

Analysis of the Practice of Cooperative Learning Strategies in Academic Achievement in Secondary School in Wolaita, Southern Nations Nationalities and Peoples' Regional State, Ethiopia

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Abstract

The purpose of this study was to assess the practices of cooperative learning strategies to student achievement in secondary schools of Wolaita Zone. To achieve this purpose the study employed descriptive survey research design by considering 6 secondary schools comprised of 125 teachers and 200 students as sampled respondents. Both secondary and primary data were collected. The result of the study indicated that cooperative learning students are not actively participating in the approach; school leaders don't continuously evaluate the process and its implementation preparing of checklist and also its implementation students were participated unsatisfactory. The major challenges that affect the implementation of cooperative-learning approach were existence of overcrowded classroom, inadequate supervision and lack of interest, lack of skill and ability of teachers, inadequate instructional material and inadequate commitment from teachers. Regarding to the contribution of cooperative learning students who appropriately learned through it their academic achievement is highly performed. As indicated students result in the schools successful implemented and which not efficient practiced cooperative learning were not continuously increased it's showed that collapse up and down. Based on these findings school leaders shall continuously evaluated and assess the teachers in order to give appropriate feedback for the implementation of cooperative-learning approaches; the school leaders should create awareness students to be interested and teaches should provide meaningful feedback for students daily activities or group work were recommended.

Keywords: Cooperative Learning, Academic Achievement, Secondary School

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1. Introduction

Education improves the productive capacity of the society and their political, economic and scientific institutions. To achieve its goals, the teachers give emphasis on teaching through diverse methods in order to improve learning and understanding. One of these is cooperative learning method, which presumes that team effort of students towards single goal of learning a particular aspect result in more understanding than solo efforts. Cooperative learning encourages students to support their classmates in a group rather than to compete against one another. In this way, students can combine their talents and help one another. In classrooms where the students are divided into cooperative teams, each with its high-and low-achieving students, the opportunity to succeed is more evenly distributed (Sonthara & Vanna, 2009). Cooperative learning increased cooperation, social skills, performance, motivation, and retention of knowledge (Davidson & Major, 2014).

Regarding challenges of cooperative learning approach Bullard and Felder (2009) pointed out that access to information resource, lack of methodological skills, lack of school facilities, class time, teacher's competency, student resistance, school principal's leadership, supervisor's competency. In class, time constraints are a major barrier to using learner-centered strategies. Teachers are often concerned that using active learning the class room while reduce the amount of information that can be converted in a given course (Krueger & Whitmore, 2002). In addition, challenges are connected with the cooperative learning improper class room organization, lack of necessary teaching materials, well trained teachers (Plass, 1998 & Lue, 2000, as cited in Hagose, 2012).

There are so many factors that determining cooperative learning particularly in the secondary schools levels is the most important services in maintaining and improving quality of education because teachers and students at this level require higher technical support. Thus, it's with this information that the researcher initiated to carry out study on the investigation the practices, challenges and contributions of cooperative learning strategies to student achievement at secondary school level. Among major contributors to the quality education Practices of Co-operative Learning in Secondary Schools of Wolaita Zone is the major one.

2. Objectives of the Study

General Objective

The general objective was to analyze the Practice of Cooperative learning strategies in Academic Achievement

in the study area.

Specific Objectives of the Study

1. To identify the perception of cooperative learning strategies for secondary schools classrooms in the study area.
2. To explore the factors affecting the effectiveness of cooperative learning implementation for the of students' academic achievement in the study area.

3. Methodology

Sources and Methods of Data Collection

Both primary and secondary source of data were employed in this study. Primary data were collected from teachers, principals, supervisors and students in sampled secondary schools of Woliata Zone, because they are directly involved and concerned bodies for the issue under the current study. The questionnaire was developed as required level to obtain information on the practices of cooperative learning practices perception. The secondary data sources were annual reports and related documents such as minute's and student grade report to assess achievement.

