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EFFECT OF STUDENT TEAMS ACHIEVEMENT DIVISION (STAD) ON
PARAGRAPH WRITING SKILLS OF ELEMENTARY STUDENTS

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ABSTRACT

It has been observed in Pakistan that students of public schools face difficulty in learning of English. There are multiple reasons which can be attributed to this deficiency. Learning of English requires proficiency in listening, speaking, reading and writing. In this article the researcher is focusing on the writing skills as at Elementary level the evaluation process is mainly based on this skill. Therefore, the researcher aimed to identify the effect of Student Teams Achievement Division (STAD) on paragraph writing skills of elementary level students. It was a quasi experimental study in which two tests pre and post were used as instruments for the collection of data. Fifty five students of grade seven comprised the sample of the study. In which thirty students were in the experimental group and twenty five in the control group as intact groups were taken. Duration of the treatment was eight weeks. STAD and traditional teaching were applied as two different methods for students in experimental and control group. Data was analyzed through t-test. The results revealed that test scores of students in experimental group improved more rapidly than those in control group. Thus, it was concluded that in comparison with the traditional teaching STAD teaching proved beneficial and enhanced the students' performance in English paragraph writing.

Introduction

Writing is an established way to communicate in any language. Through communication one organizes and expresses thoughts, perceptions, and emotions. It also helps to develop technology for learning and knowledge laden way of life. Knowledge is the epitome of understanding, comprehending and producing text in written and oral forms.

Writing is one of the essential skills to be acquired in order to communicate in a language. Reading and writing are the two active skills of a language and occur one after the other in a systematic fashion respectively. The organizational abilities required for language learning mainly depend on writing skills of the learner (Byrson, 2003).

According to Berman & Cheng, 2010 writing has proved to be the most difficult skill for the students to master as compared to the other three language skills. A written paragraph can be in the form of text both narrative and descriptive. The writing skill is supported by reading skill as it complements the language proficiency. There are many ways of teaching writing skills which have been used time and again and proven fruitful. Kagan & High, 2002 stated that cooperative learning can be used to develop writing skills in students.

With reference to Innovative learning, 2009 the Student Teams Achievement Division (STAD) is one of the forms of cooperative learning. In STAD the students are divided in study groups of four to five heterogeneous members in each group. These groups are labeled as teams. The students in each team have diverse background and ability.

STAD vs Traditional Teaching

In STAD students work in groups and four to five students information sharing is richer in resources than a single student's resource. Multiple minds in a group have better chances of problem solving as different strategies can be applied as compared to a single brain working in isolation. Sharing of thoughts among group members lead to better understanding of self and others through communication regarding different ideas and possibilities. ("Advantages of STAD," 2013).

Components of STAD

Salvin, 2009 proposed the following five components of STAD:

a. Presentation by the teacher

The lesson planning is done by the teacher which is carried out in an organized way in the form of teaching and explanation. The students actively interact with the worksheets which are presented during the lesson and they have to complete them in order to accomplish the assigned tasks.

b. Students work in groups

The students work in mixed ability groups of 4 to 5 members. At this stage students learn to work together, share ideas to achieve a combined goal. All the members of the group have to be involved in the worksheets in order to accomplish the task and gain individual score as well. This is an opportunity for peer learning as no student in the group is allowed to remain passive as in the next stage they have to score individually on the test related to the task.

c. Assessment

After the group activity the students attempt a test of the assigned task individually without any form of support from the other group members or teacher. Here the individual's competence is assessed and the score for each member adds up to the scoring of the group and the comparison between the scores on different tasks reveals the improvement of the individual student as well as the group consecutively.

d. Improvement in every student's scores

This relates to the premise that as every student is given feedback on the test in a group this gives each student the motivation to work harder for the next assignment and increase their individual score which will lead to the higher scoring of the group. The score of each student is compared with his/her base score of the previous task and if the present score is higher than the base score only then he/she will be able to contribute to the group score.

e. Awards to the groups

In each group the members get rewarded in the form of certificates or their names are put up on bulletin boards if their group attains the scoring criteria. The teacher is responsible for rewarding the members of the winning groups. Thus making the students realize the value of collective effort and mutual accomplishment which boosts the morale of every student to put in his/her share of score to meet the criteria of group evaluation. In this effort the high achievers help the average and below average students in understanding and accomplishing the task to gain good score.

Different research studies pertaining to the application of STAD provided an empirical evidence to support the current study.

Mustika (2015) tried to improve the writing skill of third grade students through STAD. Their research concluded that the descriptive writing skills of students improved when they worked in small groups made on heterogeneous abilities.

Hayatunisa (2014), in a case study reported that STAD was useful for the students both in Education and social life. It also helped to encourage students in learning more.

