CHAPTER I

INTRODUCTION
Great discoveries rarely happen by accident, when they do, the researcher is usually well grounded and possesses the skill known as serendipity to recognise the significance of these fortunate occurrences. He is imaginative enough to seize the opportunity presented and to carry it, through a fruitful conclusion.

- JOHN W. BEST

1.0.0.0 Introduction
1.1.0.0 Need and Importance of the Problem
1.2.0.0 Significance of the Present Study
1.3.0.0 Statement of the Problem
1.4.0.0 Definitions of Important Terms and Concepts
1.5.0.0 Objectives of the Study
1.6.0.0 Hypotheses of the Study
1.7.0.0 Limitations of the Study
1.8.0.0 Variables of the Study
1.9.0.0 The Outline of the Chapters
1.0.0.0. Introduction:

In a world based on Science and Technology, it is education which determines the level of prosperity, welfare and security of the people. The education of the whole world today with the linguistic superiority of English which is world-wise important of general communication and Global conversational maturalism is widely spread.

According to Kothari Commission:

"The Future of India is developing in the classrooms."

It is also universally acknowledged that any attempt at improvement in the quality of education is ultimately dependent on the quality of instruction imparted in the classroom, and the quality of instruction in our country, today is undoubtedly of a very poor standard. One fundamental reason is that it is based on centuries old traditional methods which should be renovated in the new contexts of education and learning.

Science and Technology have made rapid progress during our time. Our population growth and manpower requirements have necessiated revolutionary changes in our educational system and teaching methods. New methods and techniques in education are increasing making an impact on the traditional approach to teaching and learning progress.

We see around us a mass production of books, tapes, slides, teaching machines, T.V., V.C.R. and various electronic items such as computers etc.
Introduction

It is high time to make some efforts towards taking technology in our classrooms for effective teaching learning process.

One of these new approaches and innovations that has already started to achieve a vide acceptance is 'The use of computer in the field of Education'. In today's 21st century, the computer has emerged as a most popular and reliable audio-visual equipment. From child education to higher level of medical or scientific researches the use of computer can further be extended to help the students of secondary level in the study of all subjects, but how can it be used and implemented has been thought of, and this research has been conducted.

1.1.0.0. Need and importance of the Problem :

The progress of 21st century has brought many scientific and technological inventions in almost every spheres of our life. Due to these scientific and technological inventions, the 21st century has created it's own familarity as 'the Age of science' in all over the world. Science has influenced our life and has changed it completely. Today, with the advancements of Science, we enjoy such facilities of life as perhaps, our forefathers had never dreamt of.

The computer is a wonderful gift of modern Science. We find that computers are widely used in various ways of our life. Today, computers are found everywhere. As tools for the greatest technological revolution in our lifetime. It has already entered into the field of education and they can be proved 'A good helper and companion for teachers', 'A good guideline for students' and, A new vision for researchers'. Computers open a wide range of beautiful visions in the field of education. They progress more and more with their new advancements in this field of education.
Introduction

In this modern, scientific, technological and definitely computerized age, education require variety, novelty, harmony and something wonderful in its different teaching learning subjects. This can be achieved with its best performances through the use of computers as an educational tool.

According to general thinking of students, the subjects like Maths, Science, English, Social Studies are difficult subjects to learn. To remove this general thinking of students, the use of computer can be helpful. Computers can be identified as one of the newly scientific effective audio-visual aid. With the use of computers the teaching learning process of such difficult subjects can learn more effectively through viewing than listening. If the students get educational experience themselves only, the gained knowledge is more powerful and effective than the traditional teaching learning of our classrooms. This psychological principle can be utilized fully if we make the use of computers to give education. With the advancements of Computer Technology a large number of educational softwares are available very easily. Some of them provide 'Knowledge with Joy'. We can choose the appropriate one suitable for our subject and can use computer as one educational tool in our classroom teaching.

Moreover, the teachers can use softwares like Power-point and can prepare their softwares based on Multimedia. Detailed information regarding any subject can be given to the students through the use of internet. The National Centre for Software Technology also arranges teachers training programms such as ‘Intel Teach to the Future’ with support from Microsoft.

