



## Effectiveness of learning strategies on achievement in Tamil grammar Punarchi Vedhi at secondary level

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### Abstract

Teacher face a number of challenges in learning how to teach Tamil grammar punarchi vedhi effectively. A number of studies were conducted later on a variety of learning and instructional strategies and it was found that certain strategies significantly improve achievement. To co-operate is to work with another or others. In practice, cooperative learning has come to mean students working in pairs or small group to achieve shared learning goals. The term cooperative learning refers to learning activities especially designed and carried out through pairs or small interactive groups. Some of the techniques are Think-Pair-Share, Round Robin, Buzz Groups, Talking chips, Three step Interview, Learning Cell, Fish Bowl, Role Play, Jigsaw, Think-Aloud pair problem solving, Send-a-problem, Structured problem solving, Analytic Terms, Affinity Grouping and Term Matrix. There is no significance difference between the pre-test and post-test means scores of the achievement in Tamil grammar punarchi vedhi of the experimental group. The sample consists of 8<sup>th</sup> standard students are studying in Government High School Narasingapuram, Salem district. A total number of 40, 8<sup>th</sup> standard students' constitute the experimental group for the present sample of the study. The effectiveness of cooperative learning strategies technique on achievement in Tamil grammar punarchi vedhi was very high. There is no significant difference between the post-test mean scores of the achievement in Tamil grammar punarchi vedhi of the experiments group with respect to gender, study habit, parents' educational qualification and parents' occupation. The present study has investigated the hard parts in Tamil grammar punarchi vedhi and the construction of cooperative learning strategies techniques at secondary level and it found that the effectiveness and utilization were very high in the case of achievement in Tamil grammar punarchi vedhi. Since, cooperative-learning strategies is having effectiveness on achievement in Tamil grammar punarchi vedhi.

**Keywords:** Tamil grammar, punarchi vedhi, buzz groups, talking chips, learning cell, fish bowl

### Introduction

To promote scientific literacy in the prospective society, Tamil teaching, through multifaceted activities should make students discover and rediscover by reconciling experimental and pupils centered learning. According to official policy documents, students should have opportunities to develop comprehensive scientific literacy.

### Need and significance of the study

Teacher face a number of challenges in learning how to teach Tamil grammar punarchi vedhi effectively. At the same time, teachers need to develop a repertoire of instructional techniques, strategies and approaches that can foster productive learning communities as well as professional visions and disposition effectively (Hofstein *et al.* 2005) [5]. Teachers need to learn how to address problems of practice such as engaging students' in Tamil grammar punarchi vedhi, organizing instruction and developing productive learning communities and in doing so they need to develop their knowledge, teaching practices and dispositions (Copeland 2002) [4].

Teaching and learning aim at bringing holistic and maximum development of students. Hundreds of teaching learning strategies is used in our schools for teaching different subjects to our students. Teachers as well as many other persons

involved in teaching learning process since long ago, till today contributed significantly to make our teaching learning strategies more goals directed, purposive, participative achievable and learner centric.

Psycho educational researchers argue for a change from whole class instruction to small group instruction and competition to cooperation. Therefore, this change would help to overcome the traditional obstacles of the education system (Johnson and Johnson 1975) [6]. Hence, they have attempted to make use of co-operation rather than competition among learners in the class, as it is a strong human instinct (Burrus, 1999) [3]. A number of studies were conducted later on a variety of learning and instructional strategies and it was found that certain strategies significantly improve achievement.

### Cooperative learning strategies

To co-operate is to work with another or others. In practice, cooperative learning has come to mean students working in pairs or small group to achieve shared learning goals. The term cooperative learning refers to learning activities especially designed and carried out through pairs or small interactive groups. (Sharan 1999) [9]. Cooperative learning involves intentional design and faculty members structure intentional learning activities for students. In addition to intentional design colabouring and meaningful learning are

important feature of cooperative learning (Slavin 1990) [10]. All participants in the group engage actively in working together towards the stated objectives. Whether all group members receive, the same task or whether members complete different tasks that together comprise a single large project, all students must contribute more or less equally. As students, work together on a cooperative assignment, their knowledge increases and deepens their understanding. The task assigned to the group must be structured to accomplish the learning objectives of the course. (Patnam *et al.* 1996) [8].