Makkasau & Hafid (2013) in their study found that the activities of both teacher and students improved through STAD.

Alijaian (2012) conducted an experimental study using STAD and found that the experimental group was better in terms of English achievement than the control group.

In 2008 Muhammad, Nair & Fletcher used STAD in a quasi experimental research for improving the writing skills of Pre-University students. The treatment was for eight weeks. It was concluded that STAD yielded better results than conventional teaching.

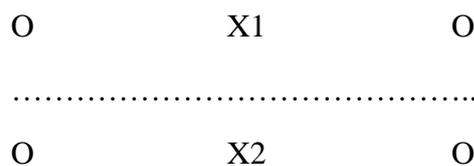
Hypothesis of the study

H₀: There is no significant difference between the paragraph writing skills of students taught through STAD and Traditional teaching.

Methodology

In this study, quasi experimental research with static pretest-posttest design was used. For the sample of the study two intact groups were taken. To know the paragraph writing skill of the students, pretest was used. The treatment group was taught through STAD method whereas the control group was taught through traditional method. Posttest was applied after receiving the treatment.

The following diagram shows the study design.



(Frankael, 2012)

Two groups from class seven were already formed and in this diagram, they are indicated through dashed line. X, here, indicates treatment, hence, X1 and X2 symbolize two different treatments i.e. STAD method and traditional method of teaching. The symbol O indicates before and after the treatment.

Treatment of Experimental Group

There were 30 students in experimental group which were equally divided in six groups. So total six groups with five students each, comprised experimental group. All the six groups were mixed ability groups as the students of above average, average and below average ability level were selected as representatives to form equal mixed ability group level. The students were labeled after the letters of alphabet. To maintain the record of each student’s score in a group, a team summary sheet was developed. The score of pretest by each student was recorded as base score.

a. Teaching

For the purpose of teaching, period of English was selected from timetable. Each lesson was distributed in four days period timing of 40 minutes. The days were named as day 1,2,3 and 4 divided for teaching, team study, test and team awarding respectively. The different topics of the lesson consisted of parts like topic sentence, main idea, five to seven sentences related to topic, closing sentence, punctuation, spelling and indenting.

b. Team Study

The team members worked in groups and helped each other in understanding the lesson during group task. The students could use worksheet to practice writing skill. In order to work in team and help group members, only one worksheet was given to each group.

c. Test

In a 40 minutes period, on every third day of the lesson, a test (individual quiz) was taken. These tests/quizzes were properly checked and scored as per assessment.

d. Improvement points and Team Score

To find an average score, individual improvement as well as team scores were calculated. The base scores through tests were the basis for students to score points for their teams. The points of improvement were given to the students according to their base scores.

The basic objective to use base score and improvement points was to encourage the students to work harder to get good score for their teams as compared to their past achieved score as the awards were given on the basis of present scores only.

Team summary sheets were used to record each member's improvement points. These sheets were used to calculate and then to divide the team members' improvement scores by the total number of working team members.

The teams were given three types of awards on the basis of average scores of the whole team. They were labeled as good team award, great team award and then super team award.

e. Awarding the Team Certificate

The awards of good team, great team and super team were given after calculation of team scores. The awards were in the form of certificates. The teams who could not score well were also encouraged to perform better in next lesson.

f. Starting the next lesson

Similarly, next lesson was also set, with same sort of activities and scoring formula as used in the previous one. The students participated actively and performed well in the given activities.

Procedure of study for Control Group

The control group was also taught eight lessons in eight weeks using traditional method. Each lesson was delivered in four days as it was divided in four days for experimental group. Duration of the period was 40 minutes. The teacher in control group was another teacher. The first day was for teaching of lesson, second day was the day of partial recapitulation (oral revision of some parts of paragraph) and generalization (explanation of the parts of paragraph by asking students to provide examples with sentences). Third day was the day for application of gained knowledge (asking students to write a paragraph on the given topic). Recapitulation was done on the fourth day. All the parts of paragraph were revised for the students.

Results

Pretest was administered to know the writing ability of the students at elementary school level. Table 3.1 identifies the paragraph writing skills of students at elementary level.

Table 3.1: *The pre-test scores of students in experimental and control group*

Dimension	N	Mean scores	S.D
Pre-test of Exp. group	30	5.48	1.70
Pre-test of Cont. group	25	4.84	1.43

Table 3.1 shows the scores achieved by the students of experimental and control group before the treatment. Out of total score of 28, the students of experimental group scored 5.48 and the control group scored 4.48 revealing very low scores on the part of both groups which indicate the need to improve paragraph writing skill by the students.

Table 3.2 reports the results of application of STAD method for improving paragraph writing skills of class seven students.

