

# IMPACT OF GADGET BASED LEARNING OF GRAMMAR IN ENGLISH AT STANDARD II

By

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### ABSTRACT

*The study enlightens the impact of Gadget Based Learning of English Grammar at standard II. Objectives of the study is to find out the learning problems of the students of standard II in Learning English Grammar in Shri Vani Vilas Middle School and to find whether there is any significant difference in achievement mean score between pre test of control group, and post test of control group in Learning English Grammar of the students of standard II in Shri Vani Vilas Middle school at Mannargudi. Equivalent group Experimental method was adopted for the study. The study is confined to 160 students of standard II studying in Shri Vani Vilas Middle school, Mannargudi for 80 students (-40 control group+40 Experimental group), and 80 students (40 control group+40 Experimental group) from Gopala Samudram Middle school at Mannargudi. Researcher's self-made achievement test was used as instrumentation for the study. It establishes that the conventional method of teaching is not effective in learning English Grammar at standard II. The main educational implication is that it can be implemented to all other schools.*

*Keywords: Gadget Based Learning, Grammar, Reasoning Skills, Self-made Achievement Test.*

### INTRODUCTION

English language is to be developed from the primary level specifically from standard II. It becomes difficult to the young learners as the structures, and sentence patterns of English language are not as same as their mother-tongue. In India, many states consider English as a second language, which has the status of an international language, a library language, and window of the world. To stand on the globalization, English is to be ameliorated to link the other languages, understand their cultures, and develop wisdom of the world. Most of the young learners face problems to develop mother tongue as well as English language in early stage. Teaching basic grammar of English and comparing it with mother tongue of the learners is necessary to eliminate their problems. Conventional self-learning materials were not fruitful in learning grammar in English. The researcher is specialized in primary Education who worked in DIET for five years, and trained more than two thousand teachers. Hence the researcher endeavoured to find out an Innovative gadget with low cost materials to eliminate the problems in learning grammar in English at standard II, and it can be used by the learners with limited support of the teachers.

### Need and Significance of the Study

Primary Education concentrates on achievement of the students in the competency in all subjects. Due to traditional method of teaching, learning English is a major problem to the younger students. Students of standard II have problems in Learning English Grammar in Shri Vani Vilas Middle School, Mannargudi, and the same problem existed in Gopal Samudram Middle School, Mannargudi. The difficulties faced by the learners were assessed through previous achievement test, and suggestions given by those who were handling classes to the students. The researcher wanted to improve the standard of the learners at primary level in learning English Grammar. Hence the researcher found out an innovative learning gadget for English Grammar which provided effective learning practice on learning English Grammar in the two schools. The researcher endeavoured to find out the impact of using the innovative gadget in an aided middle school, and a government middle school.

### Statement of the Problem

Learning English is a difficult task for those who have English as a Second Language (ESL). The conventional method of

teaching and learning materials were not fruitful to the children to improve their learning capability in English Grammar.

## Review of Related Study

Franklin S. Hoyt (1906) examined the relationship between grammar instruction and the ability to think logically, which led Hoyt to conclude that "there is no relationship between a knowledge of technical grammar and the ability to use English and to interpret language".

William Asker (1923). found out that there was no relationship between grammar instruction and the ability to improve writing by reducing errors. I. O. Ash (1935) investigated the active involvement with language through practice (functional or rhetorical grammar instruction) superior to teaching formal grammar.

Vogel, Severine P. and Engelhard, George (2011) describe a quantitative approach based on Rasch measurement theory for evaluating classroom assessments within the context of foreign language classes. A secondary purpose was to examine the effects of two instructional approaches to teach grammar, a guided inductive and a deductive approach, through the lens of Rasch measurement theory.

Larsen-Freeman, Diane (2000) suggested that from a pedagogical perspective, there is a cost for associating grammar with rules. They discuss reasons for underlying rules and give implications for a reason-based approach to teaching grammar. The way people interact with knowledge has changed tremendously for today's society, in that the skills of information-management are required more than those for the retention of knowledge.

The "knowledge society" (Ruschoff, in Mibler & Multhaup, 1999, p. 80) thus greatly supports the implementation of technology in the education sector due to its capacities in storage, retrieval and communication of information.

Hanson-Smith, Elizabeth, Ed (2000) examined "Not Just Flashy Gadgets" (June Averill, Eve Chambers, Maria Dantas-Whitney); "Immersed in Writing: Networked Composition and Kendall Demonstration Elementary School" (Joy Kreeft Peyton); "Enthusiasm, Experience and Collaboration: Technology in the DEIL/IEI" (Douglas G. Mills); and "Teaching Writing with Web Projects: Famous

Personages in Japan" (Thomas N. Robb). Part four, "Training Teachers," has two chapters: "Hands-On Teacher Training: Presentation Software" (Elizabeth Hanson-Smith); and "A Teacher Preparation Course for Computer-Assisted Language Learning" (Sarah Rilling). A "Glossary of Key Terms" and a subject index are also included.

