Chapter- 5

Abstract, Findings, Educational Implications and Recommendations
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5.0 Introduction

Knowledge is universal and beyond boundary in any field. So, no one can claim to be perfect in the field of the research in any branch of the knowledge. The present research has been undertaken for the development of the concepts of the grammar of Gujarati language. The researcher has taken each and every step and care to make this research enough competent and qualitative. If the researcher claims its perfection, it cannot be considered well in the researcher’s point of view. However, the researcher has faith that this research will become very useful to teach and clarify the concepts of the grammar in Gujarati language. The research will also be useful as a handful to the persons working in the field of the secondary education.

When the researcher initiated the teaching with the innovative method of teaching concept attainment teaching model programme, the students were seemed curious, interested and attentive. The researcher also felt the difficulties of some students and thought that will this method be convenient to the students or not. The researcher had given the instructions and guidance to some students to solve their learning difficulties who were facing the problems. The researcher had given all the information regarding the steps of the concept attainment teaching model programme with the examples to the students involved in. so, the students had taken the participation with full of curiosity, zest and interest. Thus, the research had been undertaken with success. The researcher got following opinions from the students when they were asked to respond to learning by the new innovative method.

- Learning by this new and innovative method gave the enjoyment in the learning.
- Grammatical points can be understood very easily by this innovative method. It can be memorized too.
- Students were so attentive that when the period over, students surprised how time moved fast.
- It was learning with fun to think on the examples and non-examples of the same concept and giving the answers about it.
- Learning with innovative method on the project was more enjoyable than the learning by the traditional method.
• The fundamental understanding regarding the grammatical point of Gujarati language could be developed.

The present research was undertaken with the aim of teaching the grammatical concepts of Gujarati language and development of the concept attainment teaching model programme. The concept attainment teaching model programme was constructed and applied on the students of the experimental group. The data was collected by giving the students post-test and retention test. The data were organized, distributed, analyzed and interpreted by the researcher for the understanding of the readers.

Abstract of the research, findings, educational implications and recommendations for the future research could become possible by the analysis and interpretation of the data. The information of which has been presented in the chapter with detail.

5.1 Abstract of Research.

The statement of the problem of present research has been presented literally as given under.

Effectiveness of concept attainment model with reference to

Educational Achievement in the subject of

Gujarati of standard nine

In the present research, the researcher had selected the male and female students of 9th standard of two secondary schools from the rural area and two schools from the urban areas of Mehsana district of Gujarat state and studied the concept attainment of grammatical concepts of Gujarati language of 9th standard.

The researcher had selected the concepts of six types of adverbs of the Gujarati language of 9th standard to study the effectiveness of the concept attainment teaching model programme. The researcher had prepared the lesson plan for each concept of type of adverbs. Thus, there were six lesson plans constructed by the researcher and the students were taught according to planning of concept attainment
teaching model programme. In the present research, the selected students of 9th standard of Adarsh High School of urban area were selected as an experimental group of the research and the selected students of 9th standard Kadi Sarvavidyalaya of urban area were selected as a controlled group of the research. In the present research, the selected students of 9th standard of Meda-Adraj Secondary High School of rural area were selected as an experimental group of the research and the students of 9th standard of Karannagar Secondary High School of the rural area were selected as a controlled group of the research. The selected students of both the urban area and rural area had been given the intelligent test constructed by Dr. J. H. Shah and the score on the test was collected and interpreted by the researcher. Thus, both the groups were made equivalent with the reference to Intelligent Quotient of the students. The students of an experimental group were taught by the concept attainment teaching model programme and the students of controlled group were taught by the traditional method of teaching by the researcher. After the completion of the programme the students of both the experimental group and controlled group were given the post test and after 14 days the students of both the group were given the retention test to study their retention. Thus, the data were collected in the form of post-test and retention test from the students of both the groups.

Thus, the collected data were analyzed by the statistical calculation and hypotheses were tested. The t-value was calculated. 20 hypotheses which were formatted by the researcher were tested on the basis of t-value. The interpretation of the hypotheses was presented by the researcher. The researcher had carried the findings of the research, educational implications and recommendations for the future researches on the basis of the interpretation of the present research.

The objectives of the present research have been given as under.

5.2.1 Objectives of Research

Objectives have been constructed by the researcher to determine the direction of any research. The objectives of present research were as under. Determination of the research makes the research work scientific.

1. To construct the concept attainment programme on selected types of adverb of Gujarati language subject for the students of 9th standard.
2. To compare the effectiveness of traditional lecture method and concept attainment model method on academic achievement of the students.

3. To compare the effectiveness of traditional lecture method and concept attainment model method on academic achievement of the students with the reference to area.

4. To compare the effectiveness of traditional lecture method and concept attainment model method on academic achievement of the students with the reference to gender.

