# CHAPTER – 3
## REVIEW OF THE PAST STUDIES

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CHAPTER – 3

REVIEW OF THE PAST STUDIES

3.1 INTRODUCTION

Human knowledge has the three phases: Presentation, transmission and advancement. Practically all human knowledge can be found in books, journals and papers. By building upon the accumulated and recorded knowledge of the past, man constantly adds to the vast store of knowledge which makes possible progress in all areas of human endeavor. The investigator can ensure whether considerable work has already been done on topics which are directly related to his proposed investigation.

Before taking up any specific research project in the development of a discipline, the researcher must be thoroughly familiar with previous theories and researches. To assure these familiarities, every research project has to review the available theoretical and research literature.

Research takes advantage of the knowledge, which has accumulated in the past as a result of constant human endeavor. A review of related literature gives the scholar an understanding of previous work that has been done. It enables us to know the means of getting to the frontier in the field of our problem. It tells us what others have done and what still remains to be done in our area.

One of the indispensable parts of the research is reviewing the literature. The review of related literature is a sort of formal training, which enables the researcher to understand the objectives and the corresponding hypotheses of the study. It acquaints the researcher with the current knowledge and serves as a pole star in delimiting and defining the problem.

The most important reason for reviewing the literature is to know about the recommendations of the previous researchers for further researches, which they have listed in their studies. This step helps to eliminate the duplication of what has been done and provides useful hypothesis and helpful suggestions for significant
investigation. Essentially, review of related literature economizes time and energy of the researcher.

Thus, the review of related literature is an essential aspect of research problem as it is a step of scientific method; it forms the foundation upon which all the future work is to be built. If we fail to acquire this formation of knowledge provided by the review of literature our work is likely to be shallow.

The study of related literature and research work is very essential and important as it provides us proper guidelines. For any specific research project, in the development of a discipline, the researchers must be thoroughly familiar with both previous theories and research.

The purpose of the study of research works done in the same field is to understand what type of study has been done and what exactly has been explored before the present research work started.

The review of the literature provides us an opportunity of gaining insight into the methods, measures, subjects and approaches employed by other research workers. A careful review of the research, research journals, books, dissertations, thesis and other sources of information of the problem to be investigated is one of the important steps in the planning of any research study.

A careful review of the literature enables the researcher to collect and synthesize prior studies related to the present study. This, in turn, helps him in building perspective future research. A synthesis collection of related studies identify the significant overlaps and gaps among the prior works.

**Meaning of review of related literature**

“Review of related literature” consists of two words: Review and Literature. The term ‘Review’ means to organize the knowledge of specific area of research to evolve an edifice of knowledge so that this study would be an addition to this field. The word literature has conveyed different meaning from traditional meaning. But in research methodology the term literature refers to the knowledge of a particular area of
investigation under any discipline, which includes theoretical and its practical research studies. Human beings are such animals who can take advantage of the knowledge and findings of the previous generations as well as from the surroundings.

Therefore, the task of review of literature is highly creative and tedious because researcher has to synthesize the available knowledge of the field in a unique way to provide the rationale for his study.

The term review of literature has been defined in the following ways:

According to Mouly (1977), "Man is the only animal that does not have to begin a new in every generation, but can take advantage of the knowledge which has accumulated through the centuries. This fact is of particular importance in research which operates as a continuous function of ever-closer approximation to the truth. The investigator can be sure that his problem does not exist in a vacuum and that considerable work has already been done on problems, which are directly related to his proposed investigation".

According to Borg and Gall (1983), “The literature in any field forms the foundation upon which all future work will be built. If we fail to build the foundation of knowledge provided by the review of literature, our work is likely to be shallow and naive and will often duplicate work that has already been done better by someone else”.

According to Good (1959), “The keys to vast storehouse published literature may open doors to sources of significant problems and explanatory hypothesis and provide helpful orientation for definition of the problem, background for selection of procedure, and creative and original, one must read extensively and critically as a stimulus to thinking”.

