

Effect of Think-Pair-Share Technique of Teaching on Achievement in English among Senior Secondary Students

Shivamurthy M. S.
Research Scholar

Regional Institute of Education (NCERT) Mysore

Dr. Asha KVD Kamath
Professor in Education (Rtd)

Regional Institute of Education (NCERT) Mysore

Abstract

The area of English Language Teaching is not like stagnant water. It is subject to change. Teaching of English has witnessed many changes over centuries. Even today there are many researches going on regarding effective methods to teach English. There are many methods to teach English. Studies have shown that Cooperative learning is one of the effective methods. It includes various techniques. Think-Pair-Share is one such technique. The present paper discusses the effect of Think-Pair-Share Technique of Teaching on Achievement in English among Senior Secondary Students. The objective of the study was to find out the effect of Think-Pair-Share on achievement of senior secondary students. The study found that Think-Pair-Share is an effective technique. There is significant difference between the students taught through Think-Pair-Share technique of teaching and the students taught through Traditional Method of Teaching.

Key words: Cooperative Learning, Think-Pair-Share, Achievement in English.

Introduction

Teaching and learning are not constant like stagnant water. They are like a flowing river which undergo many changes from time to time. Changes are made as to the subject matter that is going to be taught i.e. the contents to be taught. So also there are changes in the way the content is imparted to the students i.e. the method of teaching. Be it the core content subjects like History, Economics, Sociology, Mathematics etc. or languages like Kannada, English, Hindi etc. the method of teaching that was followed once would not remain the same forever. It goes on changing due to the inventions and innovations that occur during the concurrent times.

In the field of teaching English language teaching (ELT) also many researches have taken place. Still there are many studies that are being made regarding the effective ways of teaching English.

Some of the popular ways of teaching English are as follows:

Grammar Translation Method: This method is also known as Classical method. The Grammar - Translation Method. It is one of the oldest methods of teaching English. In Europe it was used in the teaching of Latin and Greek for several centuries. It was introduced in India with the arrival of the British. Though many people criticise this as an ineffective way of teaching, it has been used by an average teacher even today.

Direct Method: Also known as the 'Natural Method', the Direct Method was developed as a reaction against the Grammar-Translation Method". It is also an offshoot of the Behaviourist school of Psychology. It insists that the key to language learning lies in association. It stresses the need for direct association between Experience and Expression in the foreign language. Direct Method was popular in France and Germany around 1900. It was introduced in India in the early part of the 20th century as a reform which was needed in the methods of teaching English.

The Audio-Lingual Method

In the beginning it was also known as 'Army Method'. During the World War II, American soldiers had an urgent need to learn languages like-German, French, Chinese or Japanese to communicate effectively when posted in various countries. The Army Specialised Training Programme (ASTP) was established in 1942 by American linguists to meet this urgent need. 55 American Universities were involved in the programme by the beginning of 1943. It was popular for some period of time.

The Bilingual Method:

This method was developed by Dr. C.J. Dodson. As the name itself denotes, the method makes use of two languages- the mother tongue and the target language. It can be considered as a combination of the direct method and the grammar-translation method. 'Selection', 'Gradation', 'Presentation', and 'Repetition' are the four major principles of all language teaching methodology. In fact it is not totally a new method but it is a blend of good qualities that were already there in the earlier methods of teaching.

Dr. Michael West's The New Method: This method was evolved by Dr. Michael West, who taught English in India for a number of years and was well-aware of the English language teaching situation in India. The main demerits of this method are that it ignores the important basic three linguistic skills viz- Listening, Speaking and Writing. Its emphasis is only on Reading skill.

Suggestopedia: This method was advocated by Dr. Georgi Loznov, a Bulgarian doctor of medicine, Psychiatrist and Parapsychologist. It is also known as Desuggestopedia, a specific set of learning recommendations derived from Suggestology which Lozanov describes as a “science... concerned with the systematic study of the non-rational and/ or non-conscious influences” that human beings are constantly responding to. Suggestion is at the heart of the theory of learning underlying Suggestopedia.

