CHAPTER – 1
INTRODUCTION

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Preface</td>
<td>2</td>
</tr>
<tr>
<td>1.2</td>
<td>Statement of the problem</td>
<td>5</td>
</tr>
<tr>
<td>1.3</td>
<td>Definition of the important terms</td>
<td>5</td>
</tr>
<tr>
<td>1.3.1</td>
<td>Media</td>
<td>5</td>
</tr>
<tr>
<td>1.3.2</td>
<td>ICT</td>
<td>5</td>
</tr>
<tr>
<td>1.3.3</td>
<td>Attitude</td>
<td>6</td>
</tr>
<tr>
<td>1.3.4</td>
<td>Teacher Effectiveness</td>
<td>6</td>
</tr>
<tr>
<td>1.3.5</td>
<td>Primary School Teachers</td>
<td>7</td>
</tr>
<tr>
<td>1.3.6</td>
<td>Gujarat State</td>
<td>7</td>
</tr>
<tr>
<td>1.4</td>
<td>Objectives of the study</td>
<td>7</td>
</tr>
<tr>
<td>1.5</td>
<td>Variables of the study</td>
<td>9</td>
</tr>
<tr>
<td>1.6</td>
<td>Hypotheses of the study</td>
<td>9</td>
</tr>
<tr>
<td>1.7</td>
<td>Importance of the study</td>
<td>15</td>
</tr>
<tr>
<td>1.8</td>
<td>Delimitations of the study</td>
<td>18</td>
</tr>
<tr>
<td>1.9</td>
<td>Scheme of chapterization</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td>21</td>
</tr>
</tbody>
</table>
CHAPTER – 1

INTRODUCTION

1.1 PREFACE

Education is considered as the keystone in each and every society. The development of any country depends largely on the quality of education. India is no exception. The ancient education system of India was primarily based on the ‘Gurukul System’. Modern education is not restricted within the classroom. The recent development of technology has brought out the whole world outside the classroom. Information and Communication Technology (ICT) plays a crucial role in this respect. It is treated as the integral part for educational reforms and innovations at primary, secondary and higher secondary schools.

Educational systems around the world are becoming increasingly pressured to apply the new ICT tools to their curriculum to provide students with the knowledge and skills that they need in the 21st century. ICT provides powerful tools that may help in transforming the present isolated, teacher-centered, and text-bound classrooms into rich, student-focused interactive knowledge environments.

Pelgrum, Janssen Reinen and Plomp (2001)\(^1\) has noted that “ICT is not only the backbone of the Information Age, but also an important catalyst and tool for inducing educational reforms that change our students into productive knowledge workers.”

Government, school system and schools have made considerable investments in providing computer based information and communication technology (ICT) to support teaching and learning. These initiatives have been strongly endorsed by national and international organizations and authorities across the world. The major aims of these provisions have been to enhance the quality of teaching and learning, and to better prepare students for participation in the emerging knowledge economy and information based society.
ICT is a powerful tool to support innovative methods of teaching, learning, and support innovation management education, thus contributing to improving the efficiency and quality of education.

ICTs are making dynamic changes in society. They are influencing all aspects of life. The influences are felt more and more at schools. Because ICTs provide both students and teachers with more opportunities in adapting learning and teaching to individual needs, society is forcing schools aptly respond to this technical innovation. Tinio (2002)\(^2\) states the potentials of ICTs in increasing access and improving relevance and quality of education in developing countries.

Tinio further states the potentials of ICT as follows:

ICTs greatly facilitate the acquisition and absorption of knowledge, offering developing countries unprecedented opportunities to enhance educational systems, improve policy formulation and execution, and widen the range of opportunities for business and the poor. One of the greatest hardships endured by the poor, and by many others, who live in the poorest countries, in their sense of isolation, and ICTs can open access to knowledge in ways unimaginable not long ago.

