EFFECTS OF GROUP LEARNING ON THE ACADEMIC PERFORMANCE OF UNIVERSITY STUDENTS

Rudina Vrioni
University of Tirana, Tirana, Albania
E-mail: rudina.vrioni@yahoo.com

Abstract

This paper addresses two teaching approaches that many faculty members in Albania pursue nowadays when they teach large classes: the lecture approach and the group or cooperative learning approach. It describes the effects of both approaches on the academic performance of adult students. An empirical study is conducted with 243 students from the Faculty of Foreign Languages, University of Tirana, who are enrolled in the course of Communication Skills. The analysis presented, attempts to show that group learning provides opportunities for negotiation (of form, content and classroom rules of behavior), which create an environment favorable to learning. In contrast, the large class lecture-centered approach is shown to provide rare opportunities for student engagement, transfer of knowledge to new situations, long term knowledge retention and motivation for further learning. Placing the analysis within the role of group communication in the enhancement of one's academic, social and personal knowledge, this study demonstrates that when teachers move from primary reliance on the lecture to group learning, they lead their students to academic and cognitive benefits. The purpose of this study is to give empirical support to the use of group approaches in large class settings.
Key words*: education, group learning, lecture, students.*

Introduction

A growing body of research points to the value of active and interactive learning. At most universities in Albania, hundreds of students are enrolled in introductory courses or classes every year. These large classes have traditionally been taught using the lecture mode. In these classes, students are not challenged to engage in reflecting on course material or thinking. Minimal engagement from the students is required, expecting only memorization of information as evidence of their learning (Tabaku, 2008).

Traditionally, the teacher has been the source of knowledge in the classroom (Hansen &Stephens, 2000). As a result of the nature of this role, university teachers adopt what they consider to be the most efficient instructional method for imparting information in large classes - lecturing. Students are rarely asked to process their learning unless the class also carries a discussion or quiz section. Even then, the discussion section is little more than a supplementary or review lecture.

Meanwhile, in recent years, a growing body of university lecturers have been transforming their large class settings to make them more academically and socially involving for their students. They believe that deeper engagement and more lasting learning arise from the active use of concepts in the class, the construction of one's own knowledge and meaning and the creation of a communicative climate within the class. Some strategies for creating student engagement and increasing student learning, involve group discussion and inquiry.

This emphasis on group learning at universities is a reaction to the changes of the Albanian society during the last twenty years of democracy, including a new emphasis on team work in the business sector (Millis and Cottell, 1998), coupled with a realization that in a rapidly changing information society, communication skills are increasingly important. At this level of education, the reasons for implementing group learning into their classrooms include an increasingly diverse student population who need to develop ways of learning together in order to achieve their learning goals, the increased use of teaching and learning that emphasize learner-centered approaches such as peer and group learning and student projects that often require a group approach.

The study suggests that there is a benefit in switching from the traditional teacher-centered classroom setting to a learner-centered classroom setting which promotes communication. It gives some empirical support to the use of group approaches in large class settings by examining the results of a survey conducted with third year students studying Communication Skills in the Faculty of Foreign Languages, University of Tirana. After a detailed analysis of the data collected, it is suggested that group learning can be a useful tool academically and a classroom management strategy. It could contribute not only to an implementation of new educational policies and to a better understanding of the subject material but also to the enhancement of student interest, motivation, creativity, understanding and equality.

Problem of Research

The paper examines how two different teaching approaches; the lecture mode and cooperative learning, affect the learning that occurs. It explores these two methods of teaching at University context by examining the students' results in the final test and their perceptions in a course evaluation form. It aims at understanding how group learning methods affect academic achievement and maximize opportunities for learning. It aims at giving an end to the debate among different lecturers about how these two different methods influence academic achievement by documenting the benefits that accrue to students who interact with others. It asks for a great concern and a change in the education system due to the demands of the Albanian society, by emphasizing the idea that cooperative learning should gain acceptance as a strategy for promoting positive academic, social and attitudinal outcomes (Johnson &Johnson, 1985, Slavin, 1980).

Research Focus

The study extends the commonly held view of teacher-centeredness among classroom teachers beyond a mere provision for more group activities by addressing the question of how the new role of the learner can be implemented through teacher-learner and learner-learner interaction. By contrasting these interactions, from both perspectives, the study attempts at giving arguments to those teachers who are reluctant to trade the benefits of lecture with the benefits of group work without reassurance that the gains will outweigh the risks.