Sampling Techniques and Sample Size Determination

The target populations of the study were secondary school principals, supervisors, teachers and students. The researcher used the guidelines given by Orodho and Kombo (2000), to employ sampling techniques sample size determination. In Wolaita Zone, there are 12 woredas and 3 administrative towns, with total of 62 general secondary schools. Among these 3 Woredas and Sodo town administration was selected by using simple random sampling techniques. These selected woredas such as Kindo Didaye, Kawo Koysha, Ofa and Sodo Town were selected by using simple random sampling techniques which is the best way to get representative samples because of giving equal chance to sampling frame.

In the selected Woredas and town administration, there were 9 secondary schools out of which 6 schools were selected by using simple random sampling method. These secondary schools include: Gocho, Lasho, Mure, Yakima, Arada Hidasiya and Sodo secondary schools (see Table, 1). In these selected secondary schools, there are 250 teachers, 2100 students and 14 principals. By using proportionate methods suggested by Orodho and Kombo (2000), 125 (50%) of the teachers, because of researcher believed that to get sufficient information about, 210 (10%) of the students and 14(100%) of the principals were selected to be the participants of the study. Moreover, 4(50%) of supervisors were included in the study. Additionally, focused group discussion was used in this study because of gaining insight into ways in which people share their knowledge and argue their different points of view (Best & James, 2004). In this method researcher was used two set of focus group discussions (FGD) and held totally with 14 persons (each FGD include 7 individuals) purposively from the target population (Byers & Wilcox, 1991). A focus-group discussion guide consisting of 5 semi-structured items were developed by the researcher. A descriptive method of data analysis was employed. Descriptive analysis was used to explain, compare, interpret and accordingly to arrive at conclusion of the study.

4. Results and Discussion

The Perception of Cooperative Learning Strategies

As revealed in the table 1, the respondents were requested to show their level of agreement about cooperative learning practice to implement it successfully or not. The computed mean score of agreement level about cooperative learning for teachers was 2.20 with standard deviation of 1.07. This indicates the teachers were disagreed about level of agreement about cooperative learning approach. This result implied as the failures of teachers' commitment and strong participation have a strong contribution to students' academic achievement. With no question, committed teachers are role models for their students. Teacher's practice has an influence on students' day to day life as well as in their focus of receiving recital ideas for their learning.

Whereas the calculated mean of students was 3.16 with standard deviation 1.11 and revealed that their level of agreement about cooperative learning practice to implement it successfully was medium level on cooperative learning implementation. This implies that students in the sampled secondary schools have better practices to implement the cooperative learning. *According the study of Johnson & Johnson, 2010, the successful implementing of cooperative learning was promoting interaction or the willingness of group members to encourage and facilitate each other's efforts to complete their tasks in order for the group to achieve its goal. He also added that cooperative learning promoting interaction with students: providing each other with the help they need; sharing needed resources; providing effective feedback to group members on their performances on specific tasks*

On the other hand, the calculated t-test value ($t=-4.48$, $p<0.05$) showed that there is statistically significant difference between the teachers and students about the cooperative learning practical implementing practices in

the schools under study. Therefore, it is possible to infer that cooperative learning practice implementation in the school is unsuccessfully.. *In addition, one of the interviewed supervisors's asserted that:-*

Regarding the cooperative learning practice most of the schools don't implement according to its standard, during classroom instruction majority of teachers using explanation method and they are put in to practice during inbuilt supervision. This is due to try to find results. In general, cooperative learning practices are only the paper value, i.e. majority of the teachers included in their daily plan, however, they don't implement according to what they have planned.

