

## **Collaborative Learning as a Better Alternative for Lecture Method: An Experimental Study**

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### **Abstract**

Collaborative learning can be defined as an educational approach used in learning and teaching for working together in an intellectual activity searching for answers, understanding, solutions, or meanings, or creating anything new. The paper focuses on differentiating students' performance in collaborative learning and its impact with the lecture method of teaching. The paper is outcome of empirical study conducted with II M.A. English Integrated students (UG Level) in Annamalai Univeristy, Cuddalore District.

**Keywords:** Collaborative learning, lecturing, work together, language learning.

Collaborative Learning is a method primarily designed for learning and teaching foundational (knowledge and cognition) and Non-foundational skills (Social skills and socially constructed knowledge). In Collaborative learning, the role of the teacher extends more than a lecture and monitoring. ). In fact, the teacher makes students collaborate not just with groups but as a whole – Collaborative Classroom. It promotes shifts in authority among students or student and teacher; it is informal and socially constructive. To explain, lecture is not neglected entirely but at the same time, it can take place at any time, whenever needed. An advantaged student in the group can help or students can ask help from advantaged student. As a result, students are active learners than passive during lectures.

The paper “Collaborative Learning as a Better Alternative for Lecture Method: An Experimental Study” aims at comparing the efficacy of collaborative learning with that of lecture in ELT classroom. The paper is an extract from empirical study from the doctoral programme. The experiment is conducted in II M.A. Integrated (UG level in the year 2017-18), students in Annamalai University, Chidambaram. Nearly 70 percent of the students are first generation graduates who have studied in Tamil medium Schools. Their source of learning English highly depends on English teachers and textbooks. Their outside source such as library, media, and technology is very low than students in urban areas of Tamilnadu. The experiment is conducted in Part II English class IENC 32 entitled “English through Literature III (Drama)”. The lesson taken for the experiment is “The Game of Chess” by Kenneth Sawyer Goodman.

**Time:** 20 minutes for writing (Pre-test), 20 minutes for Collaborative discussion and 20 minutes for writing (Post-test)

## Methodology

“The Game of Chess” by Kenneth Sawyer Goodman is introduced to students in lecture mode for 3 class hours where they are provided with interpretations by the teacher. Reading the text in the class hours is encouraged. Students are also instructed to read the text as a take home assignment.

### Hypothesis H<sub>1</sub>

There is a significant difference in students’ performance in Pre-test and Post-test (before and after collaborative learning).

### Null Hypothesis H<sub>0</sub>:

There is no significant difference in students’ performance in Pre-test and Post-test (before and after collaborative learning).

### Pre-test

Pre-test is conducted for first 20 minutes of the class hour. Students are given separate sheets to complete their writing.

### Questions

Marks 2x5=10

1. “God has delivered you into my hands.” Explain
2. Write a brief note on the theme of vengeance in The Game of Chess.

### Collaborative discussion

Students are encouraged to discuss the answers for the same question for 20 minutes. They are also allowed to use their text and dictionary if needed.

### Post-test

Students are asked to collaborate and write the same question such as students can talk to their friends to verify answers, ask how to write, and clarify doubts. They are instructed and monitored not to copy from their text and friends. The time allotted for writing is 20 minutes.

### Data Interpretation

The answer sheets are collected and examined carefully. Methodological Triangulation is the use of both quantitative and qualitative analysis where the data can be viewed in multiple perspectives. It can increase the validity and reliability of the data. At the same time, it can also provide deeper and unique meanings to the data.