Methodology of Research

General Background of Research

Cooperative learning is well organized as a pedagogical practice that promotes learning, higher level thinking, pro-social behavior and a greater understanding of students with diverse learning, social and adjustment needs. Cohen (1994) suggested that there is no other pedagogical practice that simultaneously achieves such diverse outcomes. Bill Mc Keachie says: "Our survey of teaching methods suggests that…. if we want students to become more effective in

meaningful learning and thinking, they need to spend more time in active, meaningful learning and thinking, - not just sitting and passively receiving information" (McKeachie, Pintrich, Yiguang, and Smith, 1986, p. 77).

Interest in cooperative learning has increased in the post three decades as more research has been published that demonstrates the benefits which accrue the students who work cooperatively as opposed to those who work in traditional classrooms (e.g. Sharan, 1980; Slavin, 1980; Webb, 1982). At university level Kraft (1985) describes successful use of small groups to increase participation in a literature class. However, these authors do not provide empirical data to show that learning outcomes of group methods are equal to or better than the learning outcomes of the lecture method. The purpose of this study is to outline current developments in cooperative learning and to show how this approach to learning is used to promote socialization and learning among diverse groups of students.

Sample of Research

The sample consisted of 243 participants. They were third year students of the Faculty of Foreign Languages, majoring in English. The participants were enrolled in the course of Communication Skills, which is compulsory for students of the third year during the second term. They were students of six classes (A, B, C, D, E, and F). The total number of the students who attended the course was 262, but 19 of them couldn't take the exam for different reasons. The participants had a mean age of 21, 2 years. 201 students or 82, 7% of them were females while only 42 students or 17, 3 % of them were males. 82, 7% of the sample is made up of females because most students enrolled in English Studies programs are females.

Instruments and Procedure

Classroom studies offer unique opportunities for professors to better understand their students' learning. (Bolster, 1983; Cross, 1987).The approach used was based on the procedures used in group investigation (Sharan &Sharan, 1976), in which students work in groups using inquiry and group discussion. In lecture sessions, students receive regular lecture presentations and work individually on the assigned material. Group work typically involves selecting a problem that would be the subject of a lecture, structuring it as a series of questions and assigning it to groups of students for discussion. In the study the classes were taught under both lecture mode and group learning, alternating between these two methods of teaching on a six week basis. An experimental design was produced to test whether group learning methods bring about better results on Communication final tests than lectures on the same topic. The Communication Skills course is worth four credits and covers the standard introductory level topics. It meets twice a week for 12 weeks and includes one mid-term test and one final. The goals of the course are threefold:
1) To introduce students with the key concepts of communication.
2) To teach them communication skills for different communication situations.
3) To help students improve their creative and critical thinking and their reasoning ability which they need for different communication situations.

Students in the course were with little or no previous exposure to communication strategies. A multiple choice final test was used as a measure of students' achievement. In addition all students were asked to complete a course evaluation form which was used to asses students' preference for the two learning approaches: group approach and lecture approach. Understanding student preferences for the type of academic climate they seek may assist lecturers to design more effective, relevant instructional programs to cater for a broader range of students. This is particularly relevant for university students who seek educational climates that provide them with a range of teaching options.

Procedures were implemented within a full term curriculum unit on Communication Skills. The course was divided into two sections. The procedures were implemented in two two-hour lessons per week over a period of six weeks for each approach. The first section was instructed using group or cooperative learning whereas the other received the lecture method. In the second section, students received their regular lecture presentation and worked individually. They sat at their own desks for two 60 minute classes and listened to the lecturer transmitting information. They had no discussion with each other. In cooperative learning sessions, a problem that would ordinarily be the subject of the lecture was chosen; it was structured as a question or a series of questions and was then assigned to pre-arranged groups of 8 to 10 students for resolution. It is efficient to fix group membership at the very beginning of the group sessions because group cohesion develops   and wasted time is avoided. Students had 40 minutes to discuss and prepare answers to the questions. At the end of the group activity each group presented their findings in a discussion led by the lecturer. A spokesperson of each group presented the information to the class in 15-20 minutes. All the students took part in both instructional methods for 12 weeks. To test the hypothesis that group methods fostered superior learning compared to lecture methods, all the test items on the final test related directly to the 12 topics taught using both methods. The final exam had 20 multiple choice questions, ten covering group method and ten covering the lecture method. After the exam the percentage of students answering these answers correctly was compared with the percentage answering all other items correctly. During the post-test session students also completed the course evaluation form.

Data Analysis

As indicated, the overall 20 item final test included six items corresponding to topics covered in each section. Therefore each student responded to 10 questions that corresponded to topics covered under cooperative learning and 10 corresponding to those covered under traditional instruction. To compare the achievement of students on topics covered under group learning and the lecture mode, a simple method was used. After the tests were corrected, the results of both sections were compared for all students.