## Objectives

The following are the objectives of the study.

1. To find out the learning problems of the students of standard II in learning English Grammar in Shri Vani Vilas Middle School, Mannargudi and Gopala Samudram Middle School.
2. To find out whether there is any significant difference in achievement mean score between pre test of control group, and post test of control group in learning English Grammar of the students of standard II in Shri Vani Vilas Middle School.
3. To find out whether there is any significant difference in achievement mean score between pre test of control group and post test of control group in learning English Grammar of the students of standard II in Gopala Samudram Middle School.
4. To find out whether there is any significant difference in achievement mean score between pre test of Experimental group and post test of Experimental group in learning English Grammar of the students of standard II in Shri Vani Vilas Middle School.
5. To find out whether there is any significant difference in achievement mean score between pre test of Experimental group and post test of Experimental group in learning English Grammar of the students of standard II in Gopala samudram Middle School.
6. To find out whether there is any significant difference in achievement mean score between post test of Control group and post test of Experimental group in learning English Grammar of the students of standard of II in Shri Vani Vilas Middle School.
7. To find out whether there is any significant difference in achievement mean score between post test of Control group and post test of Experimental group in learning English Grammar of the students of standard II at Gopala

Samudram Middle School.

8. To find out whether there is any significant difference in achievement mean score between the post test of Experimental group of Aided school and post test experimental group of Government school in learning English Grammar through using Gadget.

9. To find out the impact of Gadget Based Learning in learning English Grammar in Government school and Aided school in Thiruvarur district.

## Hypotheses

The following hypotheses of the study are,

1. Students of standard II have learning problems in learning English Grammar through conventional method in Shri Vani Vilas Middle School, and Gopala samudram Middle school.

2. There is no significant difference in the achieved mean score between pre test of control group and post test of control group in learning English Grammar of the students of standard II in Shri Vani Vilas Middle school.

3. There is no significant difference in the achieved mean score between pre test of control group and post test of control group in learning English Grammar of the students of standard II in Gopala samudram Middle School.

4. There is no significant difference in the achieved mean score between pre test of Experimental group and post test of Experimental group in learning English Grammar of the students of standard of II in Shri Vani Vilas Middle School.

5. There is no significant difference in the achieved mean score between pre test of Experimental group and post test of Experimental group in learning English Grammar of the students of standard of II in Gopala Samudram Middle School.

6. There is no significant difference in the achievement mean score between post test of Control group and post test of Experimental group in learning English Grammar of the students of standard of II in Shri Vani Vilas Middle School.

7. There is no significant difference in the achieved mean score between post test of control group and post test of Experimental group in learning English Grammar of the students of standard of II in Gopala Samudram Middle School.

8. There is no significant difference in the achieved mean score between the post test of Experimental group of Aided school and post test experimental group of Government school in learning English through Gadget Based Learning.

9. Gadget Based Learning is more effective than conventional method in learning English Grammar in a Government school and Aided school in Thiruvarur district.

## Operational Definitions

Impact means ability of activity based joyful learning in learning English. Gadget Based Learning refers to learning English Grammar by operating the innovative learning material in simple manner with desirable play way approach.

Gadget is a newly prepared device for teaching grammar. It is designed like TV model, for example, for learning NOUN-assure a picture with name. If the learners rotate the gadget, learners can learn more nouns. Ten gadgets were prepared and given to the pupils to learn English Grammar with facilitation of the teachers.

## Learning English

Learning English refers that the learners of standard II endeavour to learn English Grammar.

## Delimitations

- The study is confined to 160 students of standard II studying in Shri Vani Vilas Middle School, 80 students (40 control group+40 Experimental group), and 80 students (40 control group+40 Experimental group) from Gopala Samudram Middle school only.
- The study is confined to the state board students only.
- The study is confined to state board syllabus of English subject only.
- The study is confined to learning English Grammar only.

## Variables Used

Variables are the conditions or characteristics that the experimenter manipulates, controls or observes. The investigator used the following variables.

## Independent Variables

The independent variables are the conditions or characteristics that the experimenter manipulates or controls in his attempt to ascertain their relationship to

observed phenomena. The independent variables namely Gadget Based Learning, and types of schools were used in the study.

### **Dependent Variable**

The dependent variable namely achievement score was used in the study.