On the concern of the classroom personal commitment whether to use or not, the result mean score of teachers was 3.37 with standard deviation of 1.44 and the result mean score of students was 2.93, SD=.944. The result indicates that during cooperative learning practices in the classroom personal commitment to use it was at medium level for both teachers and students. Therefore, one can realize that cooperative learning practices in the classroom using personal commitment were progressive. Similarly, other advantages of cooperative learning are student anxieties are lowered and self-confidence and self-esteem are increased (Crandall, 1999). Interview participant of principal pointed out that:-

Most of the time school leaders tried to arrange students in cooperative-learning groups; however, in the classroom teachers are not efficiently practice. This is because teachers think as cooperative learning approach is additional activities in the teaching learning-process, therefore; they may need addition incentive to implement it. Therefore, this indicated that cooperative-learning approach was not appropriately implemented in the study areas. From this one can recognized that lack of awareness about cooperative-learning approach among school community in the schools under study.

With regard to the computed mean score of teachers on the agreement level about determination of group size was 2.48 with standard deviation of 1.27. This indicates the teachers disagreed about the determination of group size and assigning students to groups. The computed mean score of students on the agreement level about determination of group size was 3.20 with standard deviation of 1.12. This tells us that the student's agreement level about determination of group size was medium. Based on the calculated mean score, there was statistically significant difference between the teachers and students on the determination of group size and assigning students to groups the level of significance of $p < 0.05$. The data showed that while teachers during cooperative learning approach don't determine group size and assign students to groups.

The calculated mean of teachers on the concern about cooperative learning approach summarizing the main point at the end of the group discussion at medium level was 2.35 with standard deviation 1.12. The result fallen the interval of disagreement level on the issue and while students mean was 2.90 with standard deviation 1.29. This indicated that cooperative learning teacher summaries the main point at the end of the group discussion at medium level. In the same way, the calculated t-test value ($t = -2.36$, $p < 0.05$) showed that there is statistically significant difference between the two respondents on the issue. One of the interviewed principal pointed out that:

During cooperative learning practices in the classroom teachers promised to implement their planning about the summary of the main point at the end of the group discussion, but this doesn't apply in the classroom. Moreover, majority of teachers tell to students to discuss further seriously. This shows that in the schools under investigation cooperative learning practices carried out nominal without considering its contribution for students learning and their performance.

As it can be seen in Table 4.3 item 5, asks for during cooperative learning implementation students are actively participate or not, the computed mean score of active participation of students during cooperative learning implementation for teachers and students was mean with standard deviation respectively 2.73, 1.36, 2.93 and .944. The result showed that during cooperative learning implementation students are moderately participate at the significance level of t- value of 0-.769, $p > 0.05$. Therefore, one can understand that during cooperative learning implementation students were participated unsatisfactory. According to (McCollin, 2000) most of the time students resist when approach to learning is at odds with how the information is organized or is being presented. Students who are accustomed to passive participation in a classroom may resist having to activity engaged in group projections or discussion. Teachers may fear the lack of student will caused active learning new teaching techniques and prefer to fall back on a comfortable lecture and test formant.

Table 1 Perception of Cooperative learning

Items	Respondents				t-value	p-value
	Teachers (N=122)		Students (N=200)			
	Mean	SD	Mean	SD		
Cooperative learning has been practical enough to implement it successfully	2.20	1.07	3.16	1.11	-4.48	*.000
Personal commitment to using cooperative learning	3.37	1.44	2.93	.944	1.61	.108
Teacher determine group size and assign students to groups	2.48	1.27	3.20	1.12	-2.89	*.004
Teacher summaries the main point at the end of the group discussion	2.35	1.12	2.90	1.29	-2.36	*.019
During cooperative learning implementation students are actively participate	2.73	1.36	2.93	.994	-.769	.443
There is a follow-up mechanism of students' participation in cooperative learning group	2.10	.897	3.00	.909	-5.02	*.000
Most of the time teachers use cooperative-learning approach in the classroom	2.09	1.01	2.83	.985	-3.70	*.000
During the implementation of cooperative learning teachers circulate throughout the classroom, visiting each group	2.03	1.07	3.10	.994	-5.04	*.000
Students helps each other during cooperative-learning	2.12	1.20	3.16	.874	-4.50	*.000
Allow students to report their findings	2.61	1.00	3.06	.907	-2.29	*.023
Encourage students to work collaboratively with other students	3.16	.874	2.12	1.20	-4.50	*.000

Key: SDA= Strongly Disagree (1.00-1.49) DA= Disagree (1.50-2.49) M= Medium (2.50-3.49) A=Agree (3.50-4.49) SA=Strongly Agree (4.50-5.00). M- is mean, SD- is standard deviation, t-is independent sample t-test and p-value. Significance level=0.05, *=Significant at $p < 0.05$, not significant at $p > 0.05$.