### Cooperative learning strategies techniques

Within cooperative learning strategies, there are many techniques. Depending upon the circumstances, situations and nature of the problem one or few or more techniques will be employed to achieve the intended, goal, objectives or aims (Johnson *et al.*, 1998). Some of the techniques are Think-Pair-Share, Round Robin, Buzz Groups, Talking chips, Three step Interview, Learning Cell, Fish Bowl, Role Play, Jigsaw, Think-Aloud pair problem solving, Send-a-problem, Structured problem solving, Analytic Terms, Affinity Grouping and Term Matrix.

### Objective of the study

#### The objective of the study are as follows

1. To find out the significance of difference between the pre-test and post-test mean scores of the achievement in Tamil grammar punarchi vedhi of the experimental group.
2. To find out the significance of difference between the post-test mean scores of the achievement in Tamil grammar punarchi vedhi of the experimental group with respect to gender.
3. To find out the significance of difference between the post-test mean scores of the achievement in Tamil grammar punarchi vedhi of the experimental group with respect to study habit.
4. To find out the significance of difference between the post-test mean scores of the achievement in Tamil grammar punarchi vedhi of the experimental group with respect to parents' educational qualification.
5. To find out the significance of difference between the post-test mean scores of the achievement in Tamil grammar punarchi vedhi of the experimental group with respect to parents' occupation.

### Hypothesis of the study

The following of the hypothesis framed for this study;

1. There is no significance difference between the pre-test and post-test means scores of the achievement in Tamil grammar punarchi vedhi of the experimental group.
2. There is no significance of difference between the post-test means scores of the achievement in Tamil grammar punarchi vedhi of the experimental group with respect to gender.
3. There is no significance of difference between the post-test means scores of the achievement in Tamil grammar of the experimental group with respect to study habit.
4. There is no significance of difference between the post-test means scores of the achievement in Tamil grammar punarchi vedhi of the experimental group with respect to parents' educational qualification.

5. There is no significance of difference between the post-test means scores of the achievement in Tamil grammar punarchi vedhi of the experimental group with respect to parents' occupation.

### Methodology

In the present study experiment, research method was adapted for its suitability and accuracy. Single group of students, namely the experimental group taken for this study. The Cooperative learning strategies techniques used to for experimental group. Pre-test: Treatment: Post-test, was conducted by the experimental group.

### Sample of the study

The sample consists of 8<sup>th</sup> standard students are studying in Government High School Narasingapuram, Salem district. A total number of 40, 8<sup>th</sup> standard students' constitute the experimental group for the present sample of the study.

### Tools Used

Effectiveness of evaluation largely depends upon the accuracy of measurement. Accuracy of measurement in turn depends on the precision of the tool. The researcher prepared an achievement test in Tamil grammar punarchi vedhi scale with guidance of the expert committee.

### Statistical techniques used in the study

The researcher used the following statistical techniques for analyzing the data,

1. Mean and Standard Deviation
2. 't'-test and F-test

### Testing the hypothesis

#### Hypothesis no -1

There is no significance difference between the pre-test and post-test mean scores of the achievement in Tamil grammar punarchi vedhi of the experimental group. This hypothesis was tested using 't'-test.

Table 1

Test	N	Mean	S.D	SE <sub>D</sub>	t-value	Level of Significant
Pre-test	40	26.3843	7.4823	1.5699	44.7176	0.01
Post-test	40	96.5864	6.5271			

The above table shows that the computed value of 't' (44.7176) is greater than the critical value of 2.64 at 0.01 level of significance. Hence, it is significant consequently, the null hypothesis is to be rejected, and it can be said that, there is a significant difference between the pre-test and post-test mean scores of the achievement in Tamil grammar punarchi vedhi. It also inferred that the effectiveness of the cooperative learning strategies techniques on achievement in Tamil grammar punarchi vedhi.