It is said that the teaching of languages is not an easy task. In special
Introduction

concern of English language, it is really true. The teaching of English language is very essential and important as it is an international link language. In our Gujarat state, Gujarati is the mother tongue of those who are born and brought up in Gujarati families. Naturally, learning a second language needs boost an internal motivation to learn another Language. Gujarati speaking learners of English face a lot of troubles while they are learning English as their second or foreign Language. To build up the richness of any Language, the concrete knowledge of it's grammar is very essential. English language is the language which is very much controlled, conditioned and regulated by grammar. So the teaching of English grammar requires a lot of perfect efforts, knowledge of grammar basics and a definite goal to achieve its teaching success.

The use of computer opens a new vision for the teaching learning process of English language and its grammar. It can be proved one of the best media which can bring new techniques in the present era where a silent revolution of 'Knowledge Explosion' is going on in the field of education. To increase the quality standard of students' achievements, it is an enthusiastic approach.

Taking into consideration, this type of need and importance for the use of computers as a new vision for the teaching of English grammar’ it is thought to be very beneficial for the study and Computer based Powerpoint programms are constructed.

1.2.0.0. Significance of the Present Study :

For the selection of the subject, the researcher has met with some English teachers who are working in the secondary schools of Gujarati
medium in Ahmedabad city. According to these English teachers, (in
teaching this foreign language,) they have to face many difficulties and
problems in the classroom. Today, this foreign language is compulsory at
secondary level. The students also have many difficulties and problems in
learning it. Each student has his / her own capacity to learn English, and
according to it they learn at school. It is not very easy for them to learn
English. So the English teachers have to use different types of techniques
and approaches, to teach the different aspects of English language.

One another important reason for selecting this subject is that
especially for English grammar the students can’t understand the teaching
points easily. The use of computers, an audio-visual educational teaching aid
can give them a perfect vision and help them to learn English grammar easily.

Today the modern society is becoming a world family and in the
new world’s social order, English will be one of the most colloquial
language, it’s importance is ever increasing. With the modern scientific
technology, the use of computers is also increasing. So the students have
to get ready with the tomorrow’s competitive world.

1.3.0.0. Statement of the Problem :

The statement of the problem for the present study is worded as
under :

A STUDY OF THE EFFECTIVENESS OF COMPUTER BASED
POWER-POINT PROGRAMMS

1.4.0.0. Definitions of Important Terms and Concepts :

It is quite essential to define certain important terms and concepts
worded in the statement of present problem.
Introduction

They are:

• Study
• Effectiveness
• Computer
• Power-point Programms
• Teaching
• English
• Grammar

Study: The world has different-meaning.
Study means;

They are as follows:

'Pursuit of some branch of knowledge'.

According to American Everyday Dictionary\textsuperscript{1}: Study means;

• Application of mind to the acquisition of knowledge
• Deep thought
• To examine or investigate carefully

According to Webster's New Illustrated Dictionary\textsuperscript{2}: Study means;

• To evaluate closely
• To scrutinise or earnestly contemplate
Introduction

- C.V. Good in his Dictionary of Education defines it as follows:
  • "An application of the mind to a problem or subject,
  • a branch of learning,
  • selective thinking carried on in the solution of a problem,
  • an investigation of a particular subject, or a published finding of such an investigation".

- Reader's Digest Great Encyclopedia Dictionary:
  (1970) defines the term study as:
  "a devotion of time and thought to acquisition, of information of some branch of knowledge, careful examination or observation of a subject or a question."

- Effectiveness: It means:
  • 'Bringing out of the result intended;
  • 'An ability to make improvement in students' scores on a criterion test'.

