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EFFECTIVENESS OF COOPERATIVE LEARNING AND ITS ASSOCIATED FACTORS: THE CASE OF NEKEMTE COLLEGE OF TEACHERS' EDUCATION

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ABSTRACT

The study was conducted with the objective of factors affecting the effectiveness of cooperative learning in Nekemte College of teacher education. The study further examined teacher educators' and trainees' roles in the process of cooperative learning. Data was collected by using closed and openended questionnaires. The participants were selected by using a stratified random sampling technique. About 19 teacher educators and 401 regular trainees with a total of 420 participants were included in the study. Data were cleaned, edited, coded, and entered into Epi data version 3.1 and was exported to SPSS windows version 24 for analysis. Data were summarized by descriptive statistics and graphs. All variables significant at p-value <0.25 in the bivariable were entered in multivariate analysis. Multivariate logistic regression analysis with AORs, CI at 95%, and the significance level was set at p < 0.05. Qualitative data were presented in narrative forms based on the major themes of the study. The study showed that the overall effectiveness of cooperative Learning was about 58.10%. Nevertheless, 75% of the trainees valued CL due to its multifaceted benefits. Thus, to improve the effectiveness of CL the study attempted to suggest possible recommendations to tackle the impeding factors of CL in the college.

KEYWORDS: College of teacher education, cooperative, cooperative learning, learning

INTRODUCTION

Education is a social and independent process that initiates the transfer of social, cultural, political, and economic experiences of a given society to the next generation. Teaching and learning is an interactive process that requires psychological and social collaborations of students, teachers, and society to bring the intended outcome (Zhou, M. and Brown, D., 2015). The teaching and learning process happens in two major approaches. These are the Content-Oriented pedagogy which deals with the teaching-learning process based on knowledge and teacher-dominated activities grounded in the positivist philosophy of direct instruction, teacher-centered, surface approach, conventional and traditional instruction (Aggrawal, 1996). The approach put instructors as the sole expert in the classroom, students as passive receivers of knowledge, curriculum as a package of complete and perfect knowledge that must be delivered to students by direct instruction (Erickson, 1998). On the



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other hand, learning-oriented pedagogy reveals the teaching-learning process based on the needs, interests, and commitments of students" to carry out learning activities. An approach is relatively a new approach that focuses on students' learning, deep learning approach, indirect- instruction, learner-centered, conventional, and modern instruction (Unger, 1996, Tagg and Barr, 1999).

Cooperative learning is a research-based instructional strategy that meets conditions of small heterogeneous groups, students as a major resource, the teacher acts as a consultant, positive interdependence between group members, individual accountability, all members know the material and evaluate by comparison to a preset criterion (Johnson, 1994). It is an active pedagogy that promotes higher academic achievement, increase attendance, time on task, enjoyment of school and classes, motivation and independence (Roger, T. and Johnson, 1994). Cooperative learning needs students to involve in group activities ending up with positive results of academic improvements, enhanced team relations, and improved private and collective development (Brown, 2009). Another study also indicated that students who abundantly contribute in group activities, exhibit shared behaviors, provide constructive feedback, and liaise with their groups have a higher likelihood of receiving higher test scores and course grades at the end of the semester (Slavin, 1990).

The three types of cooperative learning are used in the classroom. These are formal C L, informal C L, and cooperative base group (Johnson and Johnson (1987). Research shows that workgroups allow learning social skills and school material, particularly of developing leadership and communication skills. Moreover, cooperative learning tends to improve cognitive skills and positive group relations, takes into account the higher achievers, and reinforces self-esteem. Cooperative learning encourages the acceptance of differences between students, who learn to cooperate instead of competing, and strongly favors individual initiative. In any environment, this method encourages support and commonality, good communication skills, and higher quality reasoning skills (Baghcheghi, N., 2011). Instructors have paramount importance in a learning-oriented approach. Instructors in a learning classroom have the roles of guider, facilitator, manager, researcher, and motivator of students' learning. The instructor should direct and supervise the tasks and make sure that all learners are proceeding productively. To make students booming in learning, the instructor needs to arouse their interest (Oser, 1992, Calkins, 1986).

According to Johnson et al in cooperative learning, peer relation is the positive interdependence among team members. The success of any team member leads to increased rewards in terms of grades, recognition, and superiority for the others. Students begin hoping and adopting social orientation toward their teammates. The process of the classroom is a modern approach that enables the interactions between student and students, a teacher and students more active and meaningful full, the process is communal, supportive, encouraging, and progressive (Johnson, 1984).

Cooperation is not having students sit side-by-side at the same table to talk with each other as they do their assignments, and is not assigning a report to a group of students where one student does all the



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work and the others put their names on the product. Cooperation involves much more discussing material, helping, or sharing material with other students (Smith, K.A., 1996).

Moreover, the study revealed that successful cooperative learning tasks are intellectually demanding, creative, open-ended, and involve higher-order thinking tasks. When we see competitive and cooperative learning processes are very distinctive (Ross and Smyth, 1995). The learning approach values only when it is learner-centered based on understanding than the reproduction of knowledge. Therefore, to make learning, the need, and interests of learners, how to design the curriculum, methods used, etc. must be considered (Nuan, 1998). A previously conducted study discovered that cooperative learning has Limitations from both teachers and students perspectives including the possibility that teachers become confused and lack a complete understanding of the method, teachers get into the habit of relying on CL as a way to keep students busy, while CL will consume time, Teachers also might be confronted with resistance and hostility from students who believe that they are being held back by their slower colleagues who are less confident and feel that they are being degraded by their team (Chen, L.,2015).

Furthermore, the study found that cooperative learning uses various Learning Strategies that learners practice tactics of learning either directly or indirectly. The memory and cognitive strategies consist of explaining, arguing, negotiating to mean, repeating keywords several times, and using words in actual contexts (Hill & Flynn, 2006).