According to Koul (2009), research can never be undertaken in isolation of the work that has already been done on the problems related to a study proposed by researchers. Review of related literature covers from different sources as research materials, including books, magazines, periodicals, websites, scientific papers, journals, encyclopaedia, and researches of others.
History reveals that man learns from the experience of others. Man always seeks help and guidance from his ancestors. The survey of the related literature is crucial aspect of the planning of the study, and the time spent in such a survey invariably is a wide investment. The review of the literature is an exacting task calling for deep insight, and clear perceptive of the overall field. It is a crucial step which invariably minimizes the risk of dead ends, rejected topics, reflected studies, wasted efforts discarded by previous investigators and even more important erroneous findings based on a faulty research design.

The reviews of the literature promote a greater understanding of the problem and its crucial aspects and ensure the avoidance of unnecessary duplication. It also provides comparative data to evaluate and interpret the significance of one’s findings.

Emphasizing the importance of the survey of the related literature researchers have pointed out “Survey of related literature help us to show whether evidence already available solves the problem adequately, without further investigations and thus, may save duplication. It may contribute to the general scholarship of the investigator by providing ideas, theories and explanations valuable in formatting the problem and may also suggest the appropriate methods of research.” In a nutshell it provides us with the proper and healthy guidance.

Every piece of ongoing research needs to be connected with the work already done, to attain an overall relevance and purpose. The review of literature thus becomes a link between the research proposed and the studies already conducted in the field.

Reviewing the literature has two phases. The first phase includes identifying all the relevant published material in the problem area and reading that part of it with which we are not thoroughly familiar. We develop the foundation of ideas and results on which our own study will be built. The second phase of the review of related literature involves writing this foundation of ideas into a section of the research report. For the researcher, it establishes the background in the field.
3.2 IMPORTANCE OF REVIEW OF PAST STUDY

One of the early slips in planning a research work is to review research done previously in the particular area and qualitative analysis of this research usually gives the worker an indication of the direction. It is very essential for every investigation to be up-to-date in information about the literature. It previews source of problem of study, and also it avoids the replication of the study of findings to take an advantage from similar or related literature, as regards to methodology techniques of data collection, precedence adopted and conclusions drawn.

A review of the related literature gives the scholar an understanding of the previous work that has been done. The results from the review actually provide the data used in research. These reviews will give the student the insight he needs to convert his tentative research problem to a specific and concise one. In the process of reviewing the literature the student is finding out research approaches in his area that provides to be sterile. The review of the literature provides us with an opportunity of gaining insight into the methods, measures, subjects and approaches employed by other research worker. This in turn will lead to significant improvement of our research design. A careful consideration of the chapter entitled recommendations for further research in various research studies guide us regarding the suitability of a problem and assists us in delimiting our research problems. The review of related literature is the basis of most research projects in Physical sciences, Natural sciences, Social sciences and Humanities.

Objectives of the review of related literature

According to Singh and Bajpai (2007)\(^5\), following are the objectives of the review of related literature.

1. It provides theories, ideas, explanation or hypothesis which may prove useful in the formulation of a new problem.

2. It indicates whether the evidence already available solves the problem adequately without requiring further investigation. It avoids the replication.

3. It provides the source for hypothesis.
4. It suggests method, procedure, source of the data and statistical techniques appropriate to the solution of the problem.

5. It locates comparative data and findings which are useful in the interpretation and discussion of the result.

6. It helps in the developing experts and general scholarship of the investigator in the area investigated.

7. It contributes towards the accurate knowledge of the evidence of the literature in one’s area of activity.

8. The main purpose of this review is to put the hypothesis to be examined in the research report into its proper context. And second purpose is to provide readers with guidelines regarding where they can look to find more information and to establish limitation of the previous studies.

Koul (2009)\textsuperscript{6} stated that review of the related literature, besides, allowing the researcher to acquaint himself with current knowledge in the field or area in which he is going to conduct his research, serves the following specific purposes:

1. The review of related literature enables the researcher to define the limits of his field. It helps the researcher to delimit and define his problem. The knowledge of related literature, brings the researcher up-to-date on the work which others have done and thus to state the objectives clearly and concisely.

2. By reviewing the related literature the researcher can avoid unfruitful and useless problem areas. He can select those areas in which positive findings are very likely to result and his endeavors would be likely to add to the knowledge in a meaningful way.

3. Through the review of related literature, the researcher can avoid unintentional duplication of well established findings. It is no use to replicate a study when the stability and validity of its results have been clearly established.

