition is an appropriate teaching method [6].

Iran's Research and Educational Planning Organization which also believes in the usefulness and benefits of technology, has used cooperative learning in a number of student and teacher training courses [7]. While cooperative learning methods are completely different, they all have something in common and that's to encourage students to work in small groups to help them learn materials. In cooperative learning some complementary activities may be carried out such as providing background information about the subject given at the beginning of the teaching or practicing the skills introduced by the teacher. In some cases, cooperative learning requires exploration and discovery of information by the students themselves.

[1]Faculty Member, Islamic Azad University, Ashtiyan Branch
[1] E-mail: fereshteh_afkari@yahoo.com
[2] E-mail: dbagheri348@yahoo.com

1.1. Research background

According to researches conducted, cooperation teaching method has some advantages including raising the power of expression and raising the power to comment and because this method is a subset of exploratory methods, it enjoys all of their advantages such as strengthening students' intellectual ability, increasing internal motivation, and bringing up creative and capable people [8].

Learning through cooperative teaching method improves students' academic performance and helps them use their own knowledge effectively and slightly remove their learning defects in the first session and learn the subject better. The time spent in cooperative learning is half of traditional learning and due to savings in time there is an opportunity to implement reform education and bug fixes in the classroom. Therefore, cooperative learning context makes the authority of teachers clear in accordance with which they balance between meaningful educational activities and students' guided group activities to create cooperation [9]. In this regard, using traditional, old, and repetitive methods has shown a lower performance compared with new and innovative teaching methods. Importance and necessity of education and the real value of using active teaching methods is known to the planners and those involved in education all over the world. Considering the fact that elementary students have specific physical and mental needs and are interested in friendly cooperation and teamwork, it is necessary for their teachers to use these methods to activate the students and maximize their learning and make them feel responsible about learning [10]. This method also results in participation in education, so that one learning will lead to another [11].

2.1. Research Objective

This paper attempts to study the effect of cooperative learning on some courses like mathematics, experimental sciences, and writing and to compare the amount of learning students obtained using this method with other students who were trained using traditional methods.

3.1. Research assumptions

To answer research questions, the following research hypotheses were presented and tested in this study:
1) Compared to other teaching methods, using cooperative teaching methods leads to better understanding and more practical skills in science class.
2) Cooperative teaching method leads to meaningful learning and skillful problem-solving in math classes.
3) Writing skill is better in students who are trained through cooperation teaching method compared to other students.
4) There is a significant difference between the total mean of individual methods and collaboration methods.

II. Material and Methods

The in this study, semi-experimental research method was used. All girl students in Tehran in the first year of primary school were considered as the population of this study. Since the population was very large, three educational areas namely 5, 9 and 17 were selected, and from each region one school was selected using random cluster sampling. From each school approximately 34 students were randomly selected and finally a total sample size of 100 was determined.

Considering the hypotheses presented , an examination questionnaire was planned and prepared by the researcher in collaboration with the teachers who were authoritative in those areas and were teaching the courses. Reliability and validity of performance level with a smaller sample (pilot) at the level of Cronbach's alpha 0/93 is derived. The samples were divided into two groups. 50 people with teaching assistance and 50 people with traditional teaching methods (each two months) were exposed to education in science courses, mathematics and writing.

III. Results

In order to compare the two groups under the education assistance and using traditional methods, t-model for two independent groups was used and the rate of students' learning in math, science and writing was investigated and the following results were achieved.

TABLE I
T COMPARE TWO INDEPENDENT GROUPS BASED ON SCIENCE AND TRADITIONAL METHODS OF TEACHING ASSISTANCE

Course Name	research groups	The mean	Deviation of standard	rate t	degree of freedom	Significant level
science	Cooperate method of teaching	19/61	0/85	6/9	32	0/01
	Traditional method of teaching	12/58	4/1			
Mathematic	cooperate method of teaching	19/62	1/18	7/33	30	0/01
	Traditional method of teaching	13/4	2/93			
Writing sentence	cooperate method of teaching	18/55	1/38	6/40	32	0/01
	Traditional method of teaching	12/6	3/65			

Considering the results of this table, because t obtained in the course of Science Degrees of freedom 32 equal 6/9, t obtained in the course of mathematical degree of freedom 30 equivalent 7/33 and t obtained in the course of writing with a degree of freedom 32 equivalent of 6/ 40, which is in alpha 0/01, all t equal table 1/96 are larger, can be concluded that the 95 confidence, no significant difference between mean scores of science, math and writing, including assistance in two ways. With emphasis on the average of the two groups can be acknowledged that collaboration method in comparison with traditional methods in the course of science, math and writing, including the impact on learning is more positive.

