COOPERATIVE LEARNING STRATEGY: EFFECTS ON STUDENTS’ PERFORMANCE IN GRAMMAR

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ABSTRACT

Teaching grammar to students is important as it provides them with greater depth of understanding and proficiency in the language. It guides them in understanding grammar in terms such as how sentences are built, the choice of words used, or the types of words that comprise a sentence. In the study of grammar, cooperative teaching should be given focus and emphasis. It is galvanized by participation in some kind of culturally valued activity and that the individuals’ growth into such activity follows a development pattern. Everyone should be given the appropriate encouragement, enrichment and instruction, the varied types of activities that can be developed to reasonably high level of performance. One way to help improve students’ performance in grammar is through teachers approach in teaching. English teachers should improve students’ language learning which includes the involvement of students to participate in classroom activities enthusiastically, by accomplishing given tasks with satisfaction, giving of importance to every activity designed by the teacher in the class and improving learning by providing various activities that will make the students interact, collaborate, and corporate to ensure their participation of the target language. The study employed the quantitative experimental research. The Pretest-Posttest control group design were used in this study to measure and evaluate the students’ performance in grammar subjects, using cooperative learning strategy. Emphasis is given to the use of cooperative learning strategy to help the students develop their skills during the teaching of grammar. From these perspectives, the researcher found it highly desirable to investigate on the variations of cooperative teaching strategy and traditional teaching method. Both mean scores fall in the category of Fair. This means that the students were able to answer correctly’ 6 items out of 10 questions. In like manner, in the experimental group, the Post test mean score was improved with verbal interpretation of Good. The findings showed that there is a significant difference between pretest and posttest scores in both groups. But, no significant difference was obtained in comparing the posttest scores between the control and experimental groups. Moreover, there a no significant difference between the performance level of the students exposed to cooperative learning strategy and traditional method in teaching grammar. The data used the one-way analysis of covariance in the performance level of the students before and after exposing them to Cooperative learning. It further used qualitative interview questions to validate the results of the study.

Keywords: Cooperative learning, pretest, posttest, student's performance, experimental group, traditional group.

INTRODUCTION

From the days education began, teachers use the traditional method of lecturing in order to communicate and discuss different topics. But today, the use of different teaching methods has greatly revolutionized the strategies of teaching. With this program, teachers have the advantage of using different strategies to make the students’ learning become meaningful and successful.
The dawn of edutainment, offers hope to English teachers because students learn better when more than one medium is used in instruction. It can be said then that a point no educational psychologist would dispute is that students learn more when information is presented in a variety of modes than when only single mode is used. The point is supported by a English grammar is the study of the structure and meaning of human language; the term is also applied to books that set out rules governing a language’s use. Grammar maybe understood either in a traditional sense, designating an unbroken chain of theories about language extending back to ancient Greece, or in a modern way. In current Linguistics, grammar is defined as the body of traits, knowledge that constitutes as morphology, the principles of word formation, the sentence structure and the parts of speech. Descriptive grammar is observational and attempts to characterize the principles of word and sentence formation that speakers actually follow in using their language. On the other hand, perspective grammar, also called normative grammar, formulates rules about how people ought to speak or write.

Reason for studying grammar as the following historical sketch will show the reason for studying and investigating grammar which have varied greatly over the centuries, include the following: To instruct the young and the unlearned in foreign languages or in the prestige “educated” or “cultivated” use of their own language; To keep sacred texts accurate and therefore effective; To understand the operation of language itself as such; and to understand the human mind and means of operating with linguistic symbols. The first reason which has been the most widespread and practical, is the one that has given grammar an evil name among those who are forced to learn its strange terminology and translate into pattern into “diagrams” that seem to violate and distort the act of speech. What “glamour” there is in grammar and it is powerfully there for some resides in the third and fourth reasons.