The Challenges of Cooperative learning

As cited in Chemere H. and Ashebir B.(2018), cooperative learning is currently an accepted and highly recommended instructional procedure at all levels of education. As described in the table 2, the major challenges significantly affecting secondary schools in implementing cooperative learning strategy were students resistant to working in cooperative groups, difficulty of implement successfully; Lack of interest affects the practice of cooperative learning and Lack of awareness about cooperative learning implementation and its advantage.

The respondents asked for students are resistant to working in cooperative groups and on this concern the computed mean score with standard deviation of teachers and students respectively 2.60, 1.37 and 2.32, 1.21. This reveals that the teachers are resistant to working in cooperative groups moderately and the students are resistant to working in cooperative groups low. There was statistical significant difference between the two respondents on the issue. Therefore, one can understand that students are resistant to working in cooperative groups are unsatisfactory.

Again the respondents requested to rate the difficulty to implement successful cooperative learning. Then, the computed mean score mean score with standard deviation of teachers and students respectively 2.61, 1.35 and 2.26, 1.20. This shows that the teachers are cooperative learning is too difficult to implement successfully moderately and the students are cooperative learning is too difficult to implement successfully low. There was statistical significant difference between the two respondents on the difficulty of cooperative learning is too difficult to implement successfully. Therefore, one can understand that cooperative learning is too difficult to implement successfully are unsatisfactory.

Following the same fashion the computed mean score with standard deviation of teachers and students on lack of interest that affects the practice of cooperative learning respectively 2.05, 1.10 and 2.53, 1.67. This shows that the teachers are cooperative learning is too difficult to implement successfully moderately and the students are cooperative learning is too difficult to implement successfully low. There was statistical significant difference between the two respondents on the difficulty of cooperative learning is too difficult to implement successfully. The results showed that the lack of interest affects the practice of cooperative learning moderately.

Table: Challenges to implement cooperative learning in school classrooms

Items	Respondents Type				t-value	p-value
	Teachers (N=122)		Students (N=200)			
	Mean	SD	Mean	SD		
Cooperative learning to create too many disciplinary problems among students	2.46	1.40	2.23	1.18	.908	.366
Students are resistant to working in cooperative groups	2.60	1.37	2.32	1.21	1.06	.001
Implementing cooperative learning takes too much class time	1.76	.817	2.11	1.16	-1.55	.123
Cooperative learning is too difficult to implement successfully	2.61	1.35	2.26	1.20	-1.28	.009
Implementing cooperative learning takes too much preparation time.	2.23	1.16	2.35	1.33	-.451	.652
The physical set-up of classroom is an obstacle to using cooperative learning.	2.46	1.40	2.23	1.18	.908	.366
There are too many students in class to implement cooperative learning effectively	2.06	1.20	2.07	1.17	-.025	.980
Lack of administrative support inhibits the implementation of cooperative learning approach	2.22	1.20	2.12	1.15	.454	.651
There are inadequate instructional materials to practice co-operative learning	2.53	1.50	2.90	1.53	-1.21	.225
Lack of interest affects the practice of cooperative learning	2.05	1.10	2.53	1.67	-1.98	*.049
Students disciplinary problems are engaged in a co-operative learning	2.56	1.67	2.66	1.53	-.311	.756
Shortage of time to practice co-operative learning in class room	2.54	1.71	2.60	1.49	-.176	.860
Lack of awareness about cooperative learning implementation and its advantage	2.80	1.60	2.53	1.42	1.49	.061
The complexity of the subject matter affects group discussion	2.44	1.56	2.30	1.29	.467	.647

Key: VL= Very Low (1.00-1.49) L=Low (1.50-2.49) M= Moderate (2.50-3.49) H=High (3.50-4.49) VH=Very High (4.50-5.00). M- is mean, SD- is standard deviation, t-is independent sample t-test and p-value. Significance level=0.05 Significant at $p < 0.05$, not significant at $p > 0.05$.