- Computer:
  "A Computer is a fast electronic device that processes the input data according to the instructions given by the programmer/user and provides and designed information as output".4
Introduction

The terminology used in the above definition is summarised as follow:

<table>
<thead>
<tr>
<th>No.</th>
<th>Term</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Data</td>
<td>The world DATA is the the plural form of datum, which means facts. Data are facts or it can be considered as the raw material of information. All the inputs given to the computer are called data</td>
</tr>
<tr>
<td>2</td>
<td>Information</td>
<td>Data which has some meaning or value, After processing of data, information is produced.</td>
</tr>
<tr>
<td>3</td>
<td>Instruction</td>
<td>A statement given to the computer to perform a task.</td>
</tr>
<tr>
<td>4</td>
<td>Input</td>
<td>Data and instructions given to computer</td>
</tr>
<tr>
<td>5</td>
<td>Process</td>
<td>Manipulation of Data</td>
</tr>
<tr>
<td>6</td>
<td>Output</td>
<td>Information Obtained after processing of data</td>
</tr>
</tbody>
</table>

**Power-Point Programms**:

“A Computer Program that can structure and create dynamic visual presentations, which include full colour images, sounds, animations, charts & graphs and which enables its users to prepare handouts to accompany each slide in their presentations”.

A STUDY OF THE EFFECTIVENESS OF COMPUTER BASED POWERPOINT PROGRAMMS
Introduction

❖ **Teaching** :

"An act of imparting knowledge of skill".

or

"An act of giving instructions or lessons".

❖ **English** :

"It is a foreign Language - a language which has secured its place its place as an international link language".

also

"A Language that is taught as a second or foreign language in Gujarat state".

❖ **Grammar** :

"Grammar is a systemetic study of scientific method which provides us information and guidance necessary to learn a language. The science of grammar teaches us how a language is spoken and written correctly and effectively. So, it can be said that grammar is primarily concerned with the formation and classification of words and sentences and their practical significance in daily life".

1.5.0.0. **Objectives of the Study** :

The present study was carried out with the following objectives:

1. To construct computer based power-point programms for the teaching of English Grammar.
Introduction

2. To teach English Grammar through the help of power-point programs in a systematic and controlled manner and in a methodically and logically related steps.

3. To study the effectiveness of computer based power-point programs in terms of
   (a) Teaching Method of English Grammar,
   (b) Student’s achievement according to their sex and
   (c) Student’s achievement according to their school area of Ahmedabad city.

4. To assess the student’s achievements.

5. To encourage the students to prepare their own power-point programs through the use of computer.

1.6.0.0 Hypotheses of the Study:

After determining the objectives and title of the study problem the researcher constructs temporary answers or solutions which are called hypotheses.

By carefully preparing hypothesis on a problem:

→ Nature of problem becomes clear,
→ The study is centralized,
→ The study work becomes easy,
→ Get better understanding about study method,
→ Get better knowledge about the instruments of information collection,
→ Get the idea of “What the information analysis technique should be”.

A STUDY OF THE EFFECTIVENESS OF COMPUTER BASED POWERPOINT PROGRAMMS
Introduction

In the words of Cohen and Nagel, “The function of a hypothesis is to direct our search for the order among facts. The suggestions formulated in the hypothesis may be solution to the problem. Whether they are, is the task of the inquiry.”

Hypothesis is a bridge in the process of inquiry or search which begins with some felt difficulty or problem and ends without the resolution of the problem.

The researcher takes into account the previous studies, theoretical facts and his own experiences and forms rules which suggest definite direction to the acquired results, which are called hypothesis. For the purpose of statistically examining such hypothesis on the basis of probability model they are converted into statements like “may not differ” or “may not relate” which is called null- hypothesis.

The common null hypotheses which are formed and tested for the study are as under :-

**F Test Hypotheses.**

- **$H_{01}$** There is no any significant main effect of Area on the teaching of English Grammar.
- **$H_{02}$** There is no any significant main effect of Method on the teaching of English Grammar.
- **$H_{03}$** There is no any significant main effect of Sex on the teaching of English Grammar.
Introduction

Ho4  There is no interaction effect of the pair between Area and Method on the teaching of English Grammar.

Ho5  There is no interaction effect of the pair between Method and Sex on the teaching of English Grammar.

Ho6  There is no interaction effect of the pair between Sex and Area on the teaching of English Grammar.

Ho7  There is no interaction effect of Area, Method and Sex on the teaching of English Grammar.

‘t’ Test Hypotheses :

Ho1  There is no significant mean difference between the students of East Area and West Area.

Ho2  There is no significant mean difference between the students of West Area and Coat Area.

