

Action Research on Minimizing Students' Absenteeism during Cooperative Learning Class among Adigrat University, College of Medicine and Health Science Undergraduate Students, Tigray, Ethiopia 2016

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Abstract: Background: Education is the backbone of societal transformation in all aspects of life. The interdependence among different part of the society is very essential to share the limited resources as well as to achieve their common goal. In this support, as Ashley Montagu stated that without the cooperation of its members society cannot survive, and the society of man has survived because the cooperativeness of its members made survival possible in a similar manner. Objective: The main objective of the study was to assess action needed to minimize students' absenteeism from cooperative learning class and impact of the cooperative learning on students' performance in Adigrat University, College of Medicine and Health Science. Method: an institutional based qualitative, participatory action research study was conducted among Adigrat University, College of medicine and Health Science under graduate students. In the College there are six departments of these conveniently we select four departments Medicine, Public Health, Nursing and Midwifery. The data collecting method was In-depth interview and focus group discussion. The total number of sample collected was four In-depth interview with department heads, one focus group discussion with mentor teachers, four focus group discussion with leaders of the cooperative learning students' team and with the member students' of the cooperative learning team from each departments. Finding: The finding of the study suggested that, cooperative learning is important in improving students' performances, not only in knowledge, skill but also development of their communication skill and ethics. Absenteeism of students from cooperative learning class as taken attendance from department of Midwifery, public health and nursing found to be 5 %, 7-9%, 60-70% respectively. the reason of students' absenteeism from cooperative learning was the mentor teachers, department heads, had no follow up on the cooperative learning process and the reason of student' absenteeism from the cooperative learning was, load of courses, preference to study alone and shortage of time to cover the courses. Besides lack of awareness on cooperative learning is also one of the reasons for student absenteeism. Conclusion and recommendation: This study concludes that cooperative learning is important to increase the students' performance as the students and mentor teachers said in the in-depth and focus group discussion but still lacks awareness on cooperative learning and lack of follow up from departments. So, giving training on cooperative learning, follow up by quality assurance of the college and department heads is mandatory, in addition to these research an interventional research should be studied in future.

Keywords: Action research, collaborative, cooperative learning

1. Introduction

Cooperative learning requires pupils to work together in small groups to support each other to improve their own learning and that of others. To work effectively certain key elements need to be in place. These four elements are essential and these are known by the acronym 'PIGS F': Positive interdependence, Individual accountability, Group processing, small Group and interpersonal Skills, Face-to-face interaction. Active learning demands not only teachers to be experts in their fields but also they have to understand how students learn best (Teshome 2012).

Collaboration is a promising mode of human engagement that has become a twenty - first - century trend. The need for think together and work together on critical issues has increased causing to stress on from individual attempts to team work and from autonomy to community (Marjan Laal

2012 , Kulshrestha 2014 , Jacobs 2016). At its core, cooperative learning is based on the premise that co-operation is more effective than competition among students for producing positive learning outcomes (PRINCE 2004, Brent 2007, Sisay AWGICHEW 2015).

1.1. Objective of the study

- 1) To assess the situation of cooperative learning in College of medicine and health science.
- 2) To assess action needed to minimize students' absenteeism from cooperative learning class in the college.
- 3) To Assess reasons for students' absenteeism from cooperative learning class
- 4) To assess the impact of cooperative learning on students performance

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2. Literature Review

Suggested collaborative classroom motivation leads to more extensive use of language and the development of greater language proficiency. In the cooperative groups, face-to-face promotive interaction and resource, reward, role interdependence can be powerful supports and encouragements for the insecure students. Learners are thus motivated to pursue larger academic success (Zhang 2010).

Involvement in cooperative learning is a strong predictor of a students' academic performance in class. A significant relationship was also found between the degree to which grades are important to a student and his or her active participation in cooperative learning for group exercises. Furthermore, the importance of grades yielded as a strong predictor of individual performance (Mina Tsay , Richard M. Felder 2001, Villers 2011).