4. The review of related literature gives the researcher an understanding of the research methodology which refers to the way the study is to be conducted. It
helps the researcher to know about the tools and instruments which proved to be useful and promising in the previous studies. The advantage of the related literature is also to provide insight into the statistical methods through which validity of results is to be established.

5. The final and important specific reason for reviewing the related literature is to know about the recommendations of previous researchers listed in their studies for further research.

In the significance of reviewing the literature mentioned above, an effort was made by the investigator to review the related researches. The researcher has tried to search related studies from different sources. Researcher has also tried to get original studies in detail.

In this process, surveys of educational research were of immense help but other sources such as journals, books, dissertations and theses were consulted at large to make acquainted with the present knowledge. In this study the investigator has reviewed the research done in the field of teacher effectiveness, media utilization and use of ICT in India and abroad.

The researcher explored the previous studies and collected the following researcher’s studies, which bear direct and indirect relevance to the present study. Therefore, in order to prepare a base for defining the problem precisely, making interpretation of data meaningful and making comparisons among similar studies, the investigator studied the related literature extensively.

The present chapter provides a thumbnail account of such studies, their ambit and outcomes.

A detailed account of review of related literature is presented in a chronological order under the following headings:

- Studies related to Media Utilization
- Studies related to Use of ICT
- Studies related to Teacher Effectiveness
3.3 STUDIES RELATED TO MEDIA UTILIZATION

Study 1:

A SURVEY OF THE ELECTRONIC MEDIA UTILISATION BY DISTANCE LEARNERS OF INDIAN OPEN UNIVERSITIES (Kumar & Sharma, 2006)

Objectives of the study:

Objectives of the study were to prepare the demographic profile of the distance learners, to assess the media accessibility of the learners, to identify the media use pattern of the distance learners, to obtain the student’s opinion on helpfulness of electronic media in understanding the subject matter and to analyze the feedback of the learners on practical issues related with use of electronic media in their academic activities including the factors that impede its use.

Sample of the study:

Sample consisted of 1800 students enrolled in various programmes of open universities of India.

Tool used in the study:

Student questionnaire was developed by the investigators for administering to the learners enrolled through distance education to obtain information related to objectives of the study.

Research Design:

A descriptive sample survey method was adopted for present study. The investigator calculated frequency and percentage for analyzing and interpretation of the data collected for the study. Help Index was defined to compare various media on the scale of helpfulness in understanding the subject Agreement Index of each activity was defined to compare the agreement of learners on various practical aspects of use of electronic media.
Major findings:

1. The analysis on feedback of learners indicated that distance education has been accepted by nearly all segments of society; ranging from eighteen-year-old student to a service man, who is nearing his retirement, 10th class pass learners to Ph.D. holders.

2. On the question of usefulness of various media in their learning activities, the learners envisaged supplementary role of electronic media, by grading the usefulness of all media (under study) except computer and Internet, as poor. In their opinion, help extended by computer and Internet was also considered as average. This indicates the student’s preference for computer and Internet.

3. Trend in media use by the learners did not present a very encouraging state of affair, as except telephone; none of the media were used by more than half the population.

4. The agreement index of the learners also reveals that most of the learners were not satisfied with the time allotted for media use and many learners were also not sure of the availability of necessary infrastructures at the study centers.

Study 2:

PATTERN OF USAGE OF VARIOUS ELECTRONIC MEDIA BY HIGHER EDUCATION STUDENTS (Arulchelvan & Viswanathan, 2006)

Objectives of the study:

The objective of the study included identifying the variations among the students of different demographic characteristics in terms of their media usage.

Sample of the study:

The universe or population of the study consisted of the entire set of student population in the graduate level in the state of Tamilnadu. A total of 14,000 respondents (2%) of the universe have been covered as the sample. The sample for
this study was selected from among the UG students of regular distance mode and urban rural students. Samples were drawn from different type of colleges like Arts, Science, Commerce, Engineering and Technology, Medicine and Agriculture. Totally 14 places were selected for this study including seven major cities and seven small towns. Over 1,000 questionnaires were collected from each place.

**Tool used in the study:**

Data were gathered using a self-administered questionnaire prepared specially for this purpose.