According to different scholars, CL is pivotal for several matters authorizing students to demonstrate academic achievement, equally effective for all ability levels, effective for all ethnic groups, student perceptions of one another are enhanced, increases self-esteem and self-concept, ethnic and physically/mentally handicapped barriers are broken down allowing for positive interactions and friendships to occur (Bernard, R.M. and Rubalcava, B.R.D., 2000).

The current education policy of Ethiopia clearly stated that a learner-centered or modern instructional approach was accepted and activities have been going on from primary up to tertiary level education (Vavrus, F., Thomas, M. and Bartlett, L., 2011). In the implementation of learner-centered approaches, some unintended inefficiencies were observed in the instructional processes happening in a real classroom. Out of 100% continuous assessment carried out in the college; teamwork learning results are highly emphasized, while the left 40% is final examination prepared by subject teachers. Though many pieces of research show that cooperative learning is effective from various perspectives; the researchers and some of the college teacher educators are questioning the implementation and effectiveness of cooperative learning. Thus, this study was attempting to assess factors that negatively affect the implementation of team learning strategy (Freeman, M., 1995).

From these scholarly views, students are expected to gain social, attitudinal, and academic benefits from cooperative learning modes; however, in many situations of the current pedagogical processes,



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the anticipated outcomes were not realized (Veenman, S., van Bentham, N., Bootsma, D., van Dieren, J. and van der Kemp, N., 2002). Thus, this study was aimed at identifying factors affecting the effectiveness of cooperative learning in Nekemte College of teachers" education and forwarding some recommendations to solve the problem following the existing scientific approaches by devising the following research objectives.

- 1) What are factors influencing effectiveness of cooperative learning?
- 2) What are the roles of teacher educators and trainees for effectiveness cooperative learning?
- 3) How cooperative leaning effectively implemented by trainees and teacher educators?

2. MATERIALS AND METHODS

Research design and methodology are based on the purpose of the study. To achieve the objective of this research; a descriptive survey was employed as a relevant methodology with the assumption that it could describe factors that hinder the effectiveness of CL and mechanisms of enhancing its success. The use of this method is well supported by Kerlinger (1990) and Best and Khan (1996). Similarly, Cohen and Manion (1994) contend that survey inquiry gathers data at a particular point to describe the entire nature of existing conditions in the setting of the study.

2.1. Study area and setting

The study was conducted in Nekemte College of teachers" education found in western Ethiopia from May 20- November 20, 2021. It is found in the East Wellega Zone of Oromia Regional State and is located 331 km, West Addis Ababa. Nekemte town has a latitude and longitude of 9°5"N36°33"E and an elevation of 2,088 meters. Since its establishment in the 1980s, the College has been providing training in terms of the teachers' training course (TTC) and diploma level. From its foundation up to 1995, the college had been provided as a teacher's training course for 9967 males and 4423 females with a total of14,390. Afterward, the college started to provide training at diploma level and provided training for about 18051 males and 12643 female trainees with a total of 30,694 trainees. Generally, the college has been providing training for more than 45,084 trainees in the Western part of Ethiopia.

2.2. Study Design

The study employed a mixed descriptive cross-sectional method approach supported by the quantitative method. In the qualitative research approach, data were collected through observations, interviews, and document analysis and summarized the findings primarily through narrations; whereas, the quantitative data were presented numerically.

2.3. Sample Size

The sample of the study was included 401 regular first, second, and third-year student teachers and 19 teacher educators, and 420 total sample size.



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2.4. Sampling Techniques and Procedures

The sampling technique of the study was conducted by using a stratified random sampling method. In the college, there are three regulars, four evening and two-weekend batches of trainees. Out of all these trainees, only regular trainees from year one to three were incorporated in the study based on the longer time the trainees are available in the college in touch with the learning process. Accordingly; out of the total number of year one, year two, and year three 401 of them were included as it is indicated in the table by using stratified random sampling. Similarly, 19 teacher educators of the college were included in the study in the same manner. Finally, 420 study participants were included in the final data collection process as a study unit.

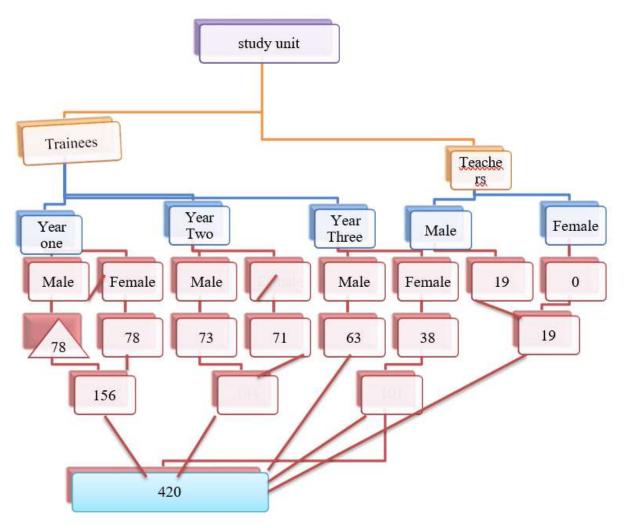


Fig 1: Sampling Procedures

2.5. Instruments of Data Collection

The data required for the study were gathered using the following data collecting tools. To collect the quantitative data closed-ended questionnaires, observation checklist was used. To collect qualitative



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data unstructured interviews, focus group discussion and observation methods were used as a data collection instrument for collecting data from selected trainers and trainees. The researchers employed focus group discussion with five teacher educators selected from different departments assuming that both common and different views were further reflected in the course of the study. The questionnaire was used as a major instrument to collect data not only because it is a popular means of collecting all kinds of data in research, but also it is an appropriate instrument to obtain information about conditions, practices, and problems for a relatively large sample study (Kumar, 1999). Before the actual data collection, a pretest was conducted on a small scale out of the actual study areas to test and improve the instruments. The pretest was used to test the suitability, clarity, relevance, and reliability of each Item. For reliability, the Cronbalcha alpha test was used and alpha results of all parts of the questionnaires were above 0.7

2.6. Data quality control

Questionnaires were prepared and used for identified trainees in Afan Oromo to communicate the message. The questionnaires administered were composed of open and closed-ended questions. The interviews were carried out by Afan Oromo, transcribed, and narrated based on the major themes of the study.