The use of cooperative assessments as a way to motivate the students to think harder, and to give them more opportunities to develop and explain their reasoning (Burke 2011 ,Garfield 2013 , Gillies 2016). Cooperative learning primarily is a change in the interpersonal reward structure of the classroom, from a competitive reward structure to a cooperative one (Slavin 1980).

Attitude can play a very important role students enjoyed working with one another on solving problems. The type of group formation was mixed among the students. Some students liked it better when the groups were formed by the teacher and others liked it better when the students formed their own groups. All Cooperative learning the students agreed that it is important to have group members who are willing to help (Scott 2009).

Collaborative Learning provided students with chance to write down analytical exposition and identify the argument, evidence and fact to support their arguments, alternative point of view, and conclusion cooperatively. The informal setting facilitated discussion and interaction between the members of group. This interaction helped students to learn from each other's skill and experience (Rokhaniyah 2016).In cooperative learning teachers agreed that preparation needed to occur if students were to work successfully in groups and this included training students in the social skills, including how to manage conflict (Robyn M. Gillies 2010).

3. Research Methods

An institutional based qualitative study was implemented using participatory action research design. In the college of medicine and health sciences there are six departments. of these departments conveniently we selected four departments these are, Medicine, Public Health, Nursing and Midwifery. The data was collected using In-depth interview, with department heads, and focus group discussion with mentor teachers', cooperative learning students' leaders, and the cooperative learning member students' using convenient sampling. The total number of samples we consider were four In-depth interviews for department heads, one focus group discussion with mentor teachers', four focus group

discussion for cooperative learning leaders and member students' of cooperative learning from each department.

The data was collected using a tool prepared for qualitative study; the tool was prepared in English then translated to Amharic back to English with language experts for consistency. Finally the data collected by four under graduate university employee/graduate assistance after permission was obtained from research director of Adigrat university. On the data collection day the principal investigators were supervising the data collection process daily, data was also received by checking. Finally the data was transcribed and analyzed using content analysis.

4. Findings

4.1. Socio Demographic Characteristics of the Participants

Four In-depth interview sessions were conducted among department heads of Nursing ,Public health Midwifery and and medicine three of the department heads were masters holders and one medical doctor. And all of the participants were orthodox by religion and with the age range of 25-35. All of the interviewee was male participants. There was also five focus group discussion. One team in each mentor teachers, cooperative leader students and student members. The focus group discussion members in each group were nine in mentor teachers, ten in cooperative leader students and eleven with student members. All of the mentor teachers where were masters holders with orthodox by religion and the age composition were 25 35. Coming to the cooperative leader students and student members significant member of students 38(90%) were male students and only 4(10%) were females, most of the participants 32(76%) were orthodox followers and 10(24%) were Muslim. The age composition of the participants were 19-24 and educational status of the participants 25(59%) were third year and 17(41%) second year respectively.

4.2. Cooperative Learning in the college

The difficulty of cooperative learning is to begin; the in-depth interview and focus group discussion with department heads, mentor teachers, cooperative learning students leader and member students indicated that, although there were ups and downs it was in a good progress but, still there are interruptions; for example in the first semester it was going good in the second semester there was highly interruption because of disintegration of the instructors for field practice or attachment specially the mentors teachers and there was no follow up by mentor teachers , and no credit was given for the cooperative learning section made to give less attention by the teachers, with those reasons the cooperative learning was not going as expected. Although cooperative learning was going well students never consider it as helpful for their academic performance rather they consider it as politics. So, they badly need awareness creation. .

Basically, the department had interest to conduct cooperative learning sections, among the students but, the teachers didn't consider as part of their work, even some of the department heads were passive to conduct some of them also claiming

for incentives and because of this reason they didn't give feedback for the work, They didn't give any recognition for the mentor teachers also, Weak intra-department relationship not sharing experiences and some of inactive departments they make teachers disappointing and cause mentors to have weak follow up in the cooperative learning.