**Research Design:**

This study has adopted the survey method and descriptive research design. The chi-square test, simple percentage, Friedman’s two-way ANOVA and cross-tabulation were used for the analysis of this study.

**Major findings:**

1. While data on viewing time suggested that 65.36% watch TV every day a week, 35.71% of those who listen to radio do it everyday a week, only 19.36% of those using internet, do it everyday a week.

2. Majority of the respondents tend to be frequent listeners of radio and TV, while TV has more regular audience than radio.

3. A vast majority of respondents possess radio sets as well as TV sets. It was found that 37.06% listen to radio for education, 35.08% watch TV for education, while 40% use internet always to gather information about study.

4. Data indicate that home is the place where most of the respondents have been listening to radio, while vast majorities of 86.64% of the students watch TV at home; only 22.56% stated that they browse the internet at home.

5. 41.28% stated that they browse the internet at institutions, whereas only a negligible segment of students use radio and TV at their institutions.
6. Among the less interactive media, 61.62% answered that they need interactive programs in radio, while only 21.86% have answered that interactive programs are needed for educational purpose on TV programs.

7. Majority 66.90% use Internet, which, in comparison to the fact that very few owned computers, is a significant achievement of media planners in higher education.

Study 3:

THE SURVEY OF THE AVAILABILITY AND UTILIZATION OF THE NON-PROJECTED MEDIA RESOURCE FOR THE TEACHING OF GEOGRAPHY IN THE SECONDARY SCHOOLS IN UASIN-GISHU DISTRICT OF KENYA (Kafwa, 2014)

Objectives of the study:

The study examines the availability and adequacy of media, frequency of use, factors influencing choice and use, and problems encountered by teachers in their attempt to utilize the non-projected media.

Sample of the study:

Data for the study was collected from a total population of 120 Geography teachers from both Private and Public Schools.

Tool used in the study:

The research instruments used were a questionnaire and an observation check list.

Research Design:

Survey method was used in this study. Data from the field was analyzed manually using descriptive statistics (percentages, frequencies, mode, and mean).
Major findings:

1. The findings showed that non-projected media are available in Secondary schools in low quantities thus and are in a poor state. These media were found to be extensively used in teaching Geography. However, more teachers from public schools use these media than their counterparts in private schools.

2. Geography teachers were found to consider the following factors in choosing the media: subject content, teaching methods, and characteristics of students. Accompanied with these factors, teachers also consider the following reasons in using the media: availability of the media, competence in handling the media, and familiarity with the media. However teachers were found to experience several problems in their attempt to use the non-projected media.

3. The main problems are: lack of media in schools, inadequate time to prepare and use the media, lack of skills to prepare and use the media, and lack of support from school administration.

Study 4:

COMPARATIVE EFFECTIVENESS OF THE PROJECTED AND NON-PROJECTED TEACHING AIDS AT THE SECONDARY LEVEL (Hussain, Sultana, Ziauddin, Nasir & Abdur-Rehman, 2009)\textsuperscript{10}

Objectives of the study:

Objectives of the study were to find out - the academic achievement of the students who are taught through projected teaching aids and through non-projected teaching aids and difference between the academic achievements of the students taught through projected and those taught through non-projected teaching aids.

Sample of the study:

All the secondary school students of the high and higher secondary schools were included in the study. One school i.e. University Wensam College was randomly
selected. A sample of 100 students was selected from the University Wensam College.

**Tool used in the study:**

A teacher made pre-test to divide the students into two equal groups on the achievement and a teacher made post-test to check and compare the achievement of control and experimental group after the experiment were used as an instrument for the research purpose.

**Research Design:**

Experimental research method was used in this study. Data was analyzed through the use of mean, standard deviation and t-statistics.

**Major findings:**

1. Projected teaching aids are more effective than the non-projected teaching aids in the subject of Physics at secondary school level.

2. The students using the projected aids in teaching show better result in academic achievement than the non-projected teaching aids.

3. There is a significant difference in the academic achievement of projected and non-projected teaching aids in the subject of Physics at 9th class level because calculated value of t i.e. 1.96 is less than the tabulated value 5.741 at 0.05 level of significant.