The 21\(^{\text{st}}\) century will be an era of finely tuned innovation. Both teacher and students will have to change themselves to cope with the changes and challenges in new media and technology. Environmental changes are unavoidable. Therefore a teacher is effective if he/she can adapt to and improve his/her environment.

Normally it is understood that teaching process means talking with someone personally and / or listening. But, usage of various media has changed this understanding. Teacher must be able to increase conceptual understanding and analytical ability among students through the use of diverse media. In short, looking at effects of various media and ICT in education, they have to make themselves compatible.

According to Iwu, Ijioma, Blessing, Onoja Abel and Nzewuihe (2011)\(^3\), teaching aids are important catalysts of social re-engineering and brings change in learners. Advances in technology have brought instructional materials especially the projected and electronic materials to the forefront as the most radical tools of globalization and
social development which have affected the classroom teaching-learning situation positively.

Teaching aids provide the teacher with interesting and compelling platforms for conveying information since they motivate learners to learn more and more. That’s why, it is mandatory to incorporate the effective usage of diverse media and ICT in teaching and learning process in schools.

Orakwe (2000)\(^4\) asserts that instructional media are gradually finding their ways into the classroom where modern and versatile teachers are exploiting new ways of transferring learning to the younger generation through the use of prints, visuals and audios or the various combinations of these trios which make up all we have in instructional media.

Teacher effectiveness can be judged through many factors through their competency and their performance in classroom. The act of teaching along with their competency and performance results in effectiveness in the classroom. Besides, due to the availability of modern technology, the advance media have to be incorporated in the teaching learning process.

Teachers’ attitude towards the use of technology in the teaching process is one of the factors that influence achieving a meaningful use of computer technology in the field of education.

Quality of students’ outcomes is very important and is influenced by the effectiveness of teachers’ teaching methods. As a result, this requires that the teachers have a positive attitude towards ICT integration and implementation into the curriculum.

Circular by Central Board of Secondary Education (CBSE / ACADEMIC / CIRCULAR / 2010)\(^5\) mentioned that Government of India has announced 2010-2020 as the decade of innovation. Reasoning and Critical thinking skills are necessary for innovation. Foundation of these skills is laid at school level. It is desirable that affordable ICT tools and techniques should be integrated into classroom instructions right from primary stage so as to enable students to develop their requisite skills. Most of the tools, techniques and tutorials are available in Open domain and accessible on web.
So, the investigator wants to investigate the relationship between teacher effectiveness, media utilization and the attitudes toward the use of Information and Communication Technology (ICT) among primary school teachers of Bharuch district of Gujarat state.

1.2 STATEMENT OF THE PROBLEM

The present study intended to study under the problem:

“A STUDY OF TEACHER EFFECTIVENESS IN RELATION TO MEDIA UTILIZATION AND ATTITUDE TOWARDS USE OF ICT AMONG PRIMARY SCHOOL TEACHERS OF GUJARAT STATE”

1.3 DEFINITION OF THE IMPORTANT TERMS

In order to avoid the misunderstanding regarding the key words, it is essential on the part of the researcher to define the terms which are as follows:

1.3.1 Media

Media or Medium means audio visual tools used to communicate information.

As per Yarrow and Millwater (1988)⁶, "Newer" media refers to electronic devices such as 16 mm projectors, 35 mm projectors, tape recorders, radio, broadcast television, heat copiers, and overhead projectors.

In the present study media means projected and electronic media such as Films, Slides, CCTV, T.V., teleconferencing, Tele Text, Projectors, Cameras, Audio Cassette, Video Camera, Slide and Film Projector, OHP (overhead projector) transparencies etc.

1.3.2 ICT

Blurton (2002)⁷ defined ICT as: “diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information.” These technologies include computers, the Internet, broadcasting technologies (radio and television), and telephony.
de Watteville and Gilbert (2000)\(^8\) have defined ICT in the following terms: The acquisition, analysis, manipulation, storage and distribution of information; and the design and provision of equipment and software for these purposes.