2.7. Methods of Data Analysis

Data were cleaned, edited, coded, and entered into Epi data version 3.1 and was exported to SPSS windows version 24 for analysis. Descriptive statistics including, percentage, ratios, frequency distribution, and bar graph was used to describe the data. All variables significant at p value <0.25 in the bivariable were entered in multivariate logistic regression analysis. Backward stepwise goodness of fit was used to ascertain the suitable variables in multivariable logistic regression analysis. The collected data in a qualitative manner organized, presented, analyzed, and summarized the findings primarily through narrations; whereas, the quantitative data were presented numerically. Finally, multivariate logistic regression analysis with AORs, CI at 95%, and the significance level was set at p <0.05.

3. RESULT AND DISCUSSION

3.1. Socio-Demographic Characteristics of the Trainees

Four hundred twenty trainees participated in the study giving a response rate of 401(95.48%), while 19 (4.52%) of them did not respond. Similarly, thirty-one teacher educators have participated in the study giving a response rate of 19 (61%) while the others left outside. The majority of the trainees' participants were from the first year batch with similar sex proportions while the third year batch was the least participated compared to other batches. More than half of the participants were male-dominant 63 (15.65%) out of 101(25.2%). The overall result of the study across all batches revealed that the majority of the participants were male 214(53.3%) whiles the remaining 187(46.7%) were total trainees (Table 1).



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Table 1: Distribution of general information of the trainees participated in the study inNekemte College of Teachers' Education, 2022(N: 420)

	Participants in number (%)					
Batch	М	F	Total			
First year	78(19.45)	78(19.45)	156(38.9)			
Second year	73(18.2)	71(17.7)	144(35.9)			
Third year	63(15.65)	38(9.55)	101(25.2)			
Total	214(53.3%)	187(46.7%)	401(100%)			

3.2. Characteristics of Teacher Educator Respondents

The teachers" educator respondents" sex and educational qualification were discussed. The college academic staff who are currently engaged in the teaching and learning process are 74(100%), among these 70(94.59%) are male and 4 (5.41%) are females. About one-fourth 19(25.67%) of teachers educators have participated in the study and whereas about 12(12.16%) of them did not respond to the questionnaires. Thus, the data of the research is based on 19 teacher educators" responses out of 31 teachers" educators (Table 2).

Table 2: Distribution of Teacher Educator participated in the study in Nekemte College of Teachers' Education, 2022(N: 420)

S.N	Department	Qualification	Respondents' sex				Total		
			Male		Female				
			No	%	No	%	No	%	
1	Education	MA/MSC/MEd	3	15.79	0	0	3	15.79	
2	Social science	MA/MSC/MEd	3	15.79	0	0	3	15.79	
3	Natural Sciences	MA/MSC/MEd	9	47.37	0	0	9	47.37	
4	Languages	MA/MSC/MEd	3	15.79	0	0	3	15.79	
5	Aesthetics	BA/BSC/B Ed	1	5.26	0	0	1	5.26	
Grand total		19	100	0	0	0	100		

3.3 Teachers' Understanding of cooperative learning

The result of the current study was detailed with the teacher educator's understanding of cooperative learning effectiveness. The descriptive finding revealed that about 78.9% of trainees understand that cooperative learning is a kind of learning in which students work in groups toward a common academic

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goal and is the student-centered instructional approach. Similarly, about 89.47% of teachers" educators believed that cooperative Learning is focused on both in and out of Classroom activities. In addition, around 84.2% of the respondents suggested that Cooperative Learning promotes peer interaction and enhances social skills. Nearly two-thirds of the respondents believed that Cooperative Learning is an interactive teaching technique. On the other hand, 36% of teacher educators believed that Cooperative Learning is focused on classroom activities alone. In addition, during the focus group discussions teacher educators also acknowledged the importance of Cooperative Learning as a technique of teaching (Fig1).

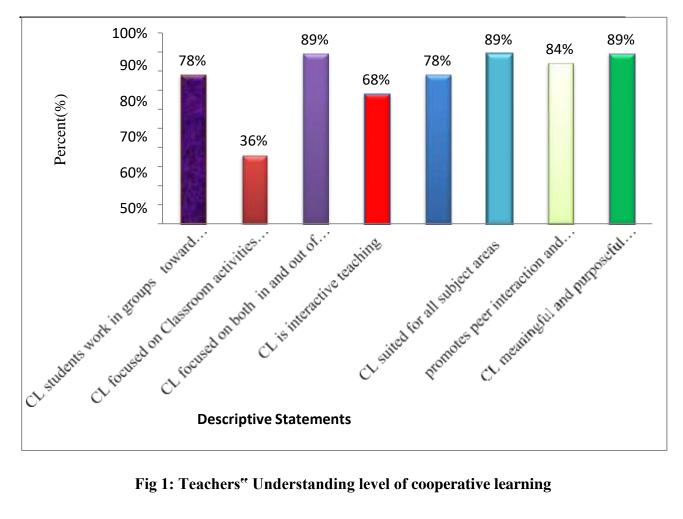


Fig 1: Teachers" Understanding level of cooperative learning

3.4 Teacher Educators' Positions on Cooperative Learning Implementation

This portion describes Teacher Educators" Positions on Cooperative Learning Implementation work out using descriptive statistics. Accordingly, around 78% of the respondents have great interested consistently using in the class room while about 22% of respondents didn't. About, 85% of the respondents agreed that it was consistent with their teaching philosophy while 15% didn't. With regards to value of instructional media approximately, 73% of the respondents valued it even if around 27% them didn't consider it. Another descriptive finding indicated that about 73% of the respondents

