

**Summary of the Minor Research Project
held by
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1. Summary

General overview of entire study is given in brief as follow.

1.1. Research problem :

Given below is the title of present study

"A STUDY OF THE DEVELOPMENT AND EFFECTIVENESS OF SELF LEARNING MATERIALS FOR TEACHING OF GUJARATI GRAMMAR INCLUDED IN CURRICULUM OF STD- VIII (EIGHT) IN CONTEXT OF CERTAIN VARIABLLES."

1.2. Objectives :

Given below were the objectives of present study:

1. To design self-dependent material for teaching chosen grammar units of eight standard Gujarati language.
2. Comparison of conventional teaching method and self-dependent material for teaching chosen grammar units of eight standard Gujarati language.

3. To study the effect of intelligence of experimental group in their achievement.
4. To study the effect of gender of experimental group in their achievement.
5. To study the effect of socio-economic status of experimental group in their achievement.
6. Building hypothesis for both control and experimental group and studying the hypothesis to check the effect of self-dependent material on grammar learning achievement.
7. Knowing the views of students regarding self-dependent materials.

1.3. Research Variables

1.3.1. Independent Variable :

Variables in present research are as follows

In present study pattern was the independent variable which is divided into two classes:

- (1) Normal class teaching pattern
- (2) Self-dependent material for teaching pattern

Diagrammatic representation of independent variable is given below

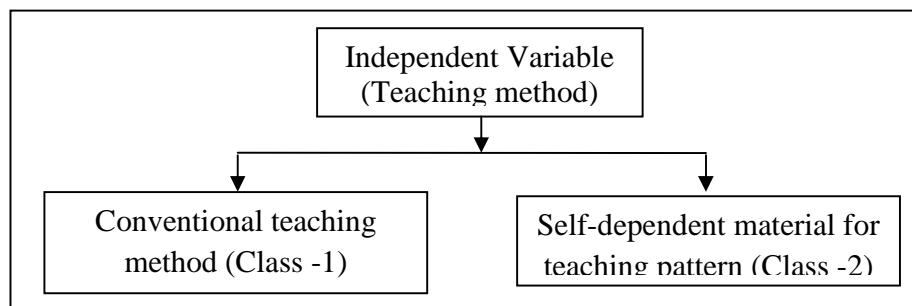


Figure -1.1: Types of teaching methods

1.3.2. Dependent Variables :

In present study researcher has taken certain topics from 8th standard Gujarati Grammar such as 'letter phonetics and pronunciation', 'word phonetics and word formation', 'Sandhi', ' samas'. These topics were taken as independent variables and standards of students gaining this knowledge were chosen as dependent variables.

Diagrammatic representation of effect of independent variable on dependent variable is given below

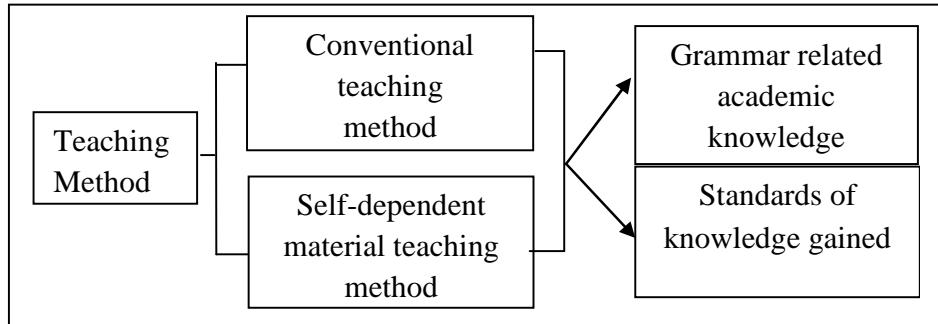


Figure - 1.2: Dependent Variables chosen for the study

1.4. Transformed variables :

Uchat (2004) said that transformed variables are those sub-independent variables whose affect may be upon the relationship of dependent and independent variables. In this study; the researcher has taken certain transformed variables whose effect may be on the subjects:

Table: 5.1 Transformed variables that may affect the subjects

Sr. No.	Variable	Class
1	Intelligence Quotient (IQ)	1. High IQ 2. Low IQ
2	Gender	1. Male 2. Female
3	Residence Area	1. Rural 2. Urban

1.5. Hypotheses of the study :

Investigator tested following hypotheses in present study:

- (1) There is no significant difference between Control Group and Experimental Group scores of Pre-Test of Rural Area