5. To study the effectiveness of application of concept attainment model on retention of the students

5.1.2 Testing of Hypotheses of Research

In the present research, the researcher had constructed 20 null hypotheses as the estimated reasons of the research. The hypotheses have been tested by t—test.

Acceptance, rejection and level of significance of the null hypotheses have been have been presented in the following table.

<table>
<thead>
<tr>
<th>NO.</th>
<th>Hypothesis</th>
<th>T-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ho₁ . There will be no significant difference between the mean score of experimental group and controlled group of rural area on post-test.</td>
<td>2.71</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>2</td>
<td>Ho₂. There will be no significant difference between the mean score of experimental group of male and female students of rural area on post-test.</td>
<td>0.55</td>
<td>Not Significant</td>
</tr>
<tr>
<td>3</td>
<td>Ho₄. There will be no significant difference between the mean score of experimental group and controlled group of rural area on retention test.</td>
<td>2.85</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>4</td>
<td>Ho₅. There will be no significant difference between the mean score of experimental group male and female students of rural area on retention test.</td>
<td>0.87</td>
<td>Not Significant</td>
</tr>
<tr>
<td>NO.</td>
<td>Hypothesis</td>
<td>T-value</td>
<td>Level of Significance</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------------------------------------------------</td>
<td>---------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>5</td>
<td>Ho₇. There will be no significant difference between the mean score of students of experimental group of rural area on post-test and retention test.</td>
<td>0.83</td>
<td>Not Significant</td>
</tr>
<tr>
<td>6</td>
<td>Ho₉. There will be no significant difference between the mean score of experimental group and controlled group of urban area on post-test.</td>
<td>2.78</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>7</td>
<td>Ho₁₀. There will be no significant difference between the mean score of experimental group male and female students of urban area on post-test.</td>
<td>0.39</td>
<td>Not Significant</td>
</tr>
<tr>
<td>8</td>
<td>Ho₁₂. There will be no significant difference between the mean score of experimental group and controlled group of urban area on retention test.</td>
<td>2.34</td>
<td>Significant at 0.05 level</td>
</tr>
<tr>
<td>9</td>
<td>Ho₁₃. There will be no significant difference between the mean score of experimental group of male and female students of urban area on retention test.</td>
<td>0.42</td>
<td>Not Significant</td>
</tr>
<tr>
<td>10</td>
<td>Ho₁₅. There will be no significant difference between the mean score of students of experimental group of urban area on post-test and retention test.</td>
<td>1.53</td>
<td>Not Significant</td>
</tr>
<tr>
<td>11</td>
<td>Ho₁₇. There will be no significant difference between the mean score of students of experimental group of urban area and rural area on post-test.</td>
<td>0.61</td>
<td>Not Significant</td>
</tr>
<tr>
<td>12</td>
<td>Ho₁₉. There will be no significant difference between the mean score of students of experimental group of urban area and rural area on retention test.</td>
<td>0.07</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>
5.3 Findings of Study

In the present research, the findings have been carried out by the statistical analysis and conclusions. The findings of the study are as under.

1. The students of rural area of experimental group held higher academic achievement than the students of rural area of controlled group. So, it can be said that the concept attainment model programme was more effective than the traditional method of teaching.

2. Male students of experimental and controlled group of rural area have the same academic achievement in the post-test as the female students of experimental and controlled group of rural area. So, it can be said that there was no effect of the gender on concept attainment model programme and traditional method of teaching.

3. The students of rural area of experimental group held higher academic achievement in retention test than the students of rural area of controlled group. So, it can be said that the concept attainment model programme was more effective than the traditional method of teaching.

4. Male students of experimental and controlled group of rural area have the same academic achievement in the retention test as the female students of experimental and controlled group of rural area. So, it can be said that there was no effect of the gender on concept attainment model programme and traditional method of teaching.

5. The students of experimental group of rural area were seen equivalent in the academic achievement with the reference to post-test and retention test. So, it can be said that there was no effect of retention test on students learnt by the concept attainment model programme.

6. The students of urban area of experimental group held higher academic achievement than the students of urban area of controlled group. So, it can be
said that the concept attainment model programme was more effective than the traditional method of teaching.

7. Male students of experimental and controlled group of urban area have the same academic achievement in the post-test as the female students of experimental and controlled group of urban area. So, it can be said that there was no effect of the gender on concept attainment model programme and traditional method of teaching.

8. The students of experimental group of urban area were not seen equivalent in the academic achievement with the reference to post-test and retention test. So, it can be said that there was effect of retention test on students learnt by the concept attainment model programme.

9. Male students of experimental and controlled group of urban area have the same academic achievement in the retention test as the female students of experimental and controlled group of urban area. So, it can be said that there was no effect of the gender on concept attainment model programme and traditional method of teaching.

10. The students of experimental group of rural and urban area were seen equivalent in the academic achievement to post-test and retention test. So, it can be said that there was no effect of concept attainment model programme on the area of domicile.