Cooperative Learning Method: Cooperative learning method is a child-centred way of learning. It has been evolved out of the researches done by Slavin, Johnson and Johnson, Kagan and others. It is based on the five principles:

- **Positive interdependence**
- **Face-to-Face Interaction**
- **Individual Accountability**
- **Collaborative Skills**
- **Group Processing**

Need of Cooperative Learning In the Modern Times

Cooperative is often interpreted as a classroom-learning environment in which students work together in small and mixed ability groups on given academic tasks to reach a common goal. It is viewed as a means for improving student achievement and cognitive skills (Slavin, 1984). Cooperative learning is an instructional strategy which provides opportunity to learn in cooperation and not in competition. The cooperative learning usually supplements the teachers' instruction by giving students an opportunity to discuss information or practice skills originally presented by the teacher, debate, disagree and ultimately to teach one another. What we require in today's world is cooperation and not competition.

Cooperation is a natural social act integrated into the learning process that involves the interaction of groups of individuals working together on a shared goal to solve a problem, complete a task, and create a product for individual and group benefit. Students work in groups to benefit themselves and the group to achieve a shared goal (Johnson et al., 1994).

Under cooperative learning method there are various techniques that are applied in a class room such as: Jigsaw, Students Team Achievement Division (STAD), Think-Pair-Share, Group Investigation, Numbered Heads Together, Teams Games Tournament, Team Assisted Individualization, Cooperative Integrated Reading and Composition (CIRC), Role-play etc.

Think- Pair- Share

Think Pair Share (TPS) is a cooperative learning technique that was first developed by Frank Lyman and his colleagues in Maryland in 198. It is named so because of the three stages involved in the technique, namely: think, pair, and share. The three stages as proposed by Lyman (1987) are elaborated as follows. During the first step individuals think silently about a question posed by the teacher. Individuals pair-up during the second step and exchange thoughts. In the third step, the pairs share their responses with each other and also with other teams, or the entire group.

The present study has made an attempt to take up one technique under cooperative learning i.e. Think-Pair- Share and has tried to find out the effect of teaching English through this technique.

Review of Related Literature

Reinhart (2002) found think-pair-share helped to improve class discussions more than any other technique he incorporated into his teaching. He noticed that this technique, by first allowing students' time to think individually, increased individual accountability and personal responsibility for learning and participation in class. He also noticed that students were more willing to share ideas with the whole class when the responsibility for the response was shared with the partner.

Ibe (2009) found that think pair share strategy is effective on classroom participation and achievement in science.

Sampsel, Ariana (2013) conducted a study with an objective to find out the effects of think-pair-share technique of teaching on students' confidence in their abilities to do mathematics and their willingness to participate in class discussion. The study found Think-Pair-Share to be a useful technique in increasing the students' participation in class discussion. The study also found that the technique would increase the number of long explanations students gave, and increase their comfort when sharing their thoughts and ideas. It also seemed to help a few students increase their confidence in their mathematics abilities and ability to contribute in class discussion.

Sunita M. Dol (2014) conducted a study on second year engineering students of Solapur, India, to find out whether the use of Think-Pair-Share strategy would help the students to improve the conceptual understanding about the Theory of Computation in Computer Science and Engineering Course. Results revealed that Think-Pair-Share strategy was useful for this course.

Participants felt that Think-Pair-Share activity developed interest among them to learn. Thinking about the problem and writing the solution during the think phase helped them learn concepts more precisely. During the Share phase, discussing the solution with the partner helped students to learn concepts more clearly. Students taught through Think-Pair-Share activities felt that they found the Think-Pair-Share activity effective.

Kiki Rizki Amelia (2016) conducted a study on a sample of seventy students who were assigned in two groups. 35 students were there in the Experimental group and 35 students in the Control group. The objectives of the study were to find out whether Think-Pair-Share technique would improve the students' vocabulary achievement and reading comprehension achievement. The students of experimental group were taught through Think-Pair-Share technique and the students of control group did not receive any treatment. The findings of the study showed that there was a significant difference between the students of the two groups in vocabulary and reading comprehension achievements. Think-pair-share strategy seems to be an effective technique of the teaching.

A review of related literature shows that Think-Pair-Share technique of teaching has been an effective way of teaching students of different levels. It has been an effective way of teaching not just English but also other branches of study as well.

Objectives of the study

1. To find out the effect of Think-Pair-Share technique on the achievement level of students in English.
2. To find out the effect of Think-Pair-Share technique on the achievement level of students of different streams like Arts, Science and Commerce.
3. To find out the effect of Think-Pair-Share technique on the achievement level of students of different gender.

Methodology

Design: In the present study the researcher has employed two group experimental design.

Sample: 84 students of first year senior secondary class are taken as sample. Two intact classes with a strength of 42 each were there in Experimental Group and Control Group. In Both the groups there were students from all the three streams Arts, Science and Commerce.