In principle, mentoring of cooperative learning was part of duty for every instructor and should consider as part of their work. The contribution of the mentors was important because; they control over all activities of the class on the cooperative learning day, develop action plan of the class and addressing issues raised by the group leaders in long, medium, and short term by discussing with department heads. But, there were some mentor teachers not following the rule of the university and for one of them warning letter was written.

In cooperative learning the cooperative learning leaders are decisive they are the 'engine' of the cooperative learning process because, the contribution of the cooperative learning leaders is many they develop action plan, communicating with responsible body starting with class representative, mentor teachers, the department head if there was a problem and they also leading the student discussing with lessens raised for discussion, controlling the cooperative learning members and they were also communicator with responsible bodies.

4.3. The impact of cooperative learning on students' performance

Form the in-depth and focus group discussion; On students performance the impact of the cooperative learning differs form one department to another department for example one of the department "said that, regarding students' performance Still there is gaps remaining to have satisfactory result and the work is not effective, most of the work is done by intelligent students' it is not known that whether the students are improving or not because we do not have base line criteria to assess the improvement of the students following cooperative learning but, students' develop communication skills." Significant departments also said that, on the achievement of cooperative learning, it was found to be fruitful to improve students' performance ,for example in psychology subject students were discussing repeatedly by raising questions freely for our instructor and classmates and increase performance of every students'.

Focus group discussion conducted with student' cooperative learning leaders and members regarding students' performance said that " yes it has good result but we are not using as needed, besides, cooperative learning not only used for teaching learning process but it is used to increase social interaction among students', Increase supporting students in any aspect, Sharing of knowledge and skill of students and also has good achievement which is more expressed by female students, but there are number of students that do not understand the benefit of cooperative"

4.4. Students reaction to cooperative learning

Students' reaction on cooperative learning the in-depth interview and focus group discussion with the department heads , mentor teachers, cooperative learning student leaders and the student members showed that Attendance was taken regularly for students coming to cooperative learning and the average absenteeism taken from the attendance of three departments that is Midwifery, public health and nursing 5%, 5-7% and 60-70% respectively.

The reason of absenteeism of students' from the cooperative learning was explained by Member student members," the volume of all the subjects was huge and it is better to study alone to cover, the purpose of the cooperative learning is politics so, why I spend time unnecessarily that is, time wasting specially for the first semester because of students' conflict of interest" Another reason for absenteeism of students from cooperative class explained by the cooperative leader students were "Poor arrangement of cooperative learning groups that is, fast learners in some of the group and vise versa, difficult to identify the student performance to lead a group, luck of strictly taking attendance And luck of awareness on cooperative learning by the students". Besides no different class for female and male students for discussion this makes discomfort for the students And lucking follow up by mentor teachers because of work load, in some departments less value is given by the department heads, in some department also even though the head department needs to work the mentor teacher's doesn't consider as part of their work.

The member students of cooperative learning, believe that, cooperative learning is present but it is not functional as it is expected, The continuation of the cooperative learning leaders from students was on and off last year was better than this year.

5. Interventional solution discussed to solve students' absenteeism by In-depth interview and Focus Group Discussants

The interventional solution for the finding based on, in-depth interview and focus group discussion of the selected department heads of the collage, mentor teachers, cooperative Learning students' leaders and member students' suggested from the discussion to minimize students' absenteeism and increase students' performance were to have good mentoring practice, respecting punctuality to the cooperative learning class, establish punishment Law for absentees, to give value for the attendance, giving tests during the cooperative Learning class, awareness creation on cooperative Learning to the students who say it is politics and instructors who doesn't consider as part of their work, moreover, during selection of cooperative learning students' leaders it must not be based on preparatory result, rather should be selected based on their current potential, because the cooperative Learning member students could have positive or negative impact if the leader are active even can replace the mentor teachers, and if the cooperative Learning leader are weak the students

members of the cooperative Learning group could not be fruitful.