### Paired t-test between pre-test and post-test

#### Descriptive Statistics

Sample	N	Mean	StDev	SE Mean
Pre-test	33	0.803	0.935	0.163
Post-test	33	1.636	1.537	0.268

#### Test

Null hypothesis                      H<sub>0</sub>:  $\mu_{\text{difference}} = 0$

Alternative hypothesis            H<sub>1</sub>:  $\mu_{\text{difference}} \neq 0$

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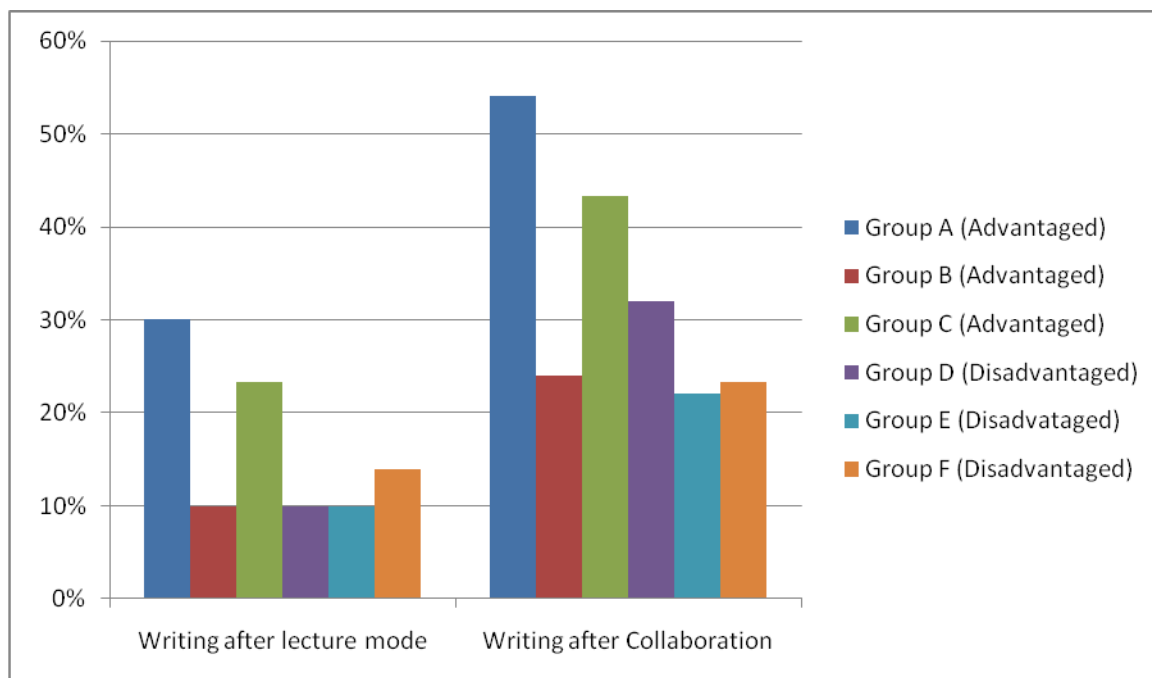
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T-Value	P-Value
-6.81	0.000

Paired t-test (descriptive statistics and test using Minitab statistics) shows that there is significant difference in students' performance in Pre-test ( $M=0.803$ ,  $SD=0.935$ ) and Post-test ( $M=1.636$ ,  $SD=1.537$ );  $p = .000$ . As the p value is lesser than cutoff significance 0.05, the result rejects the null hypothesis. Thus, there is significant difference in students' performance between the Pre-test and Post-test.

### Overall performance of each group in Pre-test and Post-test

The overall groups' performance in Pre-test and Post-test is charted as follows. Group A, B, and C are advantaged groups (above average) where at least one student will be available to help the other students in the same group. Group D, E, and F are disadvantaged groups where all students are average or below average learner and the collaborative teacher can help and monitor the groups. In Pre-test, Group A, B, C, D, E, and F scored percentage of 30, 10, 23, 10, 10, and 14 respectively and in Post-test, Group A, B, C, D, E, and F scored percentage of 54, 24, 43, 32, 22, and 23.3 respectively. The groups' overall performance increases due to the increase in individual scores after working collaboratively.



**Figure 1** Overall Performance of each group in Pre-test and Post-test

The figure 1 shows that there is increase in score for both advantaged and disadvantaged groups. In fact, it is evident that disadvantaged group is not disadvantaged when they learn collaboratively. Group D (disadvantaged group) performed better than the advantaged group (Group B). Even though, advantaged students play the role of peer-teaching, their collaborative attitude contributes effect to the teams/groups.