In the present study ICT means computers, the Internet, CD-ROM, WWW (World Wide Web), LCD Projector, Multimedia, Computer Based Tutorial (CBT) and Computer Assisted Instruction (CAT).

### 1.3.3 Attitude

McDonald (1962)\(^9\) defined attitude as a predisposition to action, a state of readiness to act in a particular way. They are generalized states of the individual, which lead to or result in a wide variety of particular way of behaving.

Scholl (2002)\(^10\) defined attitudes as a mental predisposition to act that is expressed by evaluating a particular entity with some degree of favour or disfavour. Individuals generally have attitude that focus on objects, people or institutions.

In the present study Attitude means Primary school teachers’ attitude towards media utilization and attitude towards use of ICT.

### 1.3.4 Teacher effectiveness

Flanders (1969)\(^11\) defined “Teacher effectiveness as an area of research concerned with relationship between characteristics of teacher, teaching acts and their impact on educational outcomes. An effective teacher is a person with sense of humour, explaining clearly, ability to understand the students, making subject interesting, controlling the class, ready and willing to help the students and free and frank in dealing with things.”

Good (1959)\(^12\) defined teacher effectiveness as the ability and interaction between the physical, intellectual and psychological interest of the students, content, efficiency of the teachers and the social needs.
In the present study Effectiveness means effectiveness of Primary school teachers in relation to attitude towards media utilization and attitude towards use of ICT.

1.3.5 Primary School Teachers

In India, elementary schools provide education from Class 1 to Class 8. The children in these classes are generally aged between 6 to 14 years (“Primary education,” n.d.)

Elementary schools are also called primary schools. Teachers working in such school are known as primary school teachers (“Primary school,” n.d.).

In the present study primary school teachers means primary school teachers of Bharuch district of Gujarat State during the year 2013-14.

1.3.6 Gujarat State

Gujarat state can be defined as “One state amongst India’s total 29 states and 7 union territories which is located in western direction. Gujarat is having North-South length is approximately 590 Km and East-West breadth is approximately 500 Km with population of 60,383,628 according to the 2011 census data.” (“List of states and territories of India by area,” n.d.; “Gujarat,” n.d.)

1.4 OBJECTIVES OF THE STUDY

The present research intends to study about teacher effectiveness in relation to media utilization and attitude towards use of ICT among primary school teachers. Likert rating scales were used to measure media utilization, attitude towards media utilization, attitude towards use of ICT and teacher effectiveness. The scores obtained from the different scales were to be analyzed. In order to arrive to the results of the study, the objectives are determined as follow:
1. To construct and validate Media Utilization Checklist for primary school teachers.

2. To construct and validate Media Utilization Attitude Scale for primary school teachers.

3. To construct and validate Use of ICT Attitude Scale for Primary school teachers

4. To construct and validate Teacher Effectiveness Scale for primary school teachers.

5. To compare the Male and Female primary school teachers with regard to
   - Media Utilization
   - Attitude Towards Media Utilization
   - Attitude Towards ICT
   - Teacher Effectiveness

6. To compare the Rural and Urban primary school teachers with regard to
   - Media Utilization
   - Attitude Towards Media Utilization
   - Attitude Towards ICT
   - Teacher Effectiveness

7. To compare the Government and Private primary school teachers with regard to
   - Media Utilization
   - Attitude Towards Media Utilization
   - Attitude Towards ICT
   - Teacher Effectiveness

8. To study the Teacher Effectiveness of primary school teachers in relation to
   - Attitude Towards Media Utilization
   - Attitude Towards ICT
1.5 VARIABLES OF THE STUDY

Research scientists manipulate variable in order to test their hypotheses and learn more and more about the factors that are changeable during the course of an investigation.