4. The null hypothesis that there is no significant difference in the mean score of the students who are taught through projected and through non-projected teaching aids is hereby rejected.
Study 5:

EFFECTIVENESS OF LECTURE, DEMONSTRATION & POWER POINT PRESENTATION METHODS IN CONTEXT WITH THE UNIT CHEMICAL BOND FROM SCIENCE AND TECHNOLOGY (Dave, 2013)\textsuperscript{11}

Objectives of the study:

The objectives of the present study were to prepare the PowerPoint presentation for the science lesson of Std. 9th Rasayanik Bhandhan (Chemical Bond), to prepare unit test from the science of lesson of Std. 9th Rasayanik Bandhan and to check the effectiveness of the method: Lecture, Demonstration and PowerPoint presentation with reference to achievement test of Std. 9th science lesson: Rasayanik Bandhan.

Sample of the study:

In the present study Smt. S.K. Pathak school, Rajkot was selected as sample. There were 120 students in three classes of the school. Three groups were selected randomly.

Tool used in the study:

The main objective of the study is to check the effectiveness of the different educational methods. For this a unit test of 50 marks of unit 'Rasayanik Bhandhan' was made. This test will be of objective type containing 50 questions of 1 mark. To answer these questions, 60 minutes had been given.

Research Design:

To know the effectiveness of teaching method, the researcher has used the experimental method. Mean, Standard deviation, Kurtosis, Skewness and ANOVA was used for data analysis.
Major findings:

1. In the present study, for unit 'Rasayanik Bandhan' for science and technology, PowerPoint presentation method was effective.

2. For unit 'Rasayanik Bandhan' of science and technology, the effectiveness of lecture method and demonstration was equal.

3. As far as education is concerned, the effectiveness of demonstration and PowerPoint presentation was equal for the unit of science and technology of Std. 9th.

Study 6:

THE EFFECTIVENESS OF AUDIO-VISUAL FOR THE UNIT: “CURRENT AFFAIRS OF WORLD HISTORY” IN SOCIAL SCIENCE (Bhalara, 2013)\textsuperscript{12}

Objectives of the study:

Objectives of the study were to frame and test the effectiveness of audio-visual presentation the educational programme, for the unit “Current affairs of the world history” in the subject social science of std. 9\textsuperscript{th}.

Sample of the study:

In the present study Pathak school of Rajkot city was selected as sample. Total sample was 86 students. They were divided into two groups with simple random sampling method.

Tool used in the study:

To check the effectiveness of audio-visual presentation the educational programme, questionnaire with 35 multiple choice questions based on unit was framed.

Research Design:

To know the effectiveness of audio-visual presentation, the researcher has used the experimental method. Mean, Standard deviation, and t-test was used for data analysis.
Major findings:

The score of the experimental group was higher than the score of the controlled group with audio-visual presentation for the unit “Current affairs of the world History.” Thus in the social science subject, the audio-visual presentation is very useful to enhance the educational achievement.

3.4 STUDIES RELATED TO USE OF ICT

Study 7:

INTEGRATION OF ICT IN SCHOOL EDUCATION: AN ANALYTICAL STUDY IN BURDWAN DISTRICT IN WEST BENGAL, INDIA (Paul & Mondal, 2012)

Objectives of the study:

Objectives formulated for present study were to find out the impact of ICTs in school education, to compare the views of teachers educators regarding effect of ICT in improving quality of education, to examine any disparity exists among male or female students about the applicability of ICT in school and to suggest the best possible outcome regarding effectiveness of ICT in school education.

Sample of the study:

A sample size of 100 respondents from 65 secondary schools in West Bengal during 2009-10 is drawn in order to throw some light on the impact of ICT on quality of education (QE) in West Bengal.

Tool used in the study:

A well structured questionnaire has been used to collect primary data.

Research Design:

Statistical techniques used for the study are: mean, standard deviation, t-value, $\chi^2$, Kendall’s Coefficient of Concordance’ analysis and multiple regression equation.
Major findings:

1. The result reveals that there has been significant positive influence on quality of education through ICT by taking into consideration the factors – ‘relative advantage’, ‘compatibility’, ‘demonstrability’ and ‘image’ with some variation among the estimated ‘t’ values. While in case of factors like ‘complexity’, and ‘avoidance’ the estimated values of coefficients are negative. This means that these two factors outweigh the positive impact of ICT on quality of education in certain extent.