Tools used: In the present study the researcher has used the following tools:

Language Proficiency Test in English: It was a test of 100 marks which consisted of two parts: Part A and Part B. In Part A there were questions based on 12 components of English. In Each component there were five questions with four alternatives. Totally there were 60 multiple choice questions each question carrying one mark. Part B consisted questions on Listening Comprehension, Reading comprehension, Essay writing and Speaking Skills. It was for 40 marks.

Unit test question papers: The study has made use of three unit test question papers each comprising 20 marks. The maximum marks including three unit tests was 60 marks.

Best Performance Certificates: These were the certificates prepared by the researcher. They were issued to the best performers in the Think-Pair-Share activities assigned to the students belonging to the experimental group.

Experimentation

A Language Proficiency Test in English for both Experimental Group as well as the Control Group was conducted by the researcher to ensure that both the groups are equal in their language abilities. After comparing the mean scores of both the groups it was found that there is no significant difference between the two groups in terms of English language proficiency. The mean scores of SSLC examination of the students of both the groups were also compared to confirm that both the groups are equal in their level of achievement.

After ensuring that both the two groups are equal in their language proficiency, the Experimental Group was taught through think pair share technique and the Control Group was taught through Traditional way of teaching. The units taken were *The Farmer's Wife*, *If I was a Tree*, and *Do Not ask of Me My Love*. The units were taught for the Experimental Group through *Think-Pair-Share technique*. The best participants were identified and given certificates for the best performance. The units were taught for 9 hours based on the lesson plans prepared. The unit was covered over a period of 14 weeks.

The same units were taught to the Control Group of students by using the Traditional way of teaching. In each hour the selected poem was recited by researcher. Then the students were asked to recite the poem aloud. Then the teacher asked some questions related to the poem. Some students briefly answered the questions. The teacher elaborated the answers by explaining the relevant details. Sometimes the students unable to answer the questions. Then

the teacher answered the question himself in detail. Student's participation was minimum in this class and most of the time was consumed by the teacher to explain the contents of the poem in detail. After the completion of the units the teacher provided notes related to the poems taught. The three units of poems were taught for 09 hours which was covered over a period of 14 weeks.

Analysis and interpretation

H1: There will be a significant difference between the scores of students belonging to Experimental Group and the Control Group

To test this the researcher subjected the data to 't' test and the results are given in table-1

Table – 1: Mean, Standard Deviation and t - value of students belonging to Experimental Group and the Control Group

Sl. No.	Group	N	Mean	SD	df	t- value
1	Experimental	42	33.57	7.23	82	3.58
2	Control	42	28.17	6.56		

* Significant at 0.05 level

From table - 1 it can be seen that the table value for df 82 to be significant is 1.99. The calculated value i.e. 3.58 is greater than the table value (1.99). There is a significant difference between the scores of Experimental Group and the Control Group. The mean scores of students of Experimental Group is more than the mean scores of students of Control Group. Therefore the Hypothesis H1 - “There will be a significant difference between the scores of students belonging to control group and experimental group” is accepted.

H 2: There will be no significant difference between the scores of students of Arts stream and Commerce stream belonging to Experimental Group

To test this the researcher subjected the data to 't' test and the results are given in table-2

Table - 2: Mean, Standard Deviation and t - value of students of Arts stream and Commerce stream belonging to Experimental Group

Sl No.	Stream	N	Mean	SD	df	t- value
1	Arts	19	28.79	4.89	33	-3.46
2	Commerce	16	33.94	3.68		

* Significant at 0.05 level

In table - 2, it can be seen that the table value for df 33 to be significant is 2.04. The calculated value i.e. -3.46 is greater than the table value (2.04). There is a significant difference between the students of Arts stream and Commerce stream. The mean scores of students of Commerce stream is more than the mean scores of students of Arts stream. Therefore the null hypothesis H2 - “There will be no significant difference between the scores of students of Arts stream and Commerce stream belonging to Experimental Group” is rejected.

H3: There will be no significant difference between the scores of students of Arts stream and Science stream belonging to Experimental Group

To test this the researcher subjected the data to 't' test and the results are given in table-3

Table - 3: Mean, Standard Deviation and t - value of students of Arts stream and Science stream belonging to Experiment Group

Sl No.	Stream	N	Mean	SD	Df	t-value
1	Arts	19	28.79	5.14	24	-8.62
2	Science	7	45.71	2.63		

* Significant at 0.05 level

In Table – 3 it can be seen that the Table value for df 24 to be significant is 2.06. The calculated value i.e.8.62 is greater than the table value (2.06). There is a significant difference between the students of Arts stream and Science stream. The mean scores of students of Science stream is more than the mean scores of students of Arts stream. Therefore the null hypothesis H3 “There will be no significant difference between the scores of students of Arts stream and Science stream belonging to Experimental Group” is rejected.