11. The students of experimental group of rural and urban area were seen equivalent in the academic achievement. So, it can be said that there was no effect of concept attainment model programme on the area of domicile.

12. The students of experimental group of rural and urban area were seen equivalent in academic achievement of retention test. So, it can be said that there was no effect of retention test on the academic achievement of the students of experimental group of rural and urban area learning by concept attainment model programme.
15.0 Educational Implications

The educational implications of the present research have been given as under.

1. The present study will be helpful to the teachers who wants to teach concepts through concept attainment model.

2. The present study will be helpful to the teachers to prepare the material based on the concept attainment model.

3. It will be helpful to the lecturers of the college to make the student teachers prepare lesson plans based on concept attainment model.

4. The present study will be helpful to teach other subjects than Gujarati language based on concept attainment model.

5. This research will be helpful to the students to learn grammatical points of Gujarati language easily by this programme. It will be also useful to create curiosity and interest in the Gujarati language grammar.

6. Teaching by concept attainment model programme will decrease rote learning. It will also decrease the pressure on memory.

7. The present study will be also useful in developing reasoning ability, thinking ability, recognition ability, rememorize ability and finding co-relation ability of the students.

8. If the teacher considers the abilities of male and female students of the class the same and teach them with concept attainment teaching model programme, the development can be noted in both of them.

5.5 Recommendations

In the present research, the aim of the researcher was to prepare and construct the material based on concept attainment model and to study its effectiveness. Here, the concept achievement of the students of experimental group was seen higher and better than the students of controlled group. So, the researcher
has specified some recommendation to the person related with the education. The recommendations are as under.

5.5.1 Recommendations for Principals

1. The principals are concerned with the committee of syllabus construction. So, rational matter important for the concept attainment model should be put into syllabus.

2. Seminars, symposium, training and workshops can be arranged in the school for the application of concept attainment model.

3. Motivation should be provided to the students to apply concept attainment model programme in routine classroom teaching. It should not be become 'on paper' programme.

5.5.2 Recommendations for Teachers

1. The language teacher should teach the grammatical points by clarifying and magnifying concepts and terms of specific teaching items.

2. The teachers should motivate the students to aware of the change in the teaching method.

3. The weak students should be taught repeatedly by concept attainment model programme.

4. The teachers should become aware of different model based teaching system.

5. The teachers should clarify all the concepts of the content neglecting lack of time or giving more time to specific concepts of the content.

6. The students should be motivated to be active during the whole class because this method involves the analysis of thinking process.

7. The teacher should check whether the teaching by the teaching models are effective or not, after the teaching by specific teaching model.
5.5.3 Recommendations for Students

1. The students should remain aware of the use of different instruments in innovative system of learning.

2. The students should be self motivated to study different concepts and grammatical points of Gujarati language.

3. The students should remain attentive and updated with current knowledge and updates of the time.

4. The students should join the class with interest and curiosity. They should participate in class room activity.

5.5.4 Recommendations for Gujarat State Textbook Mandal

1. Presentation of concept in the text book should be based on inductive-deductive reasoning.

2. The examples of the textbook should be easy to understand and it should be based on practical knowledge.

3. Hard words of the lesson should be explained at the end of the textbook. The words should be explained with the examples.

4. Different assignment and projects should be put at the end of the textbook. So, it can accelerate the reasoning ability of the students.

5.6 Recommendations for Future Researches

The scope in the educational research is wider and broader. In educational research, new problem origins where one research stops. Thus, there is no limit to the research work.

In the present research, attempts have been made to improve the quality of education. But it cannot be said that this research is enough competent for all the aspects of problem. So, the researcher has tried to suggest future researches which can be undertaken in the present field.
1. In the present research, the researcher has applied the concept attainment model programme on six types of adverb. Other grammatical points can also be taken for the future research.

2. Grammatical points of other subjects than Gujarati like English, Hindi, Sanskrit can also be taken for the research and effectiveness of the consequent programme can be studied.

3. In the present research, the researcher has used acceptance oriented type of concept attainment model; other types of the same model can also be taken as a problem of the research.

4. In the present research, the researcher has not considered the variable 'intelligence'. Future researcher can undertake similar study considering this variable and can undertake the comparative study of high I. Q. students and low I. Q. students.

5. In the present study, the researcher had compared the concept attaining model with traditional method of teaching. Future researcher can compare concept attainment model with other teaching model also i.e. with questioning model.

6. In the present study, the researcher had made power point model as a medium of instruction. Other medium can also be selected for future researches.

5.7 Conclusion

Findings achieved by the present study will be useful to principals, teachers and students. The research will be helpful to increase their accountability and professional knowledge. The findings of the study will also be helpful to all persons concerned with the education and schools. The researcher will be grateful if the research will be helpful to the society and education of the present era.