Ho3  There is no significant mean difference between the students of Coat Area and East Area.

Ho4  There is no significant mean difference between the Traditional Method and Computer based Method.

Ho5  There is no significant mean difference between the eight standard Boys and Girls.

Ho6  There is no significant mean difference between the Traditional Method and Computer based Method of East Area.

Ho7  There is no significant mean difference between the Traditional Method and Computer based Method of West Area.
Introduction

$H_{o_8}$ There is no significant mean difference between the Traditional Method and Computer based Method of Coat Area.

$H_{o_9}$ There is no significant mean difference between East and West Area of Traditional Method.

$H_{o_{10}}$ There is no significant mean difference between West and Coat Area of Traditional Method.

$H_{o_{11}}$ There is no significant mean difference between Coat and East Area of Traditional Method.

$H_{o_{12}}$ There is no significant mean difference between East and West Area of Computer based Method.

$H_{o_{13}}$ There is no significant mean difference between West and Coat Area of Computer based Method.

$H_{o_{14}}$ There is no significant mean difference between Coat and East Area of Computer based Method.

$H_{o_{15}}$ There is no significant mean difference between boys and girls of Traditional Method.

$H_{o_{16}}$ There is no significant mean difference between boys and girls of Computer based Method.

$H_{o_{17}}$ There is no significant mean difference between the Traditional and Computer based Method of Boys.

$H_{o_{18}}$ There is no significant mean difference between the Traditional and Computer based Method of Girls.
Introduction

$H_{09}$ There is no significant mean difference between Boys and Girls of East Area.

$H_{10}$ There is no significant mean difference between Boys and Girls of West Area.

$H_{11}$ There is no significant mean difference between Boys and Girls of Coat Area.

$H_{12}$ There is no significant mean difference between the East and West Area of Boys.

$H_{13}$ There is no significant mean difference between the West and Coat Area of Boys.

$H_{14}$ There is no significant mean difference between the Coat and East Area of Boys.

$H_{15}$ There is no significant mean difference between the East and West Area of Girls.

$H_{16}$ There is no significant mean difference between the West and Coat Area of Girls.

$H_{17}$ There is no significant mean difference between the Coat and East Area of Girls.

$H_{18}$ There is no significant mean difference between the Boys and Girls of East Area: Traditional Method.

$H_{19}$ There is no significant mean difference between the Boys and Girls of West Area: Traditional Method.
Introduction

$H_{o30}$ There is no significant mean difference between the Boys and Girls of Coat Area: Traditional Method.

$H_{o31}$ There is no significant mean difference between the Boys and Girls of East Area: Computer based Method.

$H_{o32}$ There is no significant mean difference between the Boys and Girls of West Area: Computer based Method.

$H_{o33}$ There is no significant mean difference between the Boys and Girls of Coat Area: Computer based Method.

$H_{o34}$ There is no significant mean difference between the Traditional and Computer based Method of East Area: Boys.

$H_{o35}$ There is no significant mean difference between the Traditional and Computer based Method of West Area: Boys.

$H_{o36}$ There is no significant mean difference between the Traditional and Computer based Method of Coat Area: Boys.

$H_{o37}$ There is no significant mean difference between the Traditional and Computer based Method: East Area: Girls.

$H_{o38}$ There is no significant mean difference between the Traditional and Computer based Method: West Area: Girls.

$H_{o39}$ There is no significant mean difference between the Traditional and Computer based Method: Coat Area: Girls.

$H_{o40}$ There is no significant mean difference between the East and West Area: Traditional Method: Boys.
Introduction

$H_{o41}$ There is no significant mean difference between the West and Coat Area: Traditional Method: Boys.

$H_{o42}$ There is no significant mean difference between the Coat and East Area: Traditional Method: Boys.

$H_{o43}$ There is no significant mean difference between the East and West Area: Traditional Method: Girls.

$H_{o44}$ There is no significant mean difference between the West and Coat Area: Traditional Method: Girls.

$H_{o45}$ There is no significant mean difference between the Coat and East Area: Traditional Method: Girls.

$H_{o46}$ There is no significant mean difference between the East and West Area: Computer based Method: Boys.