H4: There will be no significant difference between the scores of students of Commerce stream and Science stream belonging to Experimental Group

To test this the researcher subjected the data to 't' test and the results are given in table-4

Table - 4: Mean, Standard Deviation and t - value of students of Commerce stream and Science stream belonging to Experimental Group

Sl No.	Stream	N	Mean	SD	df	t-value
1	Commerce	16	33.94	4.28	21	7.61
2	Science	7	45.71	2.63		

* Significant at 0.05 level

In Table No. 4 it can be seen that the table value for df 21 to be significant is 2.08. The calculated value i.e. 7.61 is greater than the table value (2.08). There is a significant difference between the students of Commerce stream and Science stream. The mean score of students of Science stream is more than the mean scores of students of Commerce stream. So the null hypothesis H-4 “There will be no significant difference between the scores of students of Commerce stream and Science stream belonging to Experimental Group” is rejected.

H5: There will be no significant difference between the scores boys of all streams and girls of all streams belonging to Experimental Group.

To test this the researcher subjected the data to 't' test and the results are given in table-5

Table - 5: Mean, standard deviation and t-value of boys of all streams and girls of all streams belonging to Experimental Group.

Sl No.	Gender	N	Mean	SD	Df	t-value
1	Boys	18	31.67	6.46	40	1.50
2	Girls	24	35.00	7.58		

*Not Significant at 0.05 level

From table – 5 it is inferred that the calculated value of 't' for df 40 is 1.50 and the table value of 't' at 0.05 level of significance is 2.02. The table value of 't' (2.02) is greater than the calculated value (1.50). Therefore the null hypothesis H5 is accepted. It is concluded that there is no significant difference between the scores boys of all streams and girls of all streams belonging to Experimental Group.

Findings of the study

The following are the findings of the study:

1. The *Think-Pair-Share* technique was found to be an effective technique of teaching play for the students of first year senior secondary schools.
2. The *Think-Pair-Share technique* was found to be beneficial for all students in their level of achievement irrespective of their streams. The students of Science stream were found to have scored better than the students of other two streams.
3. Gender has not been an influencing factor in deciding the level of achievement of students.

Educational implications

- The present study has found that Think-Pair-Share is an effective way of teaching poems for students at the senior secondary level. This study shows that Students should be encouraged to take part in the activities like Thinking with their peers and sharing whatever they have learnt together.
- It was found that the effect of technique is not limited for any one stream of students. It has its positive effect on all the three streams of study. So there is no need to treat different streams in different ways. Think-Pair-Share technique can be used in case of all the three streams.
- The present study supports the view that positive reinforcements yield better achievement. The certificates given as an appreciation for the students of Experimental Group have functioned as positive reinforcements. Teachers should use such certificates to strengthen learning among the students.

Reference

- Ibe, N.A. (2009)** Metacognitive strategies on classroom participation and student achievement in senior secondary school science classrooms. *Science Education International*, 20(1/2), 25731
- Johnson, D. W., Johnson, R. T., & Holubec, E. J. (1994).** *Cooperative learning in the classroom*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Kiki Rizki Amelia, Jele, (2016)** Journal of English Literacy Education, Vol. 3, No. 2, Nov. 2016
- Lyman, F. (1987).** Think-Pair-Share: An expanding teaching technique. *MAA-CIE Cooperative News*, 1, 1-2.
- Reinhart, S.C. (2002).** Never say anything a kid can say. *Mathematics teaching in the middle school*, 5(8), 478.
- Sampsel, Ariana, (2013)** "Finding the Effects of Think-Pair-Share on Student Confidence and Participation" (2013). *Honors Projects*. 28. Retrieved from <https://scholarworks.bgsu.edu/honorsprojects/28>
- Sunita M. Dol. (2014)** TPS (Think-Pair-Share): An Active Learning Strategy to Teach Theory of Computation Course. *Inter. J. Edu. Res. Technol.* 5[4] 2014; 62-67. DOI: 10.15515/ijert.0976-4089.5.4.6267

...