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suggested that implementation of Cooperative Learning encouraged friendship and deeper understandings whereas the remaining 27% of the respondents didn"t affirmatively state. However, around 52% of the respondents stated that Cooperative Learning interfered with trainees" academic progress. Besides this, 63% of the study participants replied that it is difficult to fairly evaluate trainees" performance in using Cooperative Learning. During the implementation of Cooperative Learning, the requirement of great effort is agreed upon by 57% of the research participants, while 43% disagreed. As a result, they are using other learning techniques. According to the focus group discussion carried out with teacher educators even though Cooperative Learning has various advantages in learning; some of the problems they faced were large classes, low trainees" interest in learning, minimum positive interdependence, minimum individual accountability, lack of group processing and using group formed for political purposes than for academic issues (Fig 2).

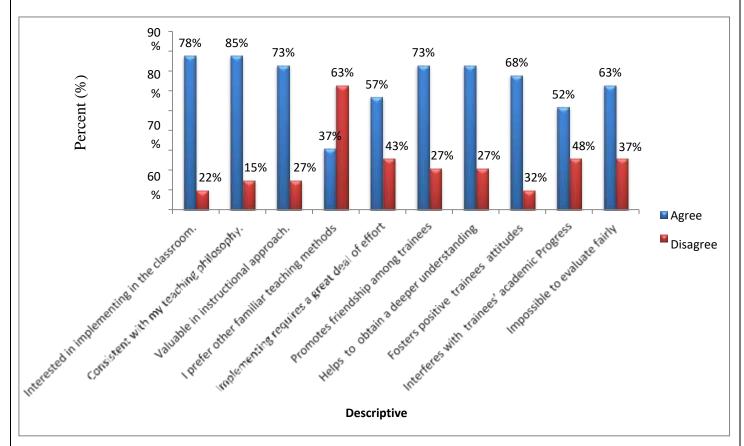


Fig 2: Teacher Educators" Positions on Cooperative Learning Implementation

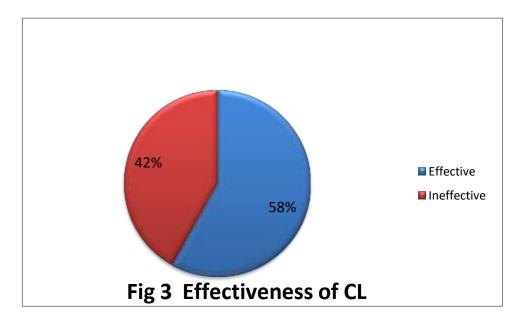
Magnitude of Cooperative Learning implementation in Nekemte College of Teachers' Education of Western Ethiopia

The overall level of Cooperative Learning was dichotomized as effective and ineffective based on the average means of the possible score of the respondents. Thus, of 420 respondents the effectiveness of



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cooperative Learning was about 244 (58.10%), and whereas about 176 (41.90%) were ineffectively implementing cooperative learning (Fig 3)



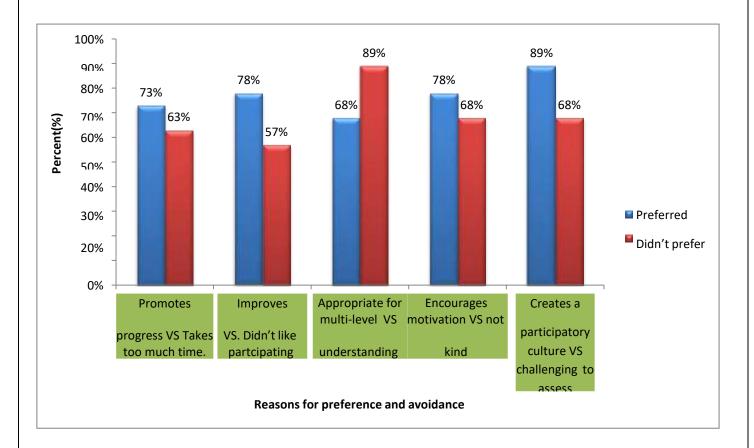
3.5. Reasons for Teachers Educators' preference and Avoidance of Implementing Cooperative Learning

The researchers also focused to retrieve factors promoting and preventing the implementation of Cooperative Learning. The authors found that about 89% of Teachers Educators preferred Cooperative Learning since it creates a participatory learning culture whereas about 11% of students didn"t like to participate in Cooperative Learning activities. Analogous to these findings around 78% of Teachers Educators preferred Cooperative Learning implementation due to encouraging students" learning motivation however about 22% responded as demotivated. About 68% of teacher educators didn"t prefer since challenging to assess students" Cooperative Learning performance. Furthermore, the study revealed that about 68% of Teachers Educators believed that Cooperative Learning was appropriate for multi-level classes whereas about 89% they stated that students have different level of understanding. In line with this about 63% Teachers Educators believed that Implementing Cooperative Learning took too much time and students didn"t like to participate for implementing Cooperative Learning which was significantly proportionated about 63% and 57% respectively. Similarly, data obtained from focus group discussion revealed that teacher educators tend to avoid CL due to trainees" carelessness, large class, and inattentiveness of college management on quality pedagogy (Fig 3).

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Fig 3: Reasons for preference and avoidance of Implementing Cooperative Learning

3.6. Quantitative findings of Factors Obstructing Cooperative Learning commencing from Trainee's perspectives

Cooperative learning is suggested by many scholars as a fruitful learning strategy in enhancing trainees" learning, achievements, communication, social skills, and team spirit Johnson (1994). However; in implementing CL these advantages are not realized in the real setting under study due to several factors. Some of the factors were discussed as follows. The writers found that about 53.4% of the participants suggested that group work helps them in learning despite the fact that 46.6% didn't suggest it. In addition, approximately 55.60 % of the study participants disagreed that group work does not help only low workers while 44.40% stated as it helps low achievers. Around 52.10% of the respondents point out that, trainers do not guide and follow trainees in CL as it is ought to be even though about 47.90%, they suggested positively to the items presented. With regards to individual contribution, around 54.60% of the respondents stated that they didn't take part in group work whereas about 45.40% they responded positively (Fig 4).



