

Improving Peer Learning for Students' Academic Performance: The Case of Second Year Rural Development and Agricultural Extension Students, College of Agriculture, Wolaita Sodo University

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Abstract

Modern universities are facing challenges due to the increasing number of young people attending higher education. The sheer number of students raises the question of how to organize teaching-learning activities that allow the students to become active learners and engaged participants in academic discussions within their disciplines rather than passive spectators. Mass universities face heterogeneous students of those who are motivated by career opportunities and need situational motivation to engage in deep levels of learning that are necessary to reach the necessary deep level of understanding of the often complex phenomena studied at the university level. Within the last decade, 'student-centered' instructional methods have become increasingly popular in higher education and one such method is peer learning. Peer learning was not well understood in earlier education system as it was perceived learning as matter of competition rather than cooperative. Still there are evidences showing that not all students are willingly involved and participating in the process of peer learning at higher institution. Therefore, this study is intended to identify factors affecting peer learning, and thereby to improve students' academic performance through strengthening peer learning. In this regard, all the third year students of Rural Development and Agricultural Extension were taken and interviewed. The descriptive results revealed that there is awareness problem among some students about the importance of peer learning. Moreover, many students were engaged in peer learning outside the classroom learning only for a few activities and not regularly practiced.

Introduction

Modern universities are facing challenges due to the increasing number of young people attending higher education. The sheer number of students raises the question of how to organize teaching-learning activities that allow the students to become active learners and engaged participants in academic discussions within their disciplines rather than passive spectators (Rocca, 2010). In addition, the mass university faces a heterogeneous student body. Many of these students, motivated by career opportunities or other external motivation, might need situational motivation to engage in deep levels of learning that are necessary to reach the necessary deep level of understanding of the often complex phenomena studied at the university level (Biggs & Tang, 2011; Entwistle, 2009). Within the last decade, 'student-centered' instructional methods have become increasingly popular in higher education (Baeten *et al.*, 2010; Lea *et al.*, 2003), and one such method is *cooperative /peer learning*. Cooperative/peer learning principles, or structures, were developed in the 1960s and onwards (Johnson *et al.*, 1998a) as a response to the competitive and individualistic learning environments in North-American primary schools. According to different scholars (Millis, 2002; Millis & Cottell, 1998; Millis, 2010; Johnson *et al.*, 1998b; Johnson *et al.*, 2007; Johnson, Johnson, & Smith, 1998), the principles and structures have been adopted at the secondary and post-secondary level. Millis and Cottell (1998) have claimed that cooperative learning is able to stimulate deep approach to learning in higher education students and within recent years cooperative learning has become increasingly popular at the university level (Cavanagh, 2011; Hammond, Bithell, Jones, & Bidgood, 2010; Hillyard, Gillespie, & Littig, 2010). Influential scholars such as Biggs and Tang (2011) and Fink (2003) have recommended cooperative learning as an important teaching-learning activity for university students. Hattie (2009) found that cooperative learning was one of the more effective means of instruction compared to a plethora of other factors influencing academic achievement. A similar development can currently be witnessed in Denmark. Following the release of a Danish version of *Cooperative Learning* (Kagan & Stenlev, 2006), cooperative learning structures are now being used in Danish primary schools (Andersen, 2012), high schools (Klausen, 2011; Beck, 2011), adult education (Wahlgren, 2010), and higher education (Schmidt, 2006).

Many institutions of learning now promote instructional methods involving active learning that present opportunities for students to formulate their own questions, discuss, explain their viewpoints, and engage in cooperative learning by working in teams on problems and projects. Similarly, Wolaita Sodo University is now

promoting peer to peer learning with a view to helping students to prepare for lifelong learning and which leads to the continuous enhancement of their performance in whatever job or posts they are engaged in their post university career. The university has recently introduced this learning approach among students, and is in the process of integrating it into the organization's culture and structure.

Group work enhance student understanding. Students learn from each other and benefit from activities that require them to articulate and test their knowledge. Group work provides that an opportunity for students to clarify and their understanding of concepts through discussion and rehearsal with their peers. Many, but not all, students recognize the value to their personal with their peers. Many, but not all, students recognize the value to their personal development of group work and of being assessed as a member of a group working with a group and for the benefit of the group also motivates some students.

Still there are evidences from students that not all students are willingly involved in the process of peer learning in the department of RDAE.

So far, no studies were conducted on the topic of "factors affecting peer learning" in the college of agriculture, at Wolaita Sodo University. Therefore, it is why this study which is specific to second year students of Rural Development and Agricultural Extension department is intended to identify factors affecting peer learning and assess its effect on the academic performance RDAE students, Wolaita Sodo University.

Sampling design and techniques

Multi stage sampling technique was used for the study. In the first stage College of Agriculture was purposively selected, in the second stage department of Rural Development and Agricultural Extension was also selected purposively. Finally, all second year students of Rural Development and Agricultural Extension were chosen for the purpose of the study.

Data type and sources

Both primary and secondary data was collected. Primary data was collected from second year students of Rural Development and Agricultural Extension department. The secondary data was collected from relevant sources such as books, master sheets from the department, internet and journal articles.

Data collection methods

The questionnaire was developed and distributed to sample students to gather the relevant information. The secondary data was collected from different documents through reviewing secondary sources.

Methods of data analysis

The unit of analysis in this study is the second year Rural Development and Agricultural Extension students. Data was analyzed using descriptive statistics such as, mean and percentage.