### Total Performance of the Class

The average of total class is calculated such as – after lecture 16% and with collaborative writing 33%. As it is their initial stage in collaboration and its activities and lack of language skills contributes 15 % difference in the score. If they are consistently encouraged to work collaboratively, their language skills and competency can improve for the better.

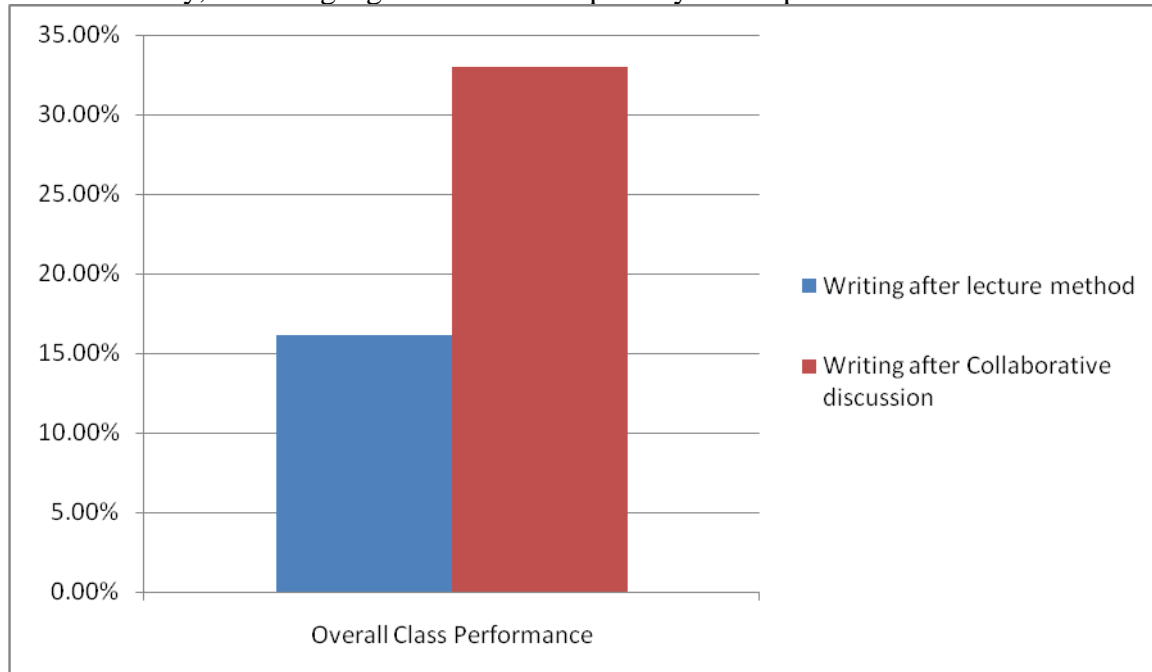
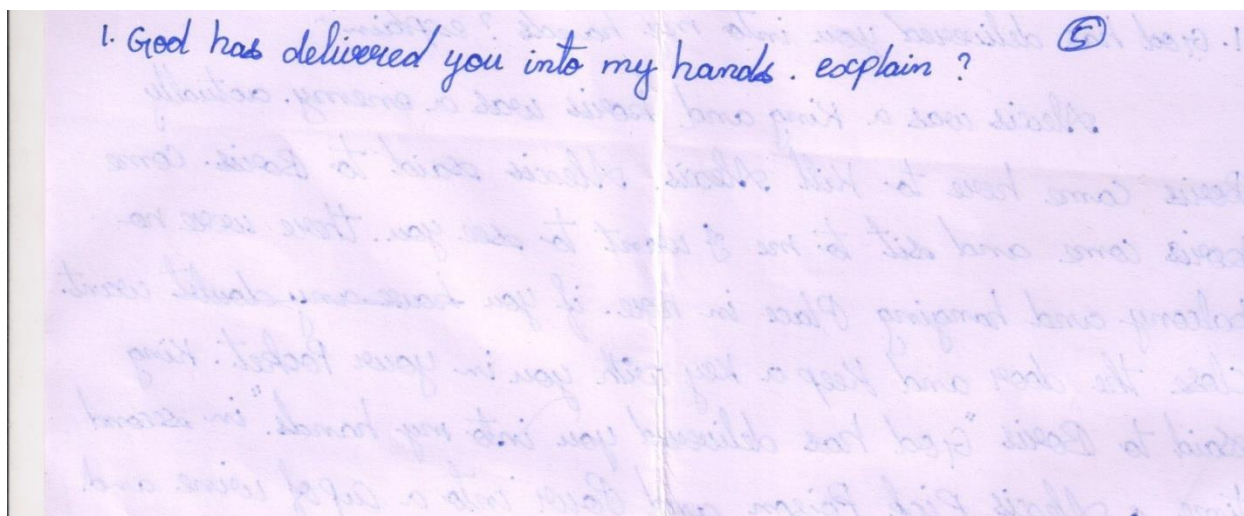