- (2) There is no significant difference between Control Group and Experimental Group scores of Pre-Test of Urban Area.
- (3) There is no significant difference between Pre-test and post test scores of students
- (4) There is no significant difference between Pre-test and post test scores of Experimental group
- (5) There is no significant difference between Pre-test and post test scores of Rural Experimental group.
- (6) There is no significant difference between Pre-test and post test scores of Urban Experimental group.
- (7) There is no significant difference between post test scores of boys and girls of Experimental group.
- (8) There is no significant difference between post test scores of boys and girls of Rural Experimental group.
- (9) There is no significant difference between post test scores of boys and girls of Urban Experimental group.
- (10) There is no significant difference between scores of High I.Q. and low I.Q. students of Experimental Group.
- (11) There is no significant difference between scores of High I.Q. and low I.Q. students of Rural Experimental Group.
- (12) There is no significant difference between scores of High I.Q. and low I.Q. students of Urban Experimental Group.
- (13) There is no significant difference between scores of Post-test and Memory-test of Controlled group students.
- (14) There is no significant difference between scores of Post-test and Memory-test of Experimental group students.
- (15) There is no significant difference between scores of Post-test and Memory-test of Rural Experimental group students.

- (16) There is no significant difference between scores of Post-test and Memory-test of Urban Experimental group students.
- (17) There is no significant difference between retention scores of Experimental group boys and girls.
- (18) There is no significant difference between retention scores of Rural and Urban Experimental group.
- (19) There is no significant difference between retention scores of boys and girls of Rural Experimental group
- (20) There is no significant difference between retention scores of Urban Experimental group boys and girls.

1.6. Population:

As we all know in Gujarat state education is divided into below categories:

1. Primary (Std I to V)
2. Upper Primary (Std VI to VIII)
3. Secondary (Std IX & X)
4. Higher Secondary (Std XI & XII)
5. Higher Education (Degree Course, Post-Degree, M.Phil., Ph.D. Etc.)

Above experiment was for the student of standard VII. So the Population was each and every student of standard VIII and it can be applicable to all standard VIIIth Gujarati medium students.

1.7. Sampling :

As per variable rules, researcher has selected one urban school from Petlad city and one rural school from a village in Petlad Taluka.

Standard VIII was selected on both the schools and their previous year's syllabus was considered in their prior test. To get the perfect result, they were divided into the group of 50 students.

1.8. Research Methodology:

Researcher has used experiment type of research method for the present study.

1.9. Tools were taken :

1.9.1. Post-Test:

This research was an Experimental Research. It was main aspect of this research is to check the enquired knowledge from by treatment. On behalf of this factor the Researcher had constructed a Post-Test on basis of Gujarati Grammar syllabus with respect to selected topics for this treatment. It was fully material based test which contained multiple choice questions, multiple choice felling blank test, complete the sentences, true or false.

This was total 50 marks test which was based on blue print. First there were 85 questions was there but then the specialists finalized 29 questions which contains 50 marks.

1.9.2. Memory Test :

After four weeks for checking students memory of enquired knowledge from by the treatment the Post-Test was given again. Here was the Post-Test is a Memory Test. It was not constructed specially.

1.9.3. Mass Intelligence Test :

To know about the students I.Q researcher selected a test design by Mr. K. G. Desai. In this test they (students) have to answer 80 questions into 40 minutes. And by observing the results they will have the I.Q of the students.

1.9.4. Techniques for analysis of the data :

The following techniques of data analysis and statistical calculation were applied.

- (1) The frequency distribution tables and figures were prepared and placed in the reports to present the data comprehensively.
- (2) Mean
- (3) Standard deviation (S.D.)

- (4) t – test
- (5) The significance at 0.05 and 0.01 levels of confidence were considered satisfactory for the acceptance or rejection of the null hypotheses.

1.10. Results of Hypotheses :

The Statistical analysis had done here by researcher, the findings of which has been in display

Table : 5.3

Results of Hypotheses

Sr. No.	Hypothesis	't' Ratio	Remark
1	There is no significant difference between Control Group and Experimental Group scores of Pre-Test of Rural Area.	0.02	Not Significant difference at 0.01 level
2	There is no significant difference between Control Group and Experimental Group scores of Pre-Test of Urban Area.	0	Not Significant difference at 0.01 level
3	There is no significant difference between Pre-test and post test scores of students	2.99	Significant difference at 0.01 level
4	There is no significant difference between Pre-test and post test scores of Experimental group	8.21	Significant difference at 0.01 level
5	There is no significant difference between Pre-test and post test scores of Rural Experimental group.	8.73	Significant difference at 0.01 level
6	There is no significant difference between Pre-test and post test scores of Urban Experimental group.	4.28	Significant difference at 0.01 level
7	There is no significant difference between post test scores of boys and girls of Experimental group.	1.48	Not Significant difference at 0.01 level
8	There is no significant difference between post test scores of boys and girls of Rural Experimental group.	1.59	Not Significant difference at 0.01 level