Even though edutainment was firstly mainly used to teach Math and Science subjects currently the internet proliferates with websites offering online tutorials, lessons, exercises and even games in English pronunciation. On the other hand, not all students are technically and conceptually capable of availing these materials from the internet. To supplement available instructional materials on grammar, the researcher deemed it necessary to integrate cooperative learning in teaching grammar since according to Vaughan schools are perhaps the most needed location for learning (Vaughan, 2004).

The researcher conducted this study to measure and evaluates the students in grammar subjects, using cooperative learning strategy. Emphasis is given to the use of cooperative learning strategy to help the students develop their skills during the teaching of grammar. From these perspectives, the researcher found it highly desirable to investigate on the variations of cooperative teaching strategy and traditional teaching method.

THEORETICAL FRAMEWORK

Grammar: In modern English the term grammar is used in connection with the classification of words according to the functions they perform in the sentence, the inflection of words and the relationships of words to one another in a sentence. To give meaningful sequence to the relationships of words in a sentence. Three grammatical devices are used. These are inflection, word order and the use of function words. Inflection refers to the changes in the form of words to reflect changes in grammatical relationships. In English, word order denotes the way the words are arranged in the sentence to produce meaning. Function words clarify relationships among words (www.merriam-webster.com/dictionary grammar)
The three known approaches of grammar are: the traditional-perspective, the structural-descriptive and the generative-transformational. The traditional perspective classifies English words into eight parts of speech: nouns, pronouns, verbs, adjectives, adverbs, prepositions, conjunctions, and interjection. It also prescribes rules arbitrarily as guides to how the parts of speech should be used in speaking and writing.

The structured-descriptive approach refers to words as form classes divided into content words and function words or structure words. Content words have meaning in themselves. The function words have little or no meaning apart from the grammatical idea that express. In using instructional strategies, it is recommended that the students are first prepared for what they are going to see, hear or do. This may entail a brief explanation. Secondly, conditions to show special materials under the best possible conditions must be arranged so they do not interrupt the momentum of the lesson. This includes making necessary adjustments, such as changing a seat for a student in the rear who has trouble seeing the screen. Thirdly, the equipment must be operated efficiently. Either the teacher or an assistant will probably be responsible for this task. Lastly, the experience must be summarized or followed up with a discussion.

Noun: In grammar, the names people give to themselves and others, to the places they live, and to the things that surround them are called nouns. The word noun comes from the Latin word nomen, which means “name.” (www.merriam-webster.com/dictionary nouns)

Aquino cited that the computer is used in the instructional process as a teaching machine. Using the programmed-instruction format, it has the capability to interact with the students, which is critical factor in the learning process. Moreover, a computer can store many instructional modules and can provide a display feature that makes learning interesting (Aquino, 2002).

Capron mentioned that the introduction of computer instruction in the secondary evaluation is a welcome change for computer beginners being a new insights for them. Students realize that in growing society, computer skills are needed. And this can happen through adequate teaching of the person responsible in importing those skills (Capron et al, 2003).

Forcier cited basically, computer-based teaching (CBT) is applied to a teaching-learning situation that involves the direct instructional interaction between computer, instructor, and students. The instruction usually has responsibility for all instructions in the classroom and sets up the learning environment through careful selection and analysis of the instructional materials, ensures that each students has the necessary entry level knowledge skills and attitudes to engage in a particular activity and follow up with activities designed to promote retention and transfer of learning (Forcier, 2004).

The interaction of the students in the classroom is then strengthening the interaction of the students with their facilitators. In this case, the intimidation happening is the usual class recitation method is minimized.

LITERATURE REVIEW

This study concerns with the integration of cooperative learning strategy in teaching grammar. It intends to furnish the readers with a better understanding of how the following
A research on teaching strategies found out that all their respondents used board, charts, flash cards, maps, globe, and photos in teaching World History. Only two of them used television and none of the respondents used computer and overhead projector in the classroom. They concluded that majority of teachers respondents use traditional instructional materials, and nobody used technology in teaching. Teachers found and observed difficulties in teaching World History to a great extent. All the topics can be supplemented by the use of any teaching strategies (Balitaan et al., 2007).