### **Preparation of Gadget**

The researcher prepared one gadget like a TV model for learning noun in English grammar, and it was validated. It was designed like TV, for example, for learning NOUN-assure a picture with name. If the learners rotate the gadget, learners can learn more nouns. Like this, ten gadgets were prepared and given to the pupils to learn English Grammar with facilitation of the teachers.

### **Method of Study**

The investigator selected the experimental study to know the effectiveness of Gadget Based Learning in enhancing achievement in learning English grammar at standard II.

### **Sample Selected for the Study**

The study is confined to 160 students of standard II studying in Shri Vani Vilas Middle school, 80 students (40 control group+40 Experimental group), and 80 students (40 control group+40 Experimental group) from Gopala samudram Middle school.

### **Tool Used for the Study**

The investigator had made use of self-made achievement test as the tool for conducting the study.

### **Pilot study**

In order to ascertain the feasibility of the proposed research, and also the adequacy of the proposed tools for the study, a pilot study has been undertaken. During this pilot study, the problem under study has been finely tuned. Sufficient number of model question papers were prepared, and distributed to 20 students of standard II in Shri Vani Vilas Middle School. This exercise was repeated twice over two sets of 20 students each. The clarification raised by the students was cleared then and there, and the filled answer scripts were collected by the researcher.

### **Sample selection for pilot study**

The question paper designed for the pilot study was

distributed to 20 students of standard II in Shri Vani Vilas Middle School, and the answer scripts were evaluated. These selected students were considered as sample of the pilot study. These students were selected in such a way that they were not part of either the control group or experimental group. The same sample was utilized for subsequent test in order to validate the tool, namely the question paper for achievement test for the final study.

### **Reliability of the tool**

A test is reliable, if it can be repeated with a similar data set, and yields a similar outcome. The expectation of a good research is that, it would be reliable. It refers to the trustworthiness or consistency of measurement of a tool whatever it measures. The various methods used to work out the reliability of the test include split half method, equivalent or parallel form method, test – retest method and Kuder-Richardson method. Under this study, the reliability has been computed using test-retest method and the calculated value comes to 0.84. The value is quite significant, and implies that the tools adopted were reliable. Hence reliability was established for the study.

### **Validity of the tool**

The concept of validity is fundamental to a research result. A result is internally valid if an appropriate methodology has been correctly followed in order to yield that result. A test is said to be valid, if it measures what it intends to measure. The expert opinion of the co-staff was obtained before freezing the design of the tools. Their opinion reinforced both content and construct validity of the proposed tool for the study. Validity is the extent to which inferences made on the basis of numerical scores are appropriate, meaningful and useful. Subject experts and experienced teachers were requested to analyse the tool. Their opinion indicated that the tool had content validity. Thus, Split-half method was used to establish reliability. The calculated reliability value of the tool is 0.89, which shows that the tool is reliable.

### **Final Study**

Sufficient copies of the revised tool were prepared, and distributed to the selected sample of students of standard II for control group as well as experimental group.

## Data Collection and Analysis

The investigator approached the principal of Shri Vani Vilas Middle School, and Gopala Samudram Middle School. The investigator was given permission for conducting the study in the cited two schools.

A total of 160 students were selected as the sample for the study. 80 of the students constituted the experimental group, and the remaining 80 constituted the control group.

## Data Collection

Since the Gadget Based Learning is a new technique in teaching-learning process, the investigator wanted to ensure objectivity in collecting data to the maximum possible extent. After the teaching was over, post-test was conducted to the experimental group. Test was conducted to the control group as well. The achievement scores of both control groups, and experimental groups were carefully collected and recorded by the investigator. The investigator took care in making students avoid the mutual consultations or copy from others during the test.

## Scheme of Analysis

The investigator used descriptive analysis and inferential analysis for analysing the data. The "t" test was used to find the significant difference between the mean scores of different groups of variables selected for the study.

## Discussion

Students of standard II have learning problems in learning English Grammar through conventional method in Shri Vani

Types of schools involved in the study	Pretests scoring marks		Post tests scoring marks	
	Control group	Experimental group	Control group	Experimental group
Gopala samudram Middle School	24%	25%	27%	75%
Shri Vani Vilas Middle school	25%	26%	27%	75%

Table 1. Pre test and post test scores of control and experimental groups

Types of schools involved in the study	Pretests mean score		Post tests mean score	
	Control group	Experimental group	Control group	Experimental group
Gopala samudram Middle School	12.58	9.58	12.70	19.65
Shri Vani Vilas Middle school	13.00	13.65	17.70	19.86

Table 2. Difference between pre test scores and post test scores

Vilas Middle School, and Gopala Samudram Middle School, were considered.