$H_{o47}$ There is no significant mean difference between the West and Coat Area: Computer based Method: Boys.

$H_{o48}$ There is no significant mean difference between the Coat and East Area: Computer based Method: Boys.

$H_{o49}$ There is no significant mean difference between the East and West Area: Computer based Method: Girls.

$H_{o50}$ There is no significant mean difference between the West and Coat Area: Computer based Method: Girls.

$H_{o51}$ There is no significant mean difference between the Coat and East Area: Computer based Method: Girls.
Introduction

1.7.0.0. Limitations of the Study:

The present study has following limitations:

1. The study is carried out in only Gujarati Medium Schools.
2. The study is undertaken in Ahmedabad city of Gujrat State.
3. The students of the standards other than eighth are not included.
4. The subjects other than English is not included.
5. Only the selected grammar points of English are taken up for the experimentation.
6. The whole study is based upon the independent variables such as the area, method and sex.

1.8.0.0. Variables of the Study:

To recognize and genuinely define the variables involved in the study problem is an important step in the study process.

Anything that changes its value is a variable. Variable are things, ideas, concepts or entities that can have more than one value. The values are levels of existense. In experimental studies cause variables are known as independent variables and the effect variables are called dependent variables. In other words independent variables “lead to changes in the dependent variable”. Some variables which may cause the changes but are controlled so that they do not cause any change. Such variable are called controlled variables. The variables in this study are presented as below:-
Introduction

→ **Dependent Variable**: Teaching of English Grammar

→ **Independent Variable**:

(A) **Area**: East Area ($A_1$)

West Area ($A_2$)

Coat Area ($A_3$)

(B) **Method**: Traditional Method ($B_1$)

Computer based Method ($B_2$)

(C) **Sex**: Boys ($C_1$)

Girls ($C_2$)

1.9.0.0. **The Outline of the Chapters**:

The entire report of the present study is divided into six chapters. They are......

→ **CHAPTER-I Introduction**: The first chapter is an introductory chapter. It presents a descriptive note regarding the following points:

❖ Introduction

❖ Need and Importance of the problem

❖ Significance of the present study

❖ Statement of the problem

❖ Definitions of Important Terms and Concepts

A STUDY OF THE EFFECTIVENESS OF COMPUTER BASED POWERPOINT PROGRAMMS
Introduction

❖ Objectives of the study
❖ Hypothesis of the study
❖ Limitations of the study
❖ Variables of the study

→ CHAPTER-II: Review of Related Literature

This second chapter throws light on the past research studies carried out in the field along with a summary of major points by the investigator. It also reflects the Desirability of present study.

→ CHAPTER-III: Methodology Content of the Study

❖ Introduction:
   Traditional Method of teaching, It's advantages, limitations and conditions for success

❖ The application of Computer Technology in the field of Education, It's constitution, system, softwares and it's types, it's broadpurposes, as an aid to learning, it's educational implications, use in the field of Education, it's objectives and characteristics.

❖ Overview of powerpoint: Starting steps in detail

❖ Application of Powerpoint

❖ Selection of Powerpoint Programmes including the construction of Instructional objectives of selected grammar points, etc. are discussed.
Introduction

→ **CHAPTER-IV : Planning and Procedure of the Research**

The fourth chapter throws light on the planning and procedure of the research. It also includes not worthy points such as the concepts of population sampling procedures and the tools of the study.

The construction of computer based powerpoint programmes and the construction of achievement test both are discussed in detail with the used statistical methods.

→ **CHAPTER-V : Process of Data Collection, Analysis and Interpretation of Data.**

The results obtained through the statistical analyses of the data are tabulated interpreted and discussed in this fifth chapter.

→ **CHAPTER-VI : Compendium**

In this last chapter, a summary of the report is given along with the major conclusions and suggestions for future researches.

→ At the end of the Thesis, a comprehensive bibliography and appendices are also given.

...
Introduction

References


(2) E.N. Teril, *Webster's New Illustrated Dictionary*, New York; Book Inc. 1960 (P. 313)

(3) C. V. Good, *Dictionary of Education*, New York: Mcgraw Hill Company Ltd., Inc. 1945 (P. 392)