There are two types of variables in this study: independent variable and dependent variable. The independent variable is the variable that is varied or manipulated by the researcher. The dependent variable is a variable that changes as the result of changing the independent variable. The details of these two variables in this study are as follow:

1. Independent variables

There were three independent variables i.e. Gender (Male, Female), Area (Rural, Urban) and School type (Government, Private) in this study.

2. Dependent variables

There were three dependent variables i.e., Attitude towards Media Utilization, Attitude towards Use of ICT and Teacher Effectiveness in this study.

1.6 HYPOTHESES OF THE STUDY

Hypothesis testing is an important activity of empirical research. A well worked up and strong hypotheses give insight and hint as well as support the researcher to find the answer to a problem. For the present study, the following hypotheses were formed:

A. Hypotheses related to Attitude towards Media Utilization (Based on Gender)

1. There will be no significant difference between the mean score of Attitude towards Media Utilization of Male and Female primary school teachers.
2. There will be no significant difference between the mean score of Attitude towards Media Utilization of Rural and Urban primary school Male teachers.

3. There will be no significant difference between the mean score of Attitude towards Media Utilization of Rural and Urban primary school Female teachers.

4. There will be no significant difference between the mean score of Attitude towards Media Utilization of Government and Private primary school Male teachers.

5. There will be no significant difference between the mean score of Attitude towards Media Utilization of Government and Private primary school Female teachers.

Hypotheses related to Attitude towards Media Utilization (Based on Area)

6. There will be no significant difference between the mean score of Attitude towards Media Utilization of Rural and Urban primary school teachers.

7. There will be no significant difference between the mean score of Attitude towards Media Utilization of Male and Female primary school teachers in Rural area.

8. There will be no significant difference between the mean score of Attitude towards Media Utilization of Male and Female primary school teachers in Urban area.

9. There will be no significant difference between the mean score of Attitude towards Media Utilization of Government and Private primary school teachers in Rural area.

10. There will be no significant difference between the mean score of Attitude towards Media Utilization of Government and Private primary school teachers in Urban area.
Hypotheses related to Attitude towards Media Utilization (Based on School Type)

11. There will be no significant difference between the mean score of Attitude towards Media Utilization of Government and Private primary school teachers.

12. There will be no significant difference between the mean score of Attitude towards Media Utilization of Male and Female Government primary school teachers.

13. There will be no significant difference between the mean score of Attitude towards Media Utilization of Male and Female Private primary school teachers.

14. There will be no significant difference between the mean score of Attitude towards Media Utilization of Rural and Urban Government primary school teachers.

15. There will be no significant difference between the mean score of Attitude towards Media Utilization of Rural and Urban Private primary school teachers.

B. Hypotheses related to Attitude towards Use of ICT (Based on Gender)

16. There will be no significant difference between the mean score of Attitude towards Use of ICT of Male and Female primary school teachers.

17. There will be no significant difference between the mean score of Attitude towards Use of ICT of Rural and Urban primary school Male teachers.

18. There will be no significant difference between the mean score of Attitude towards Use of ICT of Rural and Urban primary school Female teachers.

19. There will be no significant difference between the mean score of Attitude towards Use of ICT of Government and Private primary school Male teachers.

20. There will be no significant difference between the mean score of Attitude towards Use of ICT of Government and Private primary school Female teachers.
Hypotheses related to Attitude towards Use of ICT (Based on Area)

21. There will be no significant difference between the mean score of Attitude towards Use of ICT of Rural and Urban primary school teachers.

22. There will be no significant difference between the mean score of Attitude towards Use of ICT of Male and Female primary school teachers in Rural area.

23. There will be no significant difference between the mean score of Attitude towards Use of ICT of Male and Female primary school teachers in Urban area.

24. There will be no significant difference between the mean score of Attitude towards Use of ICT of Government and Private primary school teachers in Rural area.

25. There will be no significant difference between the mean score of Attitude towards Use of ICT of Government and Private primary school teachers in Urban area.