TABLE II
T TWO INDEPENDENT GROUPS TO COMPARE TOTAL SCORES BASED ON TRADITIONAL TEACHING METHODS AND COLLABORATION

research groups	The mean	Deviation of standard	rate t	degree of freedom	Significant level
Cooperate method of teaching	19/11	1/22	11/84	98	0/01
Traditional method of teaching	12/86	3/55			

The results indicate the table is that no significant difference between mean scores in both traditional methods and assistance there. So that t unhandy rate (11/84) at the level of alpha 0 / 01 has been significant. With emphasis on the average two groups can be concluded that the method of collaboration compared with the traditional method increases the learning rate.

IV. Discussion and Conclusions

Considering the findings of this study, there is a significant difference between the mean of scores in these two groups. Students who were trained with the assistance method, had better understanding and more practical skills in science class and scored higher in this course. The findings of this study are in line with the results of other studies in that collaboration has some benefits such as raising the power of speech, raising the power to comment, strengthening students' mental abilities , and making them creative and curious [8].

Hence it is better for the teachers in the science classes to assign students to practical skills as teamwork and by doing this make the science concepts and experiments easier and more understandable to their students.

Also there is a significant difference between the mean of math scores between the students in collaboration and traditional groups. Students who were trained with teaching assistance scored higher compared to the students who were taught using the traditional approach. Therefore, teaching assistance has a desirable effect on learning math. This result corresponds to what other researchers have achieved, that is using collaboration teaching method in math classes can create interest, confidence, and mental abilities in students [12]. So teachers can teach lessons in a manner of mathematical teaching aid by forming groups of students to promote their learning level. Finally it was determined that there is a significant difference between the mean scores of students in writing classes. Students trained by collaboration method obtained higher scores compared to students trained using the traditional method. Therefore, collaborative teaching can positively influence students' writing skills. Teachers should efficiently employ this method by forming student teams that include both strong and weak students and encourage them to collaboratively write single sentences and compositions. The results of the researches carried out in this area specify that there are some benefits in collaborative teaching, including raising the power of thinking, increasing confidence, and developing a sense of team spirit in learners, and these results correspond to the results of this study[9], [13]. The positive effects of collaborative teaching methods confirmed in other studies [14] and the results of other studies in this field showed that the use of collaborative teaching also leads to a tendency toward solving difficult tasks to achieve a goal, long-term retention of what was learned, and at higher rates, to logical reasoning and critical thinking [15], [16].

According to the findings from the overall analysis of the subjects, it was generally determined that in all lessons the scores of students under the collaboration method were higher than those obtained by students under the traditional approach and this difference has been significant at alpha level of 0/01.

References

[1] Alice, Susan and colleagues, Rastegar, T. Malekan, M. (2007). Introduction Cooperative learning. Published straw, Tehran.
[2] Shabani, H. (1999). skills, education, Samt publication.
[3] Mehrmohammdi, M. (1995) new patterns of teaching and creativity, Journal issues, education, no. IV.
[4] Keramati, M. (2003). Look at new and different approach to cooperative learning, training regulations, Mashhad.
[5] Johnson. D.W., Johnson. R.T. & Smith. K.A. (1998). Cooperative learning returns to college, what evidence is there that it works.
[6] Aghazadeh,M. (2007). guide new methods of teaching, Tehran: Publication Aeezh.
[7] Sarkar Arani, MR. (2001) Japan Education, Publishing and the International Scientific Cooperation Office.
[8] Hamedikhah, A. (1998). Evaluation of teachers using active teaching methods comparing the results of their academic performance in elementary science teaching Tehran, MSc thesis.
[9] Rauf, A. (1999) teaches to teach, Amir Kabir Publications, Tehran.
[10] Afkari, S, (2002). Review the effectiveness of aid projects in the academic achievement of high school three areas of the city of Kermanshah MA thesis, History and Philosophy of Education, Islamic Azad University of Arak.
[11] Jafar-zadeh, H.K. (1995) to evaluate the efficacy of cooperation in the education area, school geography university master's thesis.
[12] Tahmasebi, A. (1999). through collaboration learning model for teaching complex scientific school of Persian Literature Persian Language and Literature Education, Ministry of Education, Office of education in Kurdistan province.
[13] GhaniFar, H. (1995). The usefulness of passive and active methods of education, master's thesis.
[14] Sedgh poor, S. (2008). Establishing control and strategic guidance for youth groups, community education, master's thesis.
[15] Rahbarnezhad, Y. (2001), Evaluation of Curriculum Test Elementary Persian II base, research and planning organization textbooks.
[16] Gilaks, M. Mary R. (2007). Cooperative learning in mathematics education, thirty-fifth Mathematics Conferences.