Cassanova’s study showed that all topics in Geometry can be discussed using jigsaw puzzle. They used controlled and experimental group which gave an average performance in the pretest and post test in Geometry. They developed a proposed plan of action to initiate the use of jigsaw puzzle as an instructional strategy (Villamin et al., 2005).

Researches on cooperative small groups points out the benefits of interactions and describes the process as a powerful forum for developing students’ critical thinking and higher-order skills. Also, cooperative small groups require students to learn from each other though their interactions. It has positive effects on students’ interpersonal relationships in the classroom and can improve attitudes of students of different races, ethnicities and academic abilities towards one another. Thus, implementing cooperative groups in the classroom represents a shift from direct to indirect instruction and supervision on the part of the teacher.

One of the most utilized strategies in the classroom is cooperative learning. The incomparable achievement gaps among different groups of students had been an alarming concern in any educational instruction especially among subjects that are highly cognitive in nature. Over the years, teachers across all levels had just focused on what is new in education but never that they realized to reduce these disparities in the academic achievement of these student-learners.

Cooperative learning is generally defined as a teaching arrangement in which small, heterogeneous groups of students work together to achieve a common goal. Students encourage and support each other, assume responsibility to their own and each other’s learning, employ group related social skills, and evaluate the group’s progress. The basic elements are positive interdependence, equal opportunities, and individual accountability. Humans as we are, tend to be cooperative by nature in all aspects of our lives. Therefore, it follows that cooperative learning groups in schools should be used as a logical teaching method (Kagan, 2001).

These incomparable disparities in the academic achievement of students were attributed to some variations that affect students’ studies, according to Villamin. Therefore, they must be addressed properly through responsive teacher’s instructional planning design and practices. He stated that teaching learning process must be based on the notion of managing learning rather than managing the student-learners if it is to be responsive. It must provide equal opportunities across different groups of students in a heterogeneous class (Villamin et al., 2005).

Most professors viewed instructions for content mastery and progressed through lecture-discussion as subjects are smorgasbord of concepts which are taken in a limited time, that is
the reason why professors develop the course outline in a traditional point of view of teaching and learning. Consequently, student-learners are developed through bookish competencies anchored on low levels of learning. Therefore, their success is only limited to their capacity to memorize bits of information in a dogmatic standpoint. The study of Shafqat entitled “An Experimental Study to Evaluate the Effectiveness of Cooperative Learning Versus Traditional Learning Method” showed that there is no significant difference between the mean scores of experimental group on pretest and posttest (Kagan, 2001).

Another study conducted by Van Dat Tran entitled “The Effects of Cooperative Learning on the Academic Achievement and Knowledge Retention” showed that the effectiveness of cooperative learning on students is compatible with the requirements of teaching innovations in Vietnamese higher education (Moodle.amaiu.edu.bh/students). In the study of Chianson et al. showed that cooperative learning was found to be more effective in the teaching of circle geometry in terms of retention.

METHODOLOGY

The research design employs the quantitative experimental research. The Pretest-Posttest control group design were used in this study. This provides bases for the effect of the independent variable to the dependent variable involving experimental and control groups. The kinds of Nouns: Concrete, Collective, Abstract, Mass Nouns, and Pronouns were introduced in the Independent Variables. The use of module which is uploaded in the Moodle was also used. Groupings were introduced in the process. Analysis of the scores was done to conclude on the causal effect of the independent variables.

The traditional instruction was made to the control group with the usual class session, ordinary assignment, individual seatwork and exercises. This study was conducted at the Center for General Education of AMA International University - Bahrain, during the First Trimester of SY 2015 – 2016. Two sections of twenty seven (28) students being handled by the researcher in Engl401 (English Communication Skills 1) were utilized in the study. The two sections came from the classes in the morning. Groups of five will be formed in determining the experimental groupings of the study.