Hypotheses related to Attitude towards Use of ICT (Based on School Type)

26. There will be no significant difference between the mean score of Attitude towards Use of ICT of Government and Private primary school teachers.

27. There will be no significant difference between the mean score of Attitude towards Use of ICT of Male and Female Government primary school teachers.

28. There will be no significant difference between the mean score of Attitude towards Use of ICT of Male and Female Private primary school teachers.

29. There will be no significant difference between the mean score of Attitude towards Use of ICT of Rural and Urban Government primary school teachers.

30. There will be no significant difference between the mean score of Attitude towards Use of ICT of Rural and Urban Private primary school teachers.
C. Hypotheses related to Teacher Effectiveness (Based on Gender)

31. There will be no significant difference between the mean score of Teacher Effectiveness of Male and Female primary school teachers.

32. There will be no significant difference between the mean score of Teacher Effectiveness of Rural and Urban primary school Male teachers.

33. There will be no significant difference between the mean score of Teacher Effectiveness of Rural and Urban primary school Female teachers.

34. There will be no significant difference between the mean score of Teacher Effectiveness of Government and Private primary school Male teachers.

35. There will be no significant difference between the mean score of Teacher Effectiveness of Government and Private primary school Female teachers.

Hypotheses related to Teacher Effectiveness (Based on Area)

36. There will be no significant difference between the mean score of Teacher Effectiveness of Rural and Urban primary school teachers.

37. There will be no significant difference between the mean score of Teacher Effectiveness of Male and Female primary school teachers in Rural area.

38. There will be no significant difference between the mean score of Teacher Effectiveness of Male and Female primary school teachers in Urban area.

39. There will be no significant difference between the mean score of Teacher Effectiveness of Government and Private primary school teachers in Rural area.

40. There will be no significant difference between the mean score of Teacher Effectiveness of Government and Private primary school teachers in Urban area.
Hypotheses related to Teacher Effectiveness (Based on School Type)

41. There will be no significant difference between the mean score of Teacher Effectiveness of Government and Private primary school teachers.

42. There will be no significant difference between the mean score of Teacher Effectiveness of Male and Female Government primary school teachers.

43. There will be no significant difference between the mean score of Teacher Effectiveness of Male and Female Private primary school teachers.

44. There will be no significant difference between the mean score of Teacher Effectiveness of Rural and Urban Government primary school teachers.

45. There will be no significant difference between the mean score of Teacher Effectiveness of Rural and Urban Private primary school teachers.

D. Hypotheses related to relationship between Teacher Effectiveness and Attitude towards Media Utilization

46. There will be no significant relationship between Teacher Effectiveness and Attitude towards Media Utilization.

47. There will be no significant relationship between Teacher Effectiveness and Attitude towards Media Utilization of Male primary school teachers.

48. There will be no significant relationship between Teacher Effectiveness and Attitude towards Media Utilization of Female primary school teachers.

49. There will be no significant relationship between Teacher Effectiveness and Attitude towards Media Utilization of primary school teachers in Rural area.

50. There will be no significant relationship between Teacher Effectiveness and Attitude towards Media Utilization of primary school teachers in Urban area.

51. There will be no significant relationship between Teacher Effectiveness and Attitude towards Media Utilization of Government primary school teachers.
52. There will be no significant relationship between Teacher Effectiveness and Attitude towards Media Utilization of Private primary school teachers.

E. **Hypotheses related to relationship between Teacher Effectiveness and Attitude towards Use of ICT**

53. There will be no significant relationship between Teacher Effectiveness and Attitude towards Use of ICT.

54. There will be no significant relationship between Teacher Effectiveness and Attitude towards Use of ICT of Male primary school teachers.

55. There will be no significant relationship between Teacher Effectiveness and Attitude towards Use of ICT of Female primary school teachers.

56. There will be no significant relationship between Teacher Effectiveness and Attitude towards Use of ICT of primary school teachers in Rural area.