6. Proposed Action

The proposed actions from the finding of the study were discussed the finding on how to minimize students' absenteeism and achieve change of students performance, through cooperative learning with College Dean, quality assurance and department heads, and some recommendation to college dean, quality assurance, and department heads like giving awareness creation on cooperative learning training to students, making the mentor teachers functional and supervise the cooperative learning class by quality assurance and department heads come in to consciences as solution of the problem.

7. Implementation of action/intervention

On the implementation to minimize students' absenteeism to increase students performance we prepared discussion on the finding with College Dean, quality assurance and

department heads on the importance of student cooperative learning and on making functional the mentor teacher;s, cooperative learning students' leaders. And also prepared presentation on awareness creation on cooperative learning to students. And in two sections for a total of one hundred twenty students from all departments that is midwifery, nursing, and medical students was given.

8. Evaluation of the Action/Intervention

On the evaluation of the study, this action research/interventional study, minimized students absenteeism from the rate of 5 %, 7-9 %, 60-70%. to 5.3% by taking attendance after, conducting training on cooperative learning through presentation, discussions held with college dean, quality assurance and department heads on cooperative learning to have strict follow up by all responsible body for the improvement of students' performance and minimize absenteeism from the cooperative learning as shown in (Figure. 1)

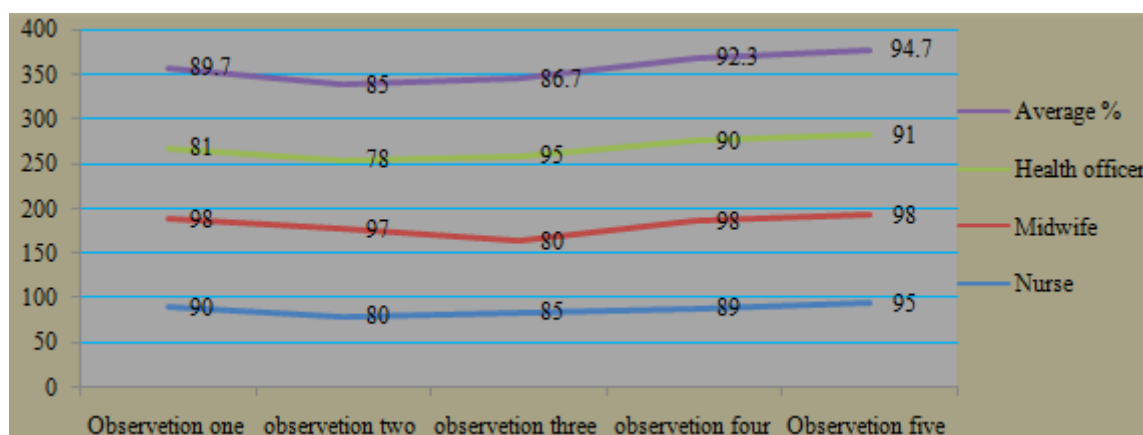


Figure 1: Five session observation of students' attendance in cooperative learning in three departments of CMHS Adigrat university 2016

9. Next Step

Still follow up by quality assurance of college of medicine and health science, and department heads and creating awareness on cooperative learning repeatedly through presentation for first year students during admission is mandatory to minimize student' absenteeism. And also the name network should not be used in a university to replace cooperative learning because network is used in many issues other than in teaching learning process.

10. Competing Interests

The authors declare that they have no competing interests.

11. Authors' Contributions

Hadush Gebremariam carried out the conception and designing the study, performed content analysis and wrote the manuscript. Assefa Ayalew, critically evaluated and made progressive suggestions throughout the study. Fiseha G/tsadkan critically evaluated and made progressive

suggestions throughout the study. Hagos Mehari critically commented the draft paper, revised the manuscript and approved the manuscript. All authors read and approved the final manuscript.

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