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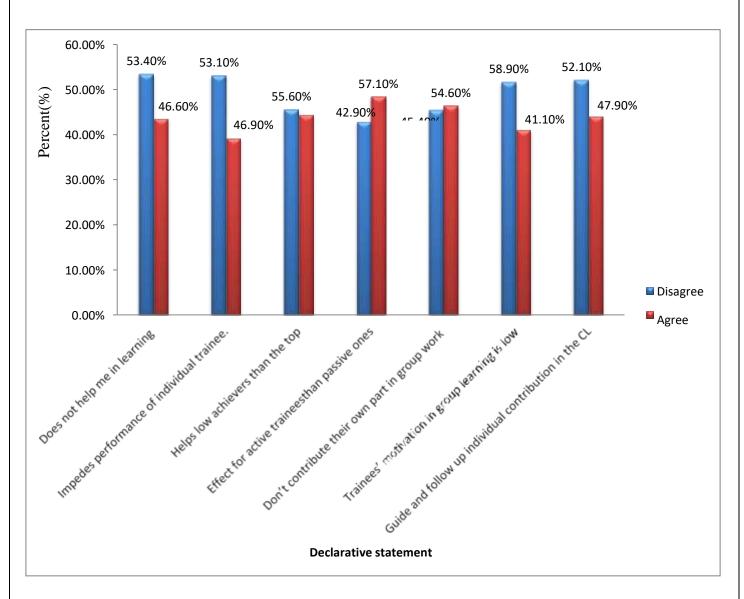


Fig 4: Quantitative findings factors Obstructing Cooperative Learning

3.7. Qualitative Findings of Factors Obstructing Cooperative Learning from Trainees Perspectives

Data obtained from open-ended questions showed that Cooperative Learning is hampered due to various factors including large class size, size of the group/team/formed, basic intensions of groups, trainees" attitude towards group activities, absence of positive interdependence, ill sharing of responsibility, lack of clear activity guideline given by teacher educators, lack of trainees" motivation and interest in learning and absence of continuous evaluation on the implementation of Cooperative Learning. Similarly, data collected through trainees" interviews reflected that:



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"Very few teachers strictly give group work or project activities with procedures to pass through, addressing individual accountability; class presentations accompanied by directed questions to every member of the group and finally distinguish trainees' individual efforts in the group".

Besides, factors related to teachers, trainees also asserted that there are also problems associated with them as stated that "trainees are not motivated to contribute in CL rather they leave the activity for a group leader and deviate to their responsibility in many cases trainees consider group formation as a relief, not as a learning environment". When the trainees explain why this is so, they pass through the lower grade levels similarly due to a lack of understanding that in turn affects their life today. Data obtained from focus group discussions conducted with trainees further indicates that all teacher educators of the college are not implementing CL alike and handle it accordingly. In addition; the trainees view also depicts that they are not well-motivated, committed and share responsibility in the CL process rather wait for some "better" trainees to gain relatively good points.

"Once we are given activity, and briefly describe how to continue with it; the teacher will tell us when to submit the assignment. No teacher gives attention to group activity and follows up. We silently perform and pass over it".

By supporting this idea some respondents further describe the efforts of a few teachers sharing that:

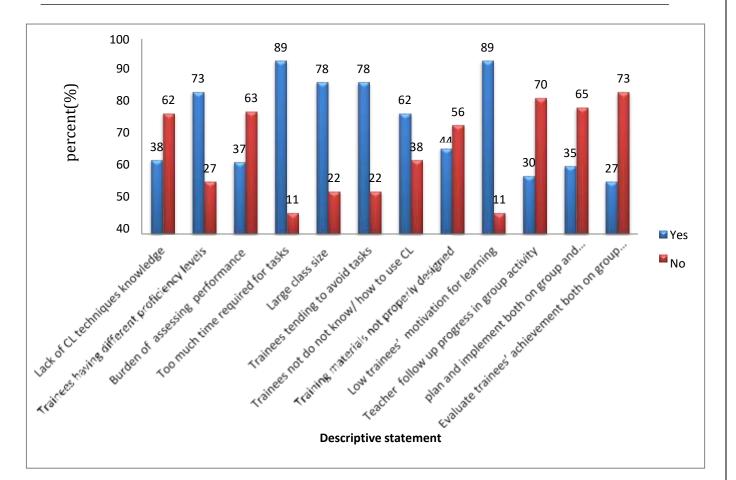
3.8. Quantitative and Qualitative Findings of Teacher Educators Perspectives of Factors Obstructing Cooperative Learning

Teacher educators" view portrays that CL is not implemented as it should be. The educators identified different factors that hinder its implementation including trainees" know-how discrepancy, large class size, trainees" inclination of escaping tasks; trainees are not acquainted with the CL technique, low trainees" enthusiasm in learning, lack of a plan on the group and individual teaching from teacher educators, and absence of follow up (Fig5).

Data collected through focus group discussions conducted with teacher educators show that due to lack of students" commitment, trainees" tendency of in balance interdependence, and lack of practical responsibility-sharing among trainees and using groups formed for political purposes are the major factors that hinder CL effectiveness in the college. In addition, a large number of trainees in classes further resulted in complicating assessments of team members, hindrance of teacher educators" and trainees face to face communication, influencing supervision of group processing and monitoring of advancement of social skills

Data obtained from open-ended questions responded by teacher educators also suggest that existing knowledge on the implementation of CL; teacher educators' attitude, lack of planning, and experience are hindering factors of CL implementation. They unveil that overemphasis of CL severely damage individual learning commit.