RESULT AND DISCUSSION

This part of the research is deal with the interpretation of results from descriptive statistics.

Table 1: The importance of peer learning

	Frequency	Percentage
No	3	11.1
Yes	24	88.9
Total	27	100

Source: Survey result, 2014.

Students were asked if they knew the importance of peer learning; in this regard about 88.9% of the students know the importance of peer learning. However, there are a few students who do not know the importance of peer learning.

Table 2: Students' interest in peer learning

	Frequency	Percentage
No	2	7.4
Yes	25	92.6
Total	27	100

Source: Survey result, 2014.

The above table shows that majority of students are interested in peer learning. Only a few students are not interested in peer learning. However, some students during focus group discussion said that most of the good performing students are not fully interested in peer learning; because they perceived that they are shouldering burdens of poorly performing students. Moreover, they reflect that some member of the group is not actively participating in peer learning.

Table 3: Students' involvement in peer learning and the subsequent performance

	Frequency	Percentage
No	1	3.7
Yes	26	96.3
Total	27	100

Source: Survey result, 2014.

Students were asked that whether involvement in peer learning has positive impact on their academic performance. In this regard, nearly all students believe that involvement into peer learning can improves their academic performance. Moreover, during the focus group discussion majority of the students reflected that their academic performance has been improved significantly as they have been involved in peer learning.

Table 4: Student's active participation

	Frequency	Percentage
No	4	14.8
Yes	23	85.2
Total	27	100

Source: Survey result, 2014.

As it can be seen from the above table majority of students are actively participating in the process of peer learning. However, a few students are not actively participating in peer learning. As it was reflected during the focus group discussion, the barriers to participation are language problem, lack of willingness of some students.

Table 5: Planning for peer learning

	Frequency	Percentage
No	6	22.2
Yes	21	77.8
Total	27	100

Source: Survey result, 2014.

The analytical result revealed that a lot of students have well defined course plan for peer learning. On the other hand, there are some students who do not have well defined course plan for peer learning. The well defined course plan include schedule for all courses to be studied in group, contents to be covered during peer learning; in this regard some of students didn't prepare well defined course plans.

Table 6: Availability of facilities

	Frequency	Percentage
No	11	40.7
Yes	16	59.3
Total	27	100

Source: Survey result, 2014.

About 40.7% of students agree that there are no well organized facilities assisting peer learning. In this regard, well organized facilities include: availability of reference books, internet access, study room, etc... However, still about 59.3% students agree that there is facilities availability facilitating peer learning.

Table 7: Peer learning for academic performance improvement

	Frequency	Percentage
No	3	11.1
Yes	24	88.9
Total	27	100

Source: Survey result, 2014.

Majority of students believe that peer learning can improve their academic performance. However, a few students do not believe that peer learning can improves academic performance. So, these students prefer to study individually; even some students reflected that peer learning can consume time while arguing to each other to decide upon courses to prioritize and deciding upon lessons to be covered.

Table 8: Peer learning schedule

Do you have schedule for peer learning?	Frequency	Percent
No	4	14.8
Yes	23	85.2
Total	27	100.0

Source: Survey result, 2014.

To make peer learning be more effective it is better for students to have common schedule of study together. Similarly, during discussion with respondents, majority of them were reported that they had time of schedule during cooperative learning for course study, doing assignment and so on, so that they improved their academic performance

whereas few of them didn't have time of schedule and as the result of this they became poor performers.

Table 9: Frequency of meeting each other per week

How you frequently meet to each other peer week?	Frequency	Percent
Once per a week	6	22.2
Twice	10	37.0
Three times	6	22.2
Above three times	5	18.5
Total	27	100.0

Source: Survey result, 2014.

Performance of student is also influenced by the frequency of students to meet each other in a given time during co-studying. So, from the above table students said that majority of them meet each other twice per a given week.

Table 10: Major purposes peer learning

What is your major purpose to meet each other?	Frequency	Percent
To do assignment only	1	3.7
To co-study only	4	14.8
Both	22	81.5
Total	27	100.0

Source: Survey result, 2014.

The researcher postulated out the purpose of students to meet and spend their time for study together. During discussions with students majority of students were reported that they spent their time on both doing assignment and co-study during meet each other.

Table 11: Places of peer study

Do you get suitable place during peer study?	Frequency	Percentage
No	5	18.5
Yes	22	81.5
Total	27	100

Source: Survey result, 2014.

Results from the above table reveal that most of the students agree as place of study affects peer learning process. During the focus group discussion they said that there are no sufficient places to go for peer learning regularly. But, this issue is not true for all students, because some other students reported that there are suitable places for peer learning.

Table 12: Group interest in peer learning

Are you interested in your group during peer study?	Frequency	Percentage
No	1	3.7
Yes	26	96.3
Total	27	100

Source: Survey result, 2014.

Interest of individual may be different from person to person so that having common study might be influenced by the interest of individuals. The results in the (Table) indicates that majority of students had interest to study in group during peer learning however one student didn't have an interest to study in group but individualism. Thus, having interest influences peer learning.

Table 13: Group active participation

Does your group leader involve you in active participation?	Frequency	Percent
No	1	3.7
Yes	26	96.3
Total	27	100.0

Source: Survey result, 2014.

Leadership is one factor that influences the peer learning system especially at students-centered activities. The results in the above table indicates that majority of students were actively participating because of they had a good leader during peer learning time but few of them were not.

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