Table3.2: *Paired samples t-test of Experimental Group*

Dimension	N	Mean	S.D	df	t-value
Pre-test	30	5.48	1.70	10.93	19.83
Post-test	30	16.42	2.90		p=.000

Level of Significance 0.05

Table 3.2 reveals the mean score of the students in the experimental group both in pretest and posttest. It shows the significant difference in the scores

achieved by students before and after the application of STAD method. The difference in mean was 10.93 with 0 p value. The level of significance was 05 (t-value = -19.26, $p = .00 < 0.05$). This difference revealed the gradual improvement in the skill of paragraph writing of students in the experimental group.

Table 3.3 displays the analysis of students' scores before and after learning through Traditional method in control group. To see the difference in paragraph writing skill of students before and after the application of treatment paired sample t-test was used. By using paired sample t-test mean scores of the students in pretest and posttest were compared. Table 3.3 shows the mean scores of pretest and posttest of the students in the control group.

Table 3.3: *Paired samples t-test of the Control group*

Dimension	N	Mean	S.D	df	t-value
Pre-test	25	4.84	1.61	5.14	9.73
Post-test	25	9.98	2.13		p=.000

Level of significance 0.05

Table 3.3 shows that the students in the control group showed the difference in mean by 5.14 at $p = .000$. This reveals the students' improvement in paragraph writing by the control group.

Table 3.4 highlights the comparison of STAD method with Traditional method on paragraph writing skills of class seven students.

Table 3.4: *Independent samples t-test*

Dimension	N	Means	S.D	df	t-value
Post-test. Ex. gr.	30	16.42	2.90	6.44	9.22
Post-test.Con.gr	25	9.98	2.13		p=.000

Level of significance 0.05

To compare the effect of STAD method with the effect of traditional method on the paragraph writing skill of the students, independent sample t-test was administered on posttest of experimental and control group. The result of mean score of posttest shows difference in the posttest score of the students of experimental and control group. It also indicated that both experimental and control group students improved their paragraph writing skills.

Conclusion

The difference between scores of posttest in both the groups was significant favoring STAD method. Although both traditional and STAD

methods had their effects on the writing skills of the students, yet the students taught through STAD method showed better performance.

Discussion

The study was conducted in Govt. Middle School Marghuz (Swabi). A certified teacher taught the groups through traditional method, whereas STAD method was applied by the researcher herself. The observation of the whole experiment was done by these two teachers. The sample size for the study was 55 students that is quite enough sample size for experimental research. A sample of 59 students was used in the experimental study of Abbas (2010) who concluded that experimental group produced better results than control group. The treatment lasted for eight weeks. Tran (2014) also conducted an experimental study comprising eight weeks. He concluded that students' mental process can be motivated, knowledge can be enhanced and success can be increased by cooperative learning.

The findings show that STAD had significant effect on the students of class seven in paragraph writing skills. The results of the study are familiar with the results of other studies except a study by Ishtiaq, Ali & Salem (2017). They concluded that STAD method did not have any significant effect on the learning of students. This was due the study time duration that was only two week, otherwise, STAD method was found better than traditional method.

Teaching learning process has different areas and clarification of ideas is one of them. STAD method as a method of cooperative learning focuses on this area as students work in teams and express their ideas with their team members. Dunn (1997) cited in Gokman (2009) that students explain their ideas and doubts on any topic in a calm situation, using cooperative learning methods. It also helps the students in involving in learning activities and improving their performance. Drakford (2012) found out that cooperative learning can be helpful in learning process regarding students' involvement. STAD method encourages students to help each other in a team. Johnson & Johnson (1992) listed the benefits of group, in which the students judge their own understanding, work for group success, develop important social skills, get group involvement feedback and present the importance of team work. This method is useful for solving problems and developing confidence in the students. Yumi & Erina (2015) resulted in their study that cooperative learning enhances self-confidence towards writing. It is also useful in creating friendly environment. Gambari, Yusaf & Thomas (2015) concluded their experimental study by stating that cooperative learning is found more effective and friendly in comparison to individualized computer instruction. Najmunnisa, Haq & Saad (2015) stated that cooperative learning methods are very helpful for teachers in developing their teaching experiences.

Recommendations

The better results demand teachers to be involved in teaching learning process more actively. The teacher is required to observe and guide the students where it is needed. Cooperative 'learning methods especially

STAD method requires a lot of time to consider duration of period for lesson sequence. The same method can be used for improving descriptive or narrative type of writing. The method can also be used for adult teaching. One thing is very important in this regard that the students need to be trained in advance how to use this method. The members of different groups develop a sense of competition. The teacher should be careful that jealousy may not be developed between groups. This study was for improvement of both descriptive and narrative writing but letter writing story writing, dialogue writing in the subject of English may also be enhanced using this particular method of cooperative learning.

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