Results of Research

Comparing the frequency of correct responses on items directly related to group work with the frequency of correct responses on items related to the lecture mode it was found that 39 students or 14% of the total number of them scored equally on both sections. For items taught directly by the group method these students performed as well as they did on topics taught by lecture. 75 students or 24% of the total number of them achieved higher scores in the second section of the multiple choice test which covered topics taught under traditional instruction. 129 students or 62% of the total nr of them achieved higher scores in the first section of the multiple-choice test, which covered topics taught under cooperative learning. Table 1 summarizes the number and percentage of students answering multiple-choice tests correctly.

Table 1. Number and percentage of students answering correctly.

Frequency of correct responses	Number	Percentage	Total
Score higher on the first section	129	62	243
Score higher on the second section	75	24	243
Score equally on both sections	39	14	243

On the course evaluation form administered at the end of the term to asses students' preferences for the two types of the learning approach these results were obtained:

Table 2. Students' perceptions of cooperative learning.

Perceptions of cooperative learning	Yes (N)	No (N)	Yes (%)	No (%)	Total (N)	Total (%)
CL for better relationships	210	33	86.5	13.5	243	100
CL as a better way to learn Communication Skills	188	55	77.3	22.7	243	100
CL requires more consistent work	201	42	82,7	17,3	243	100
CL requires more responsibility to prepare	197	46	81	19	243	100

The effects of this method on learning were examined and measured by performance on multiple-choice tests. Comparing the frequency of correct responses on items directly related to group work with the frequency of correct responses on other test items unrelated to group work we found that group work was as effective as traditional lecture for 14% of the students who were low-achieving students in other courses, the group work yielded more favorable results than the lecture for 62% of the students who were of middle-level academic achievement while it yielded less favorable results than the lecture for 24 % of the students who were of high academic achievement in other courses. Clearly the middle level students derived maximum benefit from studying with the method of cooperative learning compared to students from the other two levels of academic achievement. On the basis of the evidence presented high achieving students do not derive any significant benefit from cooperative learning. One possible reply is that they have adjusted to the lecture method that constantly compares students with one another in terms of their academic achievement. The rules of the game in the arena of academic achievement are well known to these students and they are completely in tune with them (Ames, 1992).

Discussion

Groups not only afford learning support for their members, but they also motivate attendance and preparation for class, build student connectivity and make them recognize that good communication skills and interpersonal relationships are very important to their success (Kraft, 1985, Michaelsen, 1983). However, even given all of these positive features of group learning, the method is of no real value unless it results in effective learning in the discipline. This aspect of the approach was carefully investigated. The evaluation of the effectiveness of group learning in Communication Skills encompasses not only its cognitive but also its affective dimensions.

On the course evaluation forms administered at the end of the term students displayed very positive attitudes towards group learning. Results indicated that students feel that cooperative learning builds better relationships among students (86.5%). Being part of a group generates a motive to maintain membership. Cooperative efforts result in higher levels of group cohesion and sense of belonging than do competitive or individualistic experiences. Students also stated that cooperative learning is a better way to learn Communication Skills (77.3%), that it requires more consistent work than does the lecture method (82.7%), that they feel responsible to prepare for each class as well as possible and that they feel responsible to their groups to be present in class every day (81%). As cohesiveness increases, student commitment to group

goals increases, feelings of personal responsibility to the group increase, persistence in working towards goal achievement increase and so productivity increases (Johnson and Johnson, 1985). Because students are engaged actively in the learning process and challenged to facilitate the group's learning experience, they become more focused on their individual productivity, as well as on the group's productivity. Group learning enhances student interest, motivation, success, creativity, understanding and equality. Students worked productively by sharing roles and tasks to construct knowledge together. Finally, social and academic goals seem to be intimately linked. Cooperative behavior is associated positively with academic success. These findings are consistent with those of Smith and MacGregor (2000), who found that interaction with students that is built around substantive, academic work, has been shown to lead to greater academic achievement and personal satisfaction. As Atkinson remarks: Achievement is a 'we' thing, not a 'me' thing, always the product of many heads and hands (1964).

These findings might help those teachers who would like to use the group method but who are concerned that students do not learn as much as they do in a formal lecture. Smith and MacGregor remark: One of the best reasons for bringing students together is to give them the chance to learn from and with one another, to practice communicating and working together to accomplish a common task and to find out more about one another (2000).