57. There will be no significant relationship between Teacher Effectiveness and Attitude towards Use of ICT of primary school teachers in Urban area.

58. There will be no significant relationship between Teacher Effectiveness and Attitude towards Use of ICT of Government primary school teachers.

59. There will be no significant relationship between Teacher Effectiveness and Attitude towards Use of ICT of Private primary school teachers.

1.7 **IMPORTANCE OF THE STUDY**

Primary education is the foundation on which a nation’s vital human resources are built. It is the beginning of formal education and the focus of many development efforts. Technology used at this stage of the education process is important for a country’s participation in the global knowledge economy, and technology is also especially suited to address the demands of primary schooling in some unique and powerful ways. The integration of ICT into education from an early age also prepares students for an economy in which technology is not just a tool that increases
productivity, but an indispensable and necessary part of every job. (Vital Wave Consulting, 2009)\textsuperscript{17}

The usefulness and effectiveness of the education system largely depends upon active, resourceful, competent and effective teachers. Quality of teaching depends upon the efficiency of the teacher. One can say that teacher effectiveness is the capability of teachers to teach in such a manner that he gets success to bring the desirable change in the students' behaviour. It is assessed not only from the academic pursuits and classroom teaching of the teacher but from the sum total influences exerted by the teacher upon the students. It has been recognised that the personality of the teacher and healthy attitude towards his work contributes to effective and efficient teaching. The effectiveness of a teacher lies not only in the presentation of his subject matter in an effective way but to make the whole environment of the classroom conductive for learning ensuring the all round development of a child.

Teacher is an effective and dominating factor among the ones contributing to educational improvements. The teacher effectiveness depends mainly on the teachers' attitude, characteristics and the classroom phenomena such as environment and climate, organisation and management. Various commissions and committees have recommended methods of bringing about qualitative improvements in education. As a result, the teachers are motivated, inspired and endured to develop better curriculum, text books and teaching aids. But, all the efforts are meaningless unless teachers are not having the positive attitude towards educational technology.

The process of teaching - learning depends upon the different type of equipment available in the classroom. There are many aids available these days like, audio, visual and audio-visual aids. They have very much importance in Teaching Learning Process.

Educational technology plays an important and crucial role in making teaching learning process more effective and successful. Educational Technologies are those materials, procedures, organizations, ideas, devices, instruments or machines which make the teaching learning process more effective, successful, and unforgettable.
According to Nasrin and Nangia (2007), all kinds of teaching involves the communication of ideas through senses, either orally-through medium of speech or by showing or by use of written words or printed material or by concrete three dimensional objects, because through vision or visibility students can understand the concept better. Our sense organs are our gateway to all knowledge. All our sense organs help in understanding the environment around us. Hearing and seeing are most important in this respect. There is a Chinese adage that “what we hear we forget and what we see we remember”. Both hearing about many things and seeing are done in the classroom teaching. Hearing provides only information whereas showing provides an opportunity to visualize and comprehend. Using audio-visual aids in teaching learning process, the teacher becomes a better teacher, more active, a more effective and more efficient. So every teacher should use audio visual aids to meet the students’ needs.

ICTs can enhance the quality of education in several ways: by increasing learner motivation and engagement, by facilitating the acquisition of basic skills, and by enhancing teacher training. ICTs are also transformational tools which, when used appropriately, can promote the shift to a learner-centred environment.

In education, use of ICT has become imperative to improve the efficiency and effectiveness at all levels and in both formal and non-formal settings.

It is a fact that various media and ICT had created new trend of teaching and learning at primary education. Usage of ICTs and different types of media assist educators to transmit the knowledge in an impressive way giving diversity to classroom teaching and making learning more effective. Also teacher’s positive attitude is necessary for effective implementation of media and ICT and it is one of the important factors that influence achieving a meaningful use of technology in the field of education.