Figure 2

### Qualitative Analysis of Pre-test and Post-test

Analyzing qualitative can help to identify unique findings and better interpretation about the data. Let us look at example from the pre-test and post-test. In Image 1, the blank space after the question indicates that the student did not answer the first question after the lecture. It is evident that they are hesitant to work by themselves. They are already practised in writing but they write by memorising the given essay or from the text.



**Image 1 Pre-test**

Similarly, there are a few students who left the questions answered because of the following reasons:

- i. They were unable to identify their answers.
- ii. They were unable to transfer the known answer by their own language skill.
- iii. They were hesitant to write on their own.
- iv. They were not practiced to writing

In fact, they consider writing as a test. Their attitude towards test and writing is not positive. Fear is the first outcome of writing because of lack of language skill due to unawareness of writing on their own.



Let us look at the same student's writing after collaborative discussion.

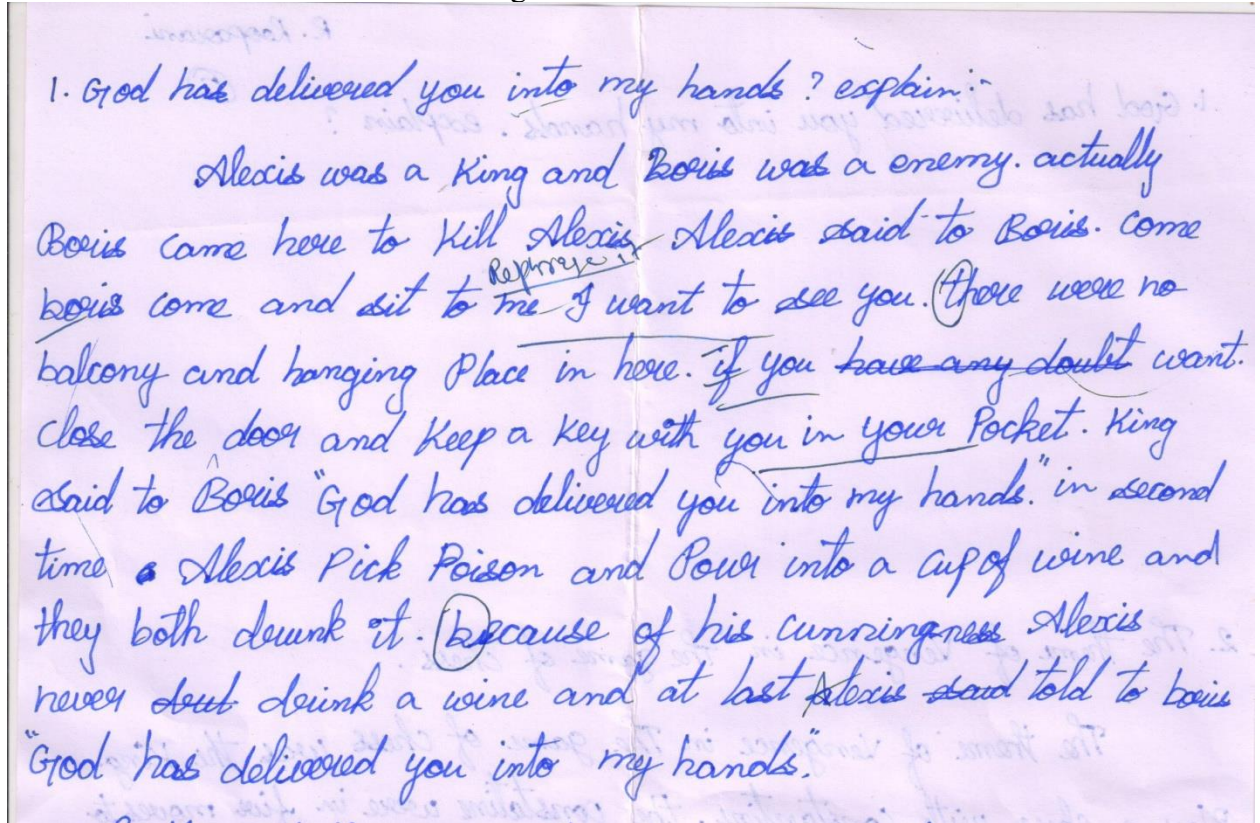


Image 2 Post-test

Image 2 is an evidence that the student was able to identify the answer from the text collaboratively. At the same time, they become less hesitant when they share their answers with friends and transfer it to writing. Even though there are errors in punctuation, grammar, spelling etc, the student is able to try and express her answers with confidence. The usage of "you" indicates that their unawareness of reporting speech. The usage of small letter after period indicates that they are not aware of punctuation. Writing the name with small letter shows are the common error found in many samples. Traditional testing provides marks and it may not allow students for learning. But while collaborating, the teacher is not holding the centre, whereas, he/she monitors and identifies the challenges in their writing. So, it provides a space for remedial teaching.