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Fig 5: Teacher educators" view portrays of factors Obstructing Cooperative Learning

Bivariate and multivariable logistic regression analysis of factors associated with effectiveness of cooperative learning

In logistic regression, disagreeing with being group work hinders performance of individual trainee ,group work mainly helps low achievers than the top ,disagreeing with trainees" being low motivation in group learning, disagreeing with all trainees didn't contribute their own part in group work, agreeing with teacher educators guide and follow up individual contribution in the CL, disagreeing with burden of assessing large number of students, disagreeing with requiring too much time for tasks, disagreeing with large class size ,disagreeing with trainees tending to avoid tasks, disagreeing with training materials not properly designed were variables associated with effectiveness of cooperative learning at P <0.25. All variables significant at the bivariate level were entered into multivariable logistic regression analysis. In multivariable logistic regression analysis, six variables were significantly associated with effectiveness of cooperative learning. Disagreed with being group work hinders performance of individual trainee were two times more likely effective of cooperative learning compared to those agreed (AOR= 1.684, 95%CI =1.066,2.662). With regards to Trainees'' motivation in group learning, disagreeing with trainees'' being low motivation in group learning were two times

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more likely effective of cooperative learning compared to those agreed (AOR= 1.720, 95%CI = 1.078, 2.743). Being agreed with the need of teacher educators' guidance and follow up

individual contribution in the CL were two times more likely effective of cooperative learning compared to those disagreed (AOR=1.787,95%CI=1.083,2.959). Participants who answered negatively that cooperative learning is burden for assessing large number of students were three times more likely effective of cooperative learning compared to those answered positively(AOR= 3.359,95%CI=1.912,5.903). Presence of large class size were two times less likely effective of cooperative learning implementation compared to small class size (AOR=1.93495%CI=1.078,3.469) (Table 3).

Variables	Category	Effectiveness of Cooperativelearning		COR (95% CI)	P- value	AOR (95% CI)	P- value
		Effective	Ineffective				
Group work hinders	Agree	237(80.89%)	56(19.11%)	1			
performance of individual trainee.	Disagree	103(81.1%)	24(18.9%)	1.667(1.100,2.527)	0.016*	1.684(1.066,2.662)	0.026 **
Group work	Agree	110(69.18%)	49(30.82%)	1			
mainlyhelps low achievers than the top	Disagree	196(75.10%)	65(24.90%)	1.285(1.865,5.787)	0.04*		
Trainees" motivation	Agree	139((59.66%)	94(40.34%)	1			
in group learning is low	Disagree	122(65.24%)	65(34.76%)	1.862(1.227,2.824)	0.003*	1.720(1.078,2.743)	0.023 **
All trainees don't	Agree	162(58.91%)	113(41.09%)	1			
contribute their ownpart in group work	Disagree	93(64.14%)	52 (35.86%)	3.306(1.995,5.478)	0.00*		
Teacher educators guide and follow up	Agree	201(89.33%)	24(10.67%)	1.842(1.510,4.027)	0.007*	1.787(1.083,2.959)	0.023 **
individual contribution in the CL	Disagree	139(71.28%)	56(28.72%)	1			
Burden of	Yes	139((59.66%)	94(40.34%)	1			
assessinglarge number of students	No	122(65.24%)	65(34.76%)	6.334 (4.008,10.009)	0.001*	3.359 (1.912,5.903)	0.003 **
Too much time	Yes	197(75.48%)	64(24.52%)	1			
required for tasks	No	103(64.78%)	56(35.22%)	2.812 (1.811,4.367)	0.001*		
Large class size	Yes	105(40.7%)	153(59.3%)	2.466(1.510,4.027)	0.00*	1.934(1.078,3.469)	0.027 **



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	No	87(53.70%)	75(46.30 %)	1			
Trainees tending to	Yes	182(61.07%)	116(38.93%)	1			
avoid tasks	No	95(77.87%)	27(22.13%)	1.024(1.008,2.469)	0.045*		
Training materials not	Yes	94(40.34%)	139((59.66%)	1			
properly designed	No	97(51.87%)	90(48.13%)	3.285(1.865,5.787)	0.00*	2.552(1.397,4.665)	0.002 **

*= Significance at P-value< = 0.25,

**= Significance at P-value < = 0.05, Dependent variable = Cooperative Learning

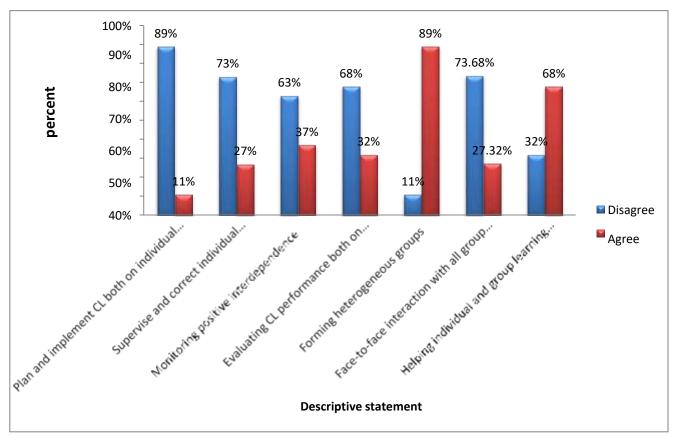
3.9. Roles of Teacher Educators in Cooperative Learning

When trainees learn cooperatively both teacher educators and trainees have their roles to play. More significantly, teacher educators are expected to plan, coordinate, implement, guide, support, assess, and give feedback Slavin (1990). Based on responses given by teacher educators on open-ended questions teacher educators" roles include managerial roles (planning, organizing, implementing, and evaluating), guiding, supplying, and designing necessary materials, and encouraging trainees in the team learning. However, according to the data teacher educators were not observed while implementing CL techniques as they ought to be. Encourage dependence in conditions where irresponsibly managed and implemented. The authors also found out some descriptive roles of teachers" educators to be implemented for cooperative learning in the class to reverse the following findings. With regards to planning and implementation of cooperative learning both on individual and group basis about 89% didn't have plan and around 73% them reported that they no supervision on the learning process both on an individual and group basis, and 89% suggested that they formed heterogenous groups. However, 73.68% of the respondents disagreed that no face-to- face interaction with each member of the group and no monitoring positive interdependence was carried out. However, the greater number of the respondents suggest that no plan, supervision, and monitoring of individual responsibility and face-to-face communication with every group member (Fig 6).