#### Hypothesis no -2

There is no significant difference between the post mean scores of the achievement between the post-test mean scores of the achievement in Tamil grammar punarchi vedhi of the experimental group with respect to gender. This hypothesis was tested using 't' test,

**Table 2**

Gender	N	Mean	P.S.D	SE <sub>D</sub>	t-value	Level of Significant
Male	20	96.8572	6.5271	0.7964	0.6801	NS
Female	20	96.3156				

The above table shows that the computed value of 't'(0.6801) is less than the critical values of 2.64 at 0.01 level of significance. Hence, it is not significant consequently, the null hypothesis is not to be rejected, and it can be said that there is no significant difference between the post-test mean scores of the achievement in Tamil grammar punarchi vedhi of the experimental group with respect to gender.

### Hypothesis no -3

There is no significant difference between the post mean scores of the achievement between the post-test mean scores of the achievement in Tamil grammar punarchi vedhi of the experimental group with respect to study habit.

**Table 3:** This hypothesis was tested using 't' test.

Study Habit	N	Mean	P.S.D	SE <sub>D</sub>	t-value	Level of Significant
Self-study	22	95.7643	6.5271	1.9163	0.8580	NS
Group study	18	97.4085				

The above table shows that the computed value of 't' (0.8580) is less than the critical values of 2.64 at 0.01 level of significance. Hence, it is not significant consequently, the null hypothesis is not to be rejected, and it can be said that there is no significant difference between the post-test mean scores of the achievement in Tamil grammar punarchi vedhi of the experimental group with respect to study habit.

### Hypothesis no -4

There is no significant difference between the post-test mean scores of the achievement in Tamil grammar punarchi vedhi of the experimental group with respect to parents' educational qualification.

This hypothesis was tested using 'F' test.

**Table 4:** ANOVA Table

Source of Variance	Sum of Squares	df	Mean variance of squares	F-value	Level of significant
Between sample	258.9220	4	64.7305	0.8547	NS
Within sample	2650.7166	35	75.7348		
Total	2909.6386	39			

The above table shows that the computed value of F (0.8547) is less than the critical value of 3.91 at 0.01 level. Hence, it is not significant consequently, the null hypothesis is not to be rejected, and it can be said that, there is no significant difference between the post-test mean scores of the achievement in Tamil grammar punarchi vedhi of the experimental group with respect to parents' educational qualification.

### Hypothesis no -5

There is no significant difference between the post-test mean scores of the achievement in Tamil grammar punarchi vedhi

of the experimental group with respect to parents' occupation. This hypothesis was tested using 'F' test,

**Table 5:** ANOVA Table

Source of Variance	Sum of Squares	df	Mean variance of squares	F-value	Level of significant
Between sample	61.7286	3	20.5762	1.6478	NS
Within sample	449.5356	36	12.4871		
Total	511.2642	39			

The above table shows that the computed value of F (1.6478) is less than the critical value of 3.91 at 0.01 level. Hence, it is not significant consequently, the null hypothesis is not to be rejected, and it can be said that, there is no significant difference between the post-test mean scores of the achievement in Tamil grammar punarchi vedhi of the experimental group with respect to parents' occupation.

### Findings

The following are the findings of the present study

1. The effectiveness of cooperative learning strategies technique on achievement in Tamil grammar punarchi vedhi was very high.
2. There is no significant difference between the post-test mean scores of the achievement in Tamil grammar punarchi vedhi of the experiments group with respect to gender.
3. There is no significant difference between the post-test mean scores of the achievement in Tamil grammar punarchi vedhi of the experiments group with respect to study habit.
4. There is no significant difference between the post-test mean scores of the achievement in Tamil grammar punarchi vedhi of the experiment group with respect to parents' educational qualification.
5. There is no significant difference between the post-test mean scores of the achievement in Tamil grammar punarchi vedhi of the experimental group with respect to parents' occupation.

### Conclusion

The present study has investigated the hard parts in Tamil grammar punarchi vedhi and the construction of cooperative learning strategies techniques at secondary level and it found that the effectiveness and utilization were very high in the case of achievement in Tamil grammar punarchi vedhi. Since, cooperative-learning strategies is having effectiveness on achievement in Tamil grammar punarchi vedhi.

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