## Results

There is significant difference (both qualitative and quantitative) in writing after lecture method and collaborative learning. Collaborative learning has worked effectively in language classroom of II M.A. English integrated students and it has encouraged students to be both dependent (work together) and independent (working by their own). It provides teachers with a space to understand students' challenges in learning a language and remedy it.

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## Appendix

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1. God has delivered you into my hands. explain? (5)

2. The theme of Vengeance in "The game of chess."

The theme of Vengeance in The game of chess was the King. Play a chess with Constantine. the Constantine were in five moves to finish a game. Constantine were a minister who never complete a game. Alexis go take a Poison and Pour into a two cup of wine and ask Boris to drink it they both take a wine and drink it. at last Alexis said to Boris have you have any glaving Boris slowly move to table and Pick a bullet and ready to shoot him but there were no bullet in it. at last Boris told to alexis eh you also drink a Poison with me. & Ha Ha Come, we both died together. the Poison is for frequently a slow Poison.



1. God has delivered you into my hands? explain:-

Alexis was a King and Boris was a enemy. actually Boris came here to kill Alexis. Alexis said to Boris. Come Boris come and sit to <sup>Represent</sup> me. I want to see you. (There were no balcony and hanging place in here. if you have any doubt want. close the door and keep a key with you in your pocket. King said to Boris "God has delivered you into my hands." in second time. Alexis Pick Poison and Pour into a cup of wine and they both drunk it. (Because of his cunningness Alexis never ~~but~~ drink a wine and at last Alexis ~~said~~ told to Boris "God has delivered you into my hands."

2. The theme of the vengeance "The game of chess."

The theme of the vengeance in the game of chess was the Boris vengeance was to kill Alexis and Constantine vengeance was to get a freedom. Alexis Pour Poison into wine and they both have take a wine and drink it. at last Alexis ask Boris had you have any glancing with you, because of his cunning the Alexis ~~never drink~~ a wine and Boris slowly moved to the table and take a bullet and ready to shoot it. vengeance  
↓  
Trick.

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