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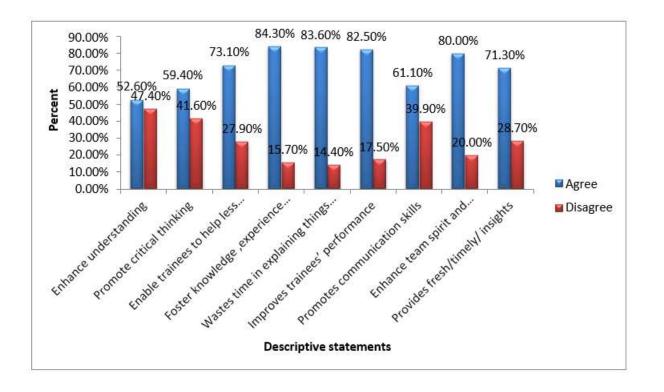
Fig 6: Roles of Teacher Educators in cooperative learning

3.10 Roles of Trainees in cooperative learning

In association with teacher educators' roles, trainees also have their role to contribute. Trainees need to fulfill their accountability, be motivated, and actively participate, communicate and share their knowledge and experience Slavin (1990). However, in many situations, trainees are not observed in playing these roles. As a result, teacher educators are also demotivated. In line with this, trainees also suggest that group and individual active participation, effective communication, positive interdependence, and working in line with directions given by teacher educators are meaningful for their learning. Nevertheless, many of them were not seen in doing so. The Results of the current study revealed that about 75.8% of trainees value CL while 24.2% of them disvalued it. In the open-ended questions, trainees also justify that CL is valued because of its academic, social, and generic benefits. According to some respondents, the technique is not questioned due to its benefits but their commitments of learning and absence of uniformity in their teachers'' classroom practice of CL has influenced them (Fig 6).



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Fig 6: Roles of Trainees in cooperative learning

3.11 FINDINGS

The primary objective of this research is to identify factors impeding cooperative learning and to suggest mechanisms of enhancing the effectiveness of cooperative learning and understand the roles of teachers and students in the cooperative learning processes to boost up what is expected out of it. To achieve these goals, basic research questions were formulated and data were collected from target groups, presented, discussed, and interpreted. Based on the interpretation made the following findings were identified.

Most of the teacher educators who participated in the study recognized that CL strengthens peer interaction, enhances social skills in the process of learning, encourages friendship, creates relatively deeper understanding, and fosters trainees" attitudes towards learning. Some teacher educators indicate that CL interferes with active trainees" academic progress and encourages unfair interdependence. Positive interdependence, shared accountability, face-to- face and meaningful group members" interaction, group processing, and development of social skills are not exhibited as required. Due to factors such as large class size, too much time requirement and the challenging nature of evaluating individual trainees" performances within a group are forcing the teacher educators to leave CL technique.



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Activities observed being done are irreconcilable. Group formation, trainees" motivation and commitment, teacher educators" attention on CL during learning and assessment are not harmonious to the realization of intended objectives. Teacher educators are ordered to use CL as dogma descended by the regional education bureau. However, every one of us appears to have our own specific needs, emotions, and intrinsic potential zeal to unveil them. The data showed no prior planning, no step-by-step implementation, no vigilant individual and group assessments. However, they are very important in CL in identifying the group and individual achievements through the process.

The implementation of CL is hampered by factors related to trainees, teacher educators, and college leadership. Trainees" related factors include (trainees" attitude towards group activities, absence of positive interdependence, ill sharing of responsibility, lack of motivation and interest), teacher educators" related factors are failure to give a clear guideline, no face-face communication with group members, following up trainees" interdependence and operation of shared duty. Leadership-related factors are large class size, restriction of team members, lack of continuous evaluation on the implementation of CL based on trainees" academic achievement.

As a result, trainees who perform the best control the learning scenario, and both teacher educators and trainees do not play the role expected of them.

RESEARCH DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

4.1 DISCUSSIONS

The implementation of cooperative learning have been significantly influenced by various factors commenced from teachers and trainees perspectives. However, the strategy is often recognized as learner-centered, have emerged in opposition to the more traditional methods in which the instructor plays a major role in class. Therefore, identifying its underlying factors associated with cooperative learning are vital form of active teaching- learning process. The overall effectively implementation of Cooperative Learning in this study was 58.10% which was relatively comparable with the result of the study conducted at Arsi University showed that instructors and students seemed to like CL, with more than half of the respondents being quite positive (agree) about it (68.2%; 60.6% instructors and students respectively. This relative similarity might be related to similar school infrastructures and economic setup across the institutions (Moges, B., 2019).

The current study found that the presence of large class size was two times more likely hindering implementation of cooperative learning compared to small class size. In addition, a large number of trainees in classes further resulted in complicating assessments of team members, hindrance of teacher educators" and trainees face to face communication, influencing supervision of group processing, and monitoring of advancement of social skills. This finding was supported with a study conducted in Arsi University Ethiopia revealed that a large number of students in the classroom, sometimes reaching up to 60 students in small classes, obstructs using CL in the class because it is difficult for teachers and



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students to move in the class (Moges, B., 2019). However, it is inconsistent with a study conducted by Richard Felder showed that Cooperative learning is especially important for large classes, where getting students engaged is usually a challenge and, the more imperative it is to use cooperative learning (Xiangju, G., 2004).