2. Calculated value of the factors like demonstrability and image has been found to be satisfactory. This is because the application of ICT has been properly addressed in these schools which dominate the complexity and avoidance factors dampening quality of education associated with ICT.

3. Finally, the ‘Concordance’ model proves significant association between ICT and quality of education. Again there is no variation regarding the effect of ICT on quality of education in terms of gender.

Study 8:

A SURVEY ON ICT USAGE AND THE PERCEPTIONS OF SOCIAL STUDIES TEACHERS IN TURKEY (Gulbahar & Guven, 2008)¹⁴

Objectives of the study:

The purpose of this study was to explore ICT usage, factors that support the use, barriers that hinder the use, and self-perceptions of efficacy and level of expertise, as well as the relationship of variables by looking at the social studies teachers in selected primary schools in Turkey.

Sample of the study:

Convenient sampling was used to reach the participants in this study. The participants for this study were 326 social studies teachers from fourth and fifth grade of various primary schools, who voluntarily participated in the study.
**Tool used in the study:**

The “Information and Communication Technology Usage Survey” developed by the researchers was used to collect data for this research study.

**Research Design:**

Survey method was used in this study. Statistical techniques used for the study are: Simple percentage, Mean, Standard deviation and Correlational analysis.

**Major findings:**

1. Social studies teachers mostly preferred board, printed materials, overhead projectors, television/video, radio cassette recorder, multimedia computer and slide projector for instructional aims.

2. Teachers most frequently use computers for accessing information on the Internet, communicating electronically, doing word processing and making slide presentations.

3. Only a few teachers reported using ICT to help them learn school material, and less than one-fifth regularly used educational software.

4. Printed materials (99.4%), Internet resources (83.4%), self-study (80.7%) and participating in seminars and workshops (79.1%) were the most favoured knowledge resources for professional development.

5. In addition to longer practical work, teachers needed more resource materials such as supplementary workbooks and a resource center where they could find teaching materials and ideas.

6. The majority of teachers acknowledged the importance of using ICT in their own teaching.
7. The self-expressed feeling of social studies teachers, that they lacked the “technical knowledge to prepare materials based on technology”, showed the importance of in-service training and paralleled the result on instructional tools and materials usage.

8. Moreover, social studies teachers appear to be unaware of possible technologies that could be helpful in the teaching processes and the majority does not use ICT.

9. The results indicated that there is no significant relationship between teachers’ awareness and their self-rated expertise level. However, a strong relationship between teachers’ self-perception of efficacy and teachers’ self-rated expertise has been identified.

10. It has been found that social studies teachers use computer technology, especially application software or tool applications. This shows a trend towards the use of application software in classroom teaching and learning.

11. Results indicated that most of the social studies teachers are computer-illiterate and they need in-service training.

12. The findings show that social studies teachers have high awareness but low expertise level which also indicated the lack of necessary in-service training opportunities.

13. A significant relationship has been found between the proximity of computers and the number of access resources (both at home and school) on the one hand, and, on the other, teachers’ attitudes toward computers.

14. The results showed that teachers who have computer at home have a higher level of expertise than the others.
Study 9:

TOWARDS IMPROVING THE QUALITY OF EDUCATION BY INTEGRATING ICT IN TEACHER EDUCATION (Swamy, 2012)\(^\text{15}\)

Objectives of the study:

The objective of the study is to find out the status of ICT use in the teacher education institutions. Specifically, it identified how the institutions are using ICT for the students to increase their efficiency to build the digital society, which helps in producing ICT expert teachers.

Sample of the study:

100 students from 5 selected colleges from natural science and social science branches of Thiruvananthapuram district in Kerala were selected as sample for the study.

Tool used in the study:

Structured questionnaire were formulated in order to identify different uses of ICT and the efficiency of using the ICT.

Research Design:

Survey method was used in this study. Simple percentage was calculated for analyzing the collected data.

Major findings:

1. The study showed that the respondents have gained only minimum ICT skills from institutions. There are no programs to build up the capacity of the students as visualized by NCTE. Efforts for this track are adhoc.