9	There is no significant difference between post test scores of boys and girls of Urban Experimental group	1.3	Not Significant difference at 0.01 level
10	There is no significant difference between scores of High I.Q. and low I.Q. students of Experimental Group.	1.56	Not Significant difference at 0.01 level
11	There is no significant difference between scores of High I.Q. and low I.Q. students of Rural Experimental Group	0.54	Not Significant difference at 0.01 level
12	There is no significant difference between scores of High I.Q. and low I.Q. students of Urban Experimental Group	1.9	Not Significant difference at 0.01 level
13	There is no significant difference between scores of Post-test and Memory-test of Controlled group students.	8.05	Significant difference at 0.01 level
14	There is no significant difference between scores of Post-test and Memory-test of Experimental group students.	1.12	Not Significant difference at 0.01 level
15	There is no significant difference between scores of Post-test and Memory-test of Rural Experimental group students.	0.38	Not Significant difference at 0.01 level
16	There is no significant difference between scores of Post-test and Memory-test of Urban Experimental group students	0.28	Not Significant difference at 0.01 level
17	There is no significant difference between retention scores of Experimental group boys and girls.	0.43	Not Significant difference at 0.01 level
18	There is no significant difference between retention scores of Rural and Urban Experimental group	0.52	Not Significant difference at 0.01 level
19	There is no significant difference between retention scores of boys and girls of Rural Experimental group	0.90	Not Significant difference at 0.01 level
20	There is no significant difference between retention scores of Urban Experimental group boys and girls.	1.12	Not Significant difference at 0.01 level

1.11. ACHIEVEMENTS FROM THE PROJECT :

The achievements of Presented project were as follows:

- This was an innovative experience for Students as well as Investigator also.
- It was highly effective for Students as well as Investigator also.
- It was highly affected to student's achievements.
- This was an inspiring experience for the researcher.
- Students were very happy and their Involvement was very better.
- If teacher will use such kind of Teaching-Learning material in class room teaching, students can success in achieving qualitative knowledge.
- It was affected on retention of students.

1.12. Major findings :

The study was devoted to the analysis of data and interpretation of data according to the objectives. The major findings concerned with the present investigation described in the study.

- (1) The treatment dose highly effect on students' achievement.
- (2) The treatment dose highly effect on students' achievement of rural area.
- (3) The treatment dose highly effect on students' achievement of urban area.
- (4) The gender difference does not effect on students' achievement in experiment group.
- (5) The area difference does not effect on students' achievement in experiment group.
- (6) The IQ difference does not effect on students' achievement in experiment group.
- (7) The treatment does effect on retention of students.
- (8) The treatment does effect equally on retention of students in relation to area.
- (9) The treatment does effect equally on retention of students in relation to gender.

1.12.1. Suggestions :

Students of Standard – 8 is very important year because after that they have to come in secondary school, and this age is very important as they have to develop and think about their career and it is also important stage for developing personality. For this they must know their study habit or style.

The CAI method is very important method for students.

1.12.2. For the state government :

State government is taking many projects for developing industries, health for children and free education, developing infrastructure, developing skills of teachers, etc. But it is very necessary to develop some concepts. After studying those results, government can take different project to develop some concepts of students and get result in form of expected achievement.

Government should take some project for develop CAI material for different concepts.

1.12.3. For the Institution or school :

Institution are always tried to increase the result of success. Now a day, each and every facility is available in most of institution. But it's different to utilized it in well manner. Although institutions are serious about success of students, but don't know how?

This study helps those institutions. This research can become way made of those. Institutions should think about different methods of teaching and use of technologies.

1.12.4. For the classroom teacher:

Classroom teacher is one of the main factors of success of students' ratio. Teachers are bothered by results of students and their class. Teacher should think about use of self learning material in classroom.

Most of teacher are known of use of computer but this research results helps to confident to try self learning material in classroom teaching. Teacher of any subject should try self learning material in classroom teaching to increase ratio of success.

1.12.5. For the students' parents:

Parents are always giving facilities to her child for education. Games, music, songs, movies est. are possible to available in computer. So most of parents avoid giving facility of such enemy of education. But parents should think

about its positive side. And at some level they should give facility of computer. Many CAI can be available in commercial market and they should try it.

1.13. Suggestions for future research :

The following suggestions may be useful to the future researchers in their research. They are follows:

- (1) There should be a chance to develop the self learning material in different topics in this subject.
- (2) There should be a chance to develop self learning material for teaching other school subjects.
- (3) One can develop programme to see effectiveness of it on mental health and adjustment.
- (4) One can do a comparative study of CAI programme and CAL programme.
- (5) One can develop programme to see effectiveness of it on interest of students.
- (6) There should be a chance to develop self learning material by different multimedia programme.

These and many other area of self learning material could be studied in order to make education progressive and make students excellent, qualitative and productive.

1.14. Conclusion :

This research can contribute a wider and novel field in the methodology of school subject.

Investigator's aim was to construct Self learning material and study an effectiveness of it in Gujarati subject. The researcher hopes that this study will be very useful to develop self learning material in different subjects and which direct effect on their study, achievement and educational objectives.