According to this study, lack of students" commitment, trainees" tendency of in balance interdependence, trainees" motivation, teacher educators" attention on CL during learning and assessment are being not harmonious to the realize of intended objectives, lack of practical responsibility-sharing, and using groups formed for political purposes are the major factors that hinder CL effectiveness in the college. This outcome was analogous with the study conducted in Harari Regional State, Ethiopia found out that, lack of students accountable for their learning, lack of motivation, lack of awareness, teachers' attitude, shortage of instructional materials, lack of clear guideline, teachers recklessness, the reliance of lower achievers on higher achievers, lack of training on how to implement CL and students reservation to get actively involved in CL was the main challenges that hampered the implementation of CL. The possible similarities might be related to the similarity of the psychosocial background and mind setup of the study participants (Ahmed, A., 2011). Moreover, this study also revealed that most of the teacher educators who participated in the study recognized that CL strengthens peer interaction, enhances social skills in the process of learning, encourages friendship, creates relatively deeper understanding, and fosters trainees" attitudes towards learning. This finding was comparable with a study conducted by Ted Panitz indicated that cooperative learning helps develop oral communication skills, social interaction among students, develop and practice skills of leadership, decision-making, trust- building, communication, and conflictmanagement and develop interpersonal relationships among students (Palmer, G., Peters, R., and Streetman, R., 2003).

Furthermore, this study found that Some teacher educators indicated that CL interferes with active trainees" academic progress and encourages unfair interdependence. Positive interdependence shared accountability, face-to-face and meaningful group members" interaction, group processing, and development of social skills are not exhibited as required. However, the result of this study was contradicting with other studies revealed that group members must promote each other's learning and success face-to-face, hold each other personally and individually accountable to do a fair share of the work, use the interpersonal and small group skills needed for successful members are working together (Olaya, M.L. and González-González, G.M.E., 2020).

4.2 CONCLUSIONS

Based on the analysis of data, it is clear that CL certainly enriches learning in numerous ways. Teacher educators and trainees in this study acknowledged the numerous merits they obtain from the practice of academic, social, and generic benefits. Findings indicate that trainees" responses are similar to literature that states CL facilitates the acquisitions of academic, social, and generic skills (Mckay 1995 and Gokhale 1995). However, some issues need to be upgraded on certain aspects of CL practice to



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make it more enjoyable and interesting. The finding shows in many ways that cooperative life and CL is mandatory for human being and trainees. Nevertheless, CL without positive interdependence, shared accountability, face-to-face meaningful group members interaction, group processing, and development of social skills is the wastage of resources and precious time in the limited span of life.CL is not employed as it needs to be. Group formation, trainees" motivation and commitment, class size, teacher educators" attention on CL during learning and assessment, leadership aim of using groups established seem to be incompatible.

Like other active learning techniques, CL has its own merits and demerits. Therefore, since one size does not fit all, nor does one method suit everybody; teacher educators need to scrutinize and use varieties of appropriate teaching methods. In process of using CL, teacher

educators need to plan how to manage its implementation, how to assess trainees" learning effort, interaction and social skills developed. This means within a group, individual performances need to be identified.

Based on the responses of the college trainees, it is recommended that teacher educators need to be concerned with the social aspects of CL such as with academic and generic skills. CL is designed to be a lively instructional method because the more interesting CL activities are the more likely the acquisitions of desired skills happen. According to Dornyei (2001), there are four techniques for making learning stimulating and enjoyable. These include making tasks challenging, making task contents attractive by adapting them to the trainees" natural interests or by including entertaining elements, personalizing learning tasks, and selecting tasks that yield tangible and complete results.

4.3 RECOMMENDATIONS

Class size needs to be manageable and should allow teacher educators to form small-sized groups (usually 3-4 trainees) to engage them in a task and follow up their learning. To ensure these; members of the group need to contribute their fair share, each group must keep records of their activities stating each member's role or activity and must be submitted along with the project. Before the submission of the report, an oral presentation may be made where each member of the group needs to present a section of the project as agreed amongst members. Teacher educators'' role is that of instructing, guiding, and facilitating. Thus, teacher educators should always explain the purpose and usefulness of a task how to proceed with it before trainees carry out the task. As a result, this would contribute to arouse the trainees'' interest and their sole roles.

It is important to pay close attention to group dynamics and maintain both common and concentrated observations as the group work. To get group works productive, teacher educators should appoint a group leader who would organize group activities and a secretary who will record activities performed. A group leader could perform both tasks in a very small group. Roles need to be routed among group



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members if the group is to work together for some time. Based on the nature of tasks done and skills intended to be obtained roles of group members need to be altered through time.

Teacher educators should review each group's progress continuously by checking the group's record of activities in monitoring their participation, progress, and intervention through the process. Establishing groups based on different techniques to foster academic, social, and generic benefits as intended. Groups could be formed arbitrarily, based on ability, mixed ability, and compatibility. Teacher educators need to alter styles of groupings and critically examine the overall and personal progress in CL. Significantly; teacher educators frequently get a reaction from trainees on several aspects of the pedagogical process. Trainee's feedback is vital to CL. Teacher educators need to get formal and informal feedback from their trainees as often as is feasible since CL gives room for informal evaluation. Only receiving feedback from our trainees are not enough; but also we must act on the feedback to sustain increased learning outcomes, boost up individual roles and give necessary corrections. CL takes time to be accepted both by trainees and teacher educators.

Groups formed in classes need to focus on academic affairs. Teacher educators also need to be committed to enhancing trainees learning progress being governed by plan. Learning objectives set by teacher educators must be communicated, work for its attainment seriously assessed at the end of the task without compromise. However, groups formed in classes were also observed while serving political purposes. Therefore, this needs to be analyzed and separate issues of academy and politics to save our education and generation too.

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