This study was conducted for two weeks, 6 hour meetings. This study utilized two (2) existing classes, First Trimester, AY 2015-2016 in Engl 401-English Communication Skills 1). The two classes were taken from morning session to ensure heterogeneous groupings. It is assumed that very few students who attended the morning classes have work. The overall groups mean was computed to ensure the comparability of the control and experimental groups at the start of the experiment.

Instrument Used

Quantitative data were gathered using the following instruments:

Achievement Test in English Communication Skills 1. A validated Achievement Test (teacher-made test) which was used in the Internal Moderation. All items in the test represent a topic covered in this study. It is a test on Nouns, kinds of Nouns and Pronouns. The test consisted of five (5) categories, five (5) items for each category that will be twenty marks (25) as the highest possible score.
The researcher made a scoring rubric written on the Pre Test-Post Test and answer key with corresponding marks. The tests were checked and were graded by the researcher using the University Grading System.

**Instruments used**

*Engl401 Module*—this module serves as a guide in teaching and learning grammar. The Module is uploaded in the Moodle for the students’ use. Achievement Test- his is a validated teacher-made-test (pre-test and post test) that will be used to determine the performance level of the students in grammar. Groupings is used also in this method. The students will be encouraged to think through questions using distinct steps, encouraging individual participation. This is an excellent method for promoting critical thinking and articulate communication in the classroom.

**Data Collection**

Two (2) existing classes in Engl401 (English Communication Skills) as regular loads of the researcher were the sources of data to be collected. However, matching was done to ensure comparability in terms of communicative skills and ability of the students based on the result of the pretest. The control group and the experimental group were determined. Once the lessons in Nouns and Pronouns were discussed, the researcher conducted an orientation on the processes of the study. Then, the pretest was conducted after the orientation. The researcher himself handled the two classes.

To control other factors that might influence the outcomes of the study, the amount of time for conducting the two classes was one hour only. Five (5) topics covered in the experiment. Both groups were provided with course specifications and instructional materials thru the Moodle of the University. PowerPoint presentations were prepared and the methods of grouping also differed (Moodle.amaiu.edu.bh/students). Direct Method of Instruction was used to both groups. However, on the traditional seatwork stage, collective teaching was used in the experimental method of grouping. The posttest was administered after the experiment.

**Data Analysis**

The quantitative analysis was done using informal interview to determine the performance level of the respondents who were exposed to the two groups. The quantitative data was derived from the results of the post test. T- test was used to determine the performance level of the two groups before and after the experiment. Analysis of covariance (ANCOVA) was used to test the significant difference between groups using pretest and posttest scores. Statistical Package for Social Sciences licensed to AMA International University-Bahrain was used for Statistical Computations in the statistical computations. Hypothesis was tested using 0.05 level of significance.

**RESULTS**

The research design of this study is shown in the diagram below:
Table 1: Achievement Test Scores

<table>
<thead>
<tr>
<th>University Grading System*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>18-19</td>
</tr>
<tr>
<td>14-17</td>
</tr>
<tr>
<td>10-13</td>
</tr>
<tr>
<td>Below 10</td>
</tr>
</tbody>
</table>

*AMAIUB Student Handbook SY 20-11-2012

Table 2: Comparison of Raw Scores in the Pretest and Post Test

<table>
<thead>
<tr>
<th>GROUP</th>
<th>Pretest Mean</th>
<th>Posttest Mean</th>
<th>df</th>
<th>Computed t</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section FG (n = 23)</td>
<td>12.5 (4.7)</td>
<td>16.1 (4.7)</td>
<td>22</td>
<td>4.660</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Section FH (n = 28)</td>
<td>15.3 (4.8)</td>
<td>16.6 (4.1)</td>
<td>27</td>
<td>2.797</td>
<td>0.009</td>
</tr>
</tbody>
</table>

Table 3: Difference of the Scores in the Student Performance in the Test

<table>
<thead>
<tr>
<th>Group</th>
<th>Adjusted Mean</th>
<th>Std. Error</th>
<th>Adjusted Mean</th>
<th>Std. Error</th>
<th>F-value</th>
<th>(p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental (n = 23)</td>
<td>17.2</td>
<td>0.594</td>
<td>15.67</td>
<td>0.536</td>
<td>3.456</td>
<td>.069&lt;sup&gt;ns&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

ns – not significant
DISCUSSION

Table 2 presents the results on the analysis of the students’ score, in the pretest and post test exams in Engl401. It describes the effects of cooperative learning on the students’ performance level.