It confirms that, both types of schools achieve the same score in pre test and post test in the traditional method in learning English Grammar. Hence, it proves that the students of standard II have learning problems in learning English grammar in Shri Vani Vilas Middle School, Mannargudi and Gopala Samudram Middle School as shown in Table 1.

## Hypothesis

Gadget Based Learning is more effective than conventional method in learning English Grammar in a Government school and Aided school in Thiruvarur district.

Table 2 witnesses that, Gadget Based Learning is more effective than conventional method in learning English Grammar at standard II in both types of schools through mean score of pre test of Experimental group in two schools respectively 9.58, 13.65, and compares with mean score of post test of Experimental group in the two schools respectively 19.65, 19.86.

## Findings of the Study

1. It confirms that, both types of schools achieve the same score in pre test and post test in traditional method in learning English Grammar. Hence, it proves that students of standard II have learning problems in learning English grammar in Shri Vani Vilas Middle School, and Gopala Samudram Middle School.

2. There is no significant difference in the achieved mean score between pre test of control group and post test of control group in learning English Grammar of the students of standard II in Shri Vani Vilas Middle School.

It establishes that, conventional method of teaching is not effective in learning English Grammar at standard II.

3. There is no significant difference in the achieved mean score between pre test of control group and post test of control group in learning English Grammar of the students of standard II in Gopala Samudram Middle School.

4. There is significant difference in the achieved mean score between pre test of Experimental group and post test of Experimental group in learning English Grammar of the students of standard II in Shri Vani Vilas Middle School. It



shows that Gadget Based Learning is more effective in learning English grammar at standard II in Shri Vani Vilas Middle School.

5. There is significant difference in the achieved mean score between pre test of Experimental group and post test of Experimental group in learning English Grammar of the students of standard II in Gopala samudram Middle School.

It shows that Gadget Based Learning is more effective in learning English at standard II in Gopala Samudram Middle school.

6. There is significant difference in the achieved mean score between post test of control group and post test of Experimental group in learning English of the students of standard of II in Shri Vani Vilas Middle Sschool. It shows that, Gadget Based Learning is more effective in learning English at standard II in Shri Vani Vilas Middle School.

7. There is no significant difference in the achieved mean score between the students of standard of II in post test of Experimental group from Shri Vani Vilas Middle school, and post test of Experimental group from Gopala samudram Middle school, in learning English Grammar through Gadget Based Learning.

8. Gadget Based Learning is more effective than conventional method in learning English Grammar at standard II in both types of schools through mean score of pre test of Experimental group in two schools respectively 9.58,13.65 and compares with mean score of post test of Experimental group in the two schools respectively 19.65,19.86.

### Conclusion of the Study

Gadget Based Learning is fairly a new area, and full potential is yet to be realized in the field of education. Any piece of knowledge on Gadget Based Learning is a contribution to its knowledge base. In this way, the research study of the investigator can be considered as a small but significant contribution to education. More studies, that too in different dimensions of Gadget Based Learning are essential to understand its true worth. Hence, the research is not an end of the problem, but just a beginning of the search for innovation.

### Educational Implications

Gadget Based Learning enhances the thinking capacity of the students and it helps them to develop reasoning skills. The present study has the following educational implications.

1. Gadget Based Learning can become an effective strategy in the classroom teaching at primary level
2. Gadget Based Learning is effective for learning English Grammar and related subjects.
3. If Gadget Based Learning is well planed, and executed, it becomes resourceful in upper primary level also.
4. It can be extended to all categories of students at primary level.
5. Gadget Based Learning is effective, both for the slow learners and the average learners.
6. Gadget Based Learning helps a student to become self reliant and confident.
7. Gadget Based Learning enhances mutual understanding, and cooperation among the students at all levels and all subjects.
8. It provides the chance of learning to the students by their own face.

### Suggestions for Further Research

Research is a chain of activities. The purpose of any research in education is to find solutions for problems related to teachers, students learning etc. but investigation on one problem always leaves many related research questions that can be investigated by other researchers. Some of the areas of research in the future may be as follows.

1. Effectiveness of Gadget Based Learning in enhancing the achievement of students in maths.
2. Effectiveness of Gadget Based Learning in enhancing the achievement of students at upper primary level in English.
3. Effectiveness of Gadget Based Learning in enhancing the achievement of students at high school level.
4. The influence of Gadget Based Learning on the creativity of students.

5. The effectiveness of Gadget Based Learning in a teachers' preparation.
6. The effect of Gadget Based Learning on problem solving skill of students.
7. A comparative study on the effectiveness of Gadget Based Learning at pre-school level and high school level.

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