5. Conclusions and Recommendations

Conclusions

The assessment of the practices of cooperative learning strategies to student achievement in secondary schools of Wolaita was the main concern the study and employed descriptive survey research design by considering 6 secondary schools comprised of 125 teachers and 200 students as sampled respondents. Both secondary and primary data were collected. Based on the result one can conclude that cooperative learning approach was not appropriately practice and school leaders don't continuously evaluate the process and its implementation preparing of checklist. This is due lack of awareness about its importance to enhance students' academic achievement. Hence, it needs to give due attention for cooperative learning implementation specially by making student centered approach. Study showed that inadequate arrangement classroom, lack of interest, lack of skill, inadequate instructional materials, and lack of commitment from teachers were concluded that major challenges that affect implementation of cooperative-learning approaches. Finally, the study concluded that the strategies that used to implementation of cooperative-learning approaches like providing opportunities, preparing adequate practical teaching materials, encouraging innovation of students, developing the awareness, providing short-term training on the pedagogy of teaching process and continuously monitoring and evaluating the process.

Recommendations

- Schools should prepared training guidelines about co-operative approach practices and its implementation.
- School leaders shall continuously evaluated and assess the teachers activates in order to give appropriate feedback for the implementation of cooperative-learning approaches.
- Teaches should provide meaningful feedback for students daily activities or group work.

Reference

- Calderon, M. (Ed.). (1990). *Cooperative leaning for limited English proficient students. (No. 3)*. Washington, D. C. Office of Educational Research and Improvement (ED.).
- Chemere Habtewold and Ashebir Bezabih (2018). Challenges of Cooperative Learning Scheme at Secondary Schools of Wolaita Zone
- Deutsch, M. (1999). A theory of co-operation and competition. *Human Relations*, 11, 129-152. <http://dx.doi.org/10.1177/001872674900200204>
- Dörnyei, Z. (1997). Psychological processes in cooperative language learning: Group dynamics and motivation. *The Modern Language Journal*, 81, 482-493.
- Ebel, R.L (1997), *Essentials of educational measurements (5thedi)*. New York: practice Hall Inc.
- Larsen-Freeman, D. (2000). *Techniques and principles in language teaching (2nd Ed.)*. Oxford: Oxford University Press.*learning methods* (pp. 177-192). Westport, CT:
- McDonell, W. (1992). Language and cognitive development through cooperative group work. In C. Kessler (Ed.), *Cooperative language learning* (pp. 51-64).
- McDonell, W. (1992). The role of the teacher in the cooperative learning classroom. In C. Kessler (Ed.), *Cooperative language learning: A teacher's resource book* (pp.163-174). Englewood Cliffs, NJ: Prentice Hall.
- Obinna, M.E (1997). *Learning and teaching continuous assessment Germany: European Academic publisher. Of education*. Paris: UNESCO international institute for educational planning.
- Olsen, R. E. W-B. & Kagan, S. (1992). About cooperative learning. In C. Kessler (Ed.), *Cooperative language learning* (pp. 1-30). Englewood Cliffs, NJ: Prentice-Hall.
- Slavin, R. E. (1995). *Cooperative learning: Theory, research and practice*. 2nd ed Boston: Allyn and Bacon.
- Slavin, R. E. (1997). Co-operative learning among students. In D. Stern & G. L. Huber (Eds.), *Active learning for students and teachers* (pp. 159-173). Frankfurt am Main: Lang.
- Slavin, R.E. (1996) *Research on cooperative learning and achievement what we know, what we need to know contemporary educational psychology*.