In the experimental group, the pretest results as shown in table 2, the mean score is 12.5 which is equivalent to 62.5% which has verbal interpretation of Fair.

While in the post test, the students got a mean score of 16.1 which is equivalent to 80.5% which has a verbal interpretation of good.

From the controlled group, the pretest score is 15.3 which is equivalent to 76.7% and interpreted as good.

While in the post test, they got 16.6 and an equivalent of 83% with a verbal interpretation as good.

Difference in the Performance Level within Groups

Furthermore, it can be gleaned from table 2 that both groups posted significantly better scores after the exposure to the cooperative learning since the p-values are less than 0.05.

Table 3 presents the results on the test of significant difference of the scores using the one-way analysis of covariance in the performance level of the students before and after exposing them to Cooperative learning. This is because the two groups were intact and that they are not comparable based on the pretest means. The pretest score was used as the covariate. This means that the post test scores will be adjusted using the pretest scores and the adjusted mean scores between the two groups will be compared. The table shows the results of the analysis.

Moreover, the table shows that the computed F-value is not significant at 0.05. Hence, there is no significant difference on the performance of students between the two groups. The data did not provide enough evidence that cooperative learning is better than the traditional method in teaching grammar. This contradicts to the studies of Van Dat Tran; Chianson, Kurumeh, and Obida. However, this study supports the study of Shafqat Ali Khan, that there is no significant difference between the mean scores of experimental group on pretest and post test.

In spite of the quantitative results of the study, qualitative results supports cooperative learning as manifested by the student’s interview. Students in the experimental group affirms that cooperative learning enhanced their communication skills, provides avenue for sharing their ideas to the group, and they enjoy working with the group while learning the lesson. These observations confirm the advantages of using cooperative learning in teaching grammar.

Insights Drawn from Students Interview

The following are insights drawn from student’s interview in terms of the researcher’s method of teaching- cooperative learning.
Cooperative Learning

The students from the two groups (control and experimental) made the following comments. A student from the control group had said:

“The grouping method is good because we can learn and share some ideas with our friends”.

However, a student commented:

“I don’t want very few members because If our members cannot answer, nobody will answer for us”.

Another student suggested that additional points will be given to their grade

“Can I suggest that you give us additional marks to our grades whether in the assessment/activity”?

Some students wanted to be with their friends:

“I don’t want to be grouped with others. I want to sit beside my friends. She could help me and explain in Arabic”.

Control group

Some students requested that the test be given in groups.

“Can we do it in groups”?

Another one said that if he could do it in pairs.

“Can we make this test in pairs because it would be very easy for us to help one another”.

A group of students altogether raised their voices and said:

“We want to do it individually”.

And another student said:

“I want to work alone because if I work alone, I won’t wait for his answer. My correct or wrong answer will be mine”.

One student said this:

“This subject is very difficult so we need groupings so we could share our answers”.

CONCLUSIONS

It is therefore possible to increase the gain scores of the students using any grouping method used in this study. Although, the result revealed a failure mark on the pretest but a significant increase of the gain scores was achieved in the posttest. Specifically, an average increase was gained by both groups which obtained a passing mark of 2.75 and 2.5 (control and experimental group, respectively). Insights drawn from the students’ journal that can contribute more in raising student’s achievement in Differential Calculus deserves an attention, which is the video recorded lectures of the professor rather that shared videos lectures of instructors from the You Tube.

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