Conclusions

Although university teachers typically recognize the value of group work in classroom learning it still remains rather uncommon. Even though most of the teachers still choose lecturing as their primary instructional strategy, it is now time for a new way of conceiving large-class learning. Group learning can be used effectively within adult education classes. This teaching strategy can be used to enhance achievement and socialization among students and contribute to improved attitudes towards learning and working with others, including a better understanding of students from diverse cultural backgrounds.

Moreover it is involving and active as it lends variety to learning, encourages participation and leads to active thinking among students. It seems evident that group based learning can be used very effectively in other courses. Student evaluations of their group learning in Communication classes strongly indicate that they like it. In order to enhance students' performance and achievement university teachers should model different teaching strategies.

Group learning calls for the construction of a better educational experience for all students and for a better environment in which teachers can be professionals. There is a need for a change of classroom cultures to support the outcomes of schooling that are congruent with the societal needs of the 21st century and a change in the preparation of all teachers to understand, internalize and implement communication principles while interacting with students. It is necessary to help the students change their behavior from externally controlled to responsible and internally motivated. From a pedagogical standpoint, this study provides teachers with a better understanding of the communicative moves that effectively involve students in classroom activities and successfully transfer responsibility from the teacher to the learner.

Recommendation

It is now time for university teachers to change the learning environment of large classes. They have the opportunity to rethink the goals of classes, especially the large ones and to reflect about the method that might best help their students acquire knowledge

References

Ames, C. (1992). Classrooms: goals, structures and student motivation. *Journal of Educational Psychology,* 84: 261-71.

Atkinson, J. W. (1964). *An Introduction to Achievement Motivation*. New York: Van Nostrand.

Bolster, A. S. (1983). Toward a more effective model of research on teaching. *Harvard Educational Review,* 53(3): 294-308.

Clifford, J. (1981). Composing in stages: The effects of a collaborative pedagogy. *Research in the Teaching of English,* 15: 3753.

Cohen, E. (1994). Restructuring the classroom: conditions for productive small groups. *Review of Educational Research,* 64, 1-35.

Cross, K. P. (1989). Classroom research. *To Improve the Academy.* Stillwater, Oclahoma: POD/ New Forums Press.

Hansen, E. J., Stephens, J. A. (2000). The ethics of learner-centered education: dynamics that impede the process. *Change*, 33 (5): 40-7.

Johnson, D. W., Roger, T. Johnson (1985). Classroom conflict: Controversy versus debate in learning groups. *American Educational Research Journal,* 22 (2): 237-56.

Johnson, D. W., Johnson, R., Stane, M. (2000). *Cooperative Learning Methods: A Meta-analysis*. Available at: http: // www. c/crc.com/pages/cl methods.html (accessed 15 July 2002).

Kraft, R. G. (1985). Group-inquiry turns passive students active. *College Teaching,* 33 (4: Fall) 149-54.

McKeachie, W. J., Pintrich, P. R., Yiguang, L., Smith, D. A. F. (1986). *Teaching and Learning in the Foreign Classroom: A Review of the Research Literature.* Ann Arbor: Regents of the University of Michigan.

Michaelsen, L. (1983). Team learning in large classes. In *Learning in groups.* New Directions for Teaching and Learning No. 14. San Francisko: Jossey-Bass.

Millis, B. J., Cottell, P.G. (1998). *Cooperative learning for Higher Education Faculty*. Phoenix, AZ: Oryx Press.

Ministry of Education and Science (MASH). (2010*). Annual Statistical Report of Education* 2009-2010. Tirana: Published by MASH, pp 82.

Sharan, S. (1980). Cooperative learning in small groups: Recent methods and effects on achievement, attitudes and ethnic relations. *Review of Educational Research,* 50: 241-72.

Slavin, R. (1980). Cooperative Learning. *Review of Educational Research,* 50: 315-42.

Smith, K. A., Cooper, J. L., MacGregor, J. (2000). *Strategies for Energizing Large Classes*. San Francisko: Jossey-Bass, pp.14-160.

Tabaku, E. (2008). *Didaktika e Gjuheve te Huaja* 1. Tirane, pp 155.

Troyka, L. Q. (1973). *A study of the effect of simulation-gaming on expository prose competence of college remedial English composition students*. PhD. Dissertation, New York University.

Advised by Gezim Hadaj, "Marin Barleti" University, Tirana, Albania

Rudina Vrioni	Lecturer, University of Tirana, Rr. e Durresit, Pallatet Fratari , Kulla 3, Ap 3, Tirana, Albania.
	E-mail: rudina.vrioni@yahoo.com
	Website: http//:www.unitir.edu.al