So, it is very much necessary to study teacher effectiveness in relation to media utilization and attitude towards use of ICT among primary school teachers. With this respect, the importance of present study is as follows:
1. Present study will provide standardized Media Utilization Checklist for studying response analysis of various types of media used by primary school teachers. This check list may be a source for similar analysis at secondary, higher secondary or even in higher education.

2. Present study will provide standardized Media Utilization Attitude Scale for studying attitude of primary school teachers towards use of media utilization.

3. Present study will be used to study the effect of different variables on attitude of primary school teachers towards media utilization.

4. Present study will provide standardized Use of ICT Attitude Scale for studying attitude of primary school teachers towards use of ICT.

5. Present study will provide standardized Teacher Effectiveness Scale for studying effectiveness of primary school teachers.

6. Present study will show study the relationship between Teacher Effectiveness and Media utilization and effect of different variables on the relationship.

7. Present study will show study the relationship between Teacher Effectiveness and Use of ICT and effect of different variables on the relationship.

1.8 DELIMITATIONS OF THE STUDY

1. The present study is limited to the primary school teachers of Bharuch district of Gujarat State during the academic year 2013-14.

2. The present study is limited to the primary school teachers of Gujarati Medium.

3. The present study is limited to the government and private primary school teachers.

4. The present study is also limited with respect to primary school teachers’ effectiveness, media utilization, attitude towards media utilization and attitude towards use of ICT.

5. The present study is also limited to the use of only computer based techniques under ICT.
1.9 SCHEME OF CHAPTERIZATION

The schemes of chapterization for next chapters are as follow:

Chapter – 2 Theoretical Orientation

Second chapter was concerned to theoretical orientation i.e. Primary education, definition of media, types of media, need and importance of media in primary education, definition of ICT, need and importance of ICT in primary education, definition of attitude, teacher’s attitude towards Media utilization and teacher’s attitude towards Use of ICT, definition of Teacher effectiveness, factors affecting teacher effectiveness.

Chapter – 3 Review of the past studies

This chapter described the review of the past studies regarding attitude towards media utilization, attitude towards use of ICT and teacher effectiveness which were already done in India and in foreign countries.

Chapter – 4 Plan and procedure

Fourth chapter discussed about plan and procedure i.e. the research method, research design, population and sample, sampling technique, research tools, techniques of data collection and method of data analysis.

Chapter – 5 Development of the tools

Fifth chapter discussed about the construction of the tools, judges’ agreement, selection of the sample for the pilot study, administration of the tools, scoring of the pilot study, item analysis and the final selection of the tools thereafter establishing reliabilities and validity.

Chapter – 6 Analysis of data and interpretation

Sixth chapter concerned to the analysis of data and interpretation i.e. the results in tabulated form with inferences related to the teacher effectiveness in relation to media utilization and attitude towards use of ICT among primary school teachers.
The chapter was divided into six parts. Response analysis of Media utilization of teachers belonging to different groups of Gender, Area and School type was the part one. Part two concerned to the comparison between mean scores of teachers belonging to different groups of Gender, Area and School type in the context of Media Utilization Attitude Scale. Part three concerned to the comparison between mean scores of teachers belonging to different groups of Gender, Area and School type in the context of Use of ICT attitude Scale. Part four concerned to the comparison between mean scores of teachers belonging to different groups of Gender, Area and School type in the context of Teacher Effectiveness Scale. Part five concerned to the relationship between Teacher Effectiveness with Attitude towards Media Utilization for teachers in total score and teachers belonging to different groups of Gender, Area and School type. Part six concerned to the relationship between Teacher Effectiveness with Attitude towards Use of ICT for teachers in total score and teachers belonging to different groups of Gender, Area and School type.

Chapter – 7 Summary, findings and recommendations

Seventh chapter discussed about the summary, findings, conclusions, educational implications and recommendations for further study.
REFERENCES