2. The use of ICT tools in seminars and teaching aids is restricted to the use of LCD/PPT and slide presentations. Their knowledge for learning is gained
from outside the institution. The colleges provided neither training in ICT nor provisions for Internet browsing.

3. For the pedagogical purposes, students are developing ICT skills by themselves. Students need more structured support of ICT development from their educational institutions.

4. The study found that teacher education institutions are no longer strictly utilizing ICT.

5. Measures are to be taken to improve the quality and support to students, opening up new avenues for professional development of our future teachers.

**Study 10:**

ICT USAGE IN HIGHER EDUCATION: A CASE STUDY ON PRESERVICE TEACHERS AND INSTRUCTORS (Gulbahar, 2008)

**Objectives of the study:**

Main purpose of this study was to examine factors that contribute to pre-service teachers’ utilization of technology and suggest recommendations regarding to the effective utilization of technology.

**Sample of the study:**

All the accessible members of Faculty of Education, who were voluntarily participated, form the participants of this study. Accessible number of participants was 6 Administrators, 25 Instructors and 556 students.

**Tool used in the study:**

Researcher developed two questionnaire forms; one for academic staff and the other for preservice teachers have been used in order to obtain data.
Research Design:

Survey method was used in this study. Descriptive statistical techniques such as frequency (f), percent (%) and mean (\( \bar{X} \)) were used for analyzing data.

Major findings:

1. The results show that in general, both the preservice teachers and instructors are in favour of using technology in and out-of-class activities. This positive attitude is an important indicator of willingness and first step in effective integration.

2. Almost all of the academic staff was willing and ready to participate in any course, seminar, and workshop about technology usage, which reveals the need for professional development.

3. They also pointed out the lack of electronic classrooms. These are very common results of technology integration studies.

4. Preservice teachers stated that their most favoured technology as “Computer Aided Instruction” and most favoured software as electronic presentation.

5. The instructors also paid special attention to the inadequacy of the quantity and low quality of computer literacy courses provided with students in faculty.

Study 11:

TEACHERS’ ATTITUDE TOWARDS INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) (Singh, 2012)\(^7\)

Objectives of the study:

The study was taken up with objectives to find out the difference between male and female teacher educators towards their attitudes of teaching ICT, to find out the difference between senior and junior teacher educators towards their attitudes of teaching ICT and to find out the difference between science and arts teacher educators towards their attitudes of teaching ICT.
Sample of the study:

Teachers of the seven teachers' training colleges which are affiliated under Manipur University constituted the whole population of the present study. Out of these seven colleges, only five colleges have been selected as the sample of the study. From the whole population, only fifty teachers (25 male and 25 female) have been selected as the teacher sample of the present study by employing the stratified random sampling technique.

Tool used in the study:

Information and Communication Technology Teaching Attitude Scale (ICTTAS) constructed by the self investigator has been used as a tool for the collection of data from different teachers' training colleges which are affiliated under Manipur University, Manipur.

Research Design:

Survey method was used in this study. Descriptive statistical techniques such as Mean, Standard deviation and t-test were used for analyzing data.

Major findings:

1. The present study is concluded that male and female as well as science and arts teachers' training college teachers have significant difference in their attitudes towards Information and Communication Technology (ICT).

2. Whereas this attitude of senior teachers has not been found significant difference between the senior and junior teachers' training college teachers.

3. It also has been found that the knowledge of ICT will be highly helpful in the development of educational institutions.
Study 12:

A STUDY ON SCIENCE TEACHERS' ATTITUDES TOWARD INFORMATION AND COMMUNICATION TECHNOLOGIES IN EDUCATION (Cavas B., Cavas P., Karaoglan & Kisla, 2009)\textsuperscript{18}

Objectives of the study:

Main aim of this study was to find out Turkish primary science teachers’ attitudes toward ICT in education and then explore the relationship between teachers’ attitudes and other variables which are related to teachers’ personal characteristics: gender, age, computer ownership at home and computer experience.

Sample of the study:

The target population for this study was Turkish science teachers enrolled in primary schools during the school year 2004-2005. Stratified sampling was used to obtain data from 1071 science teachers of primary. Three cities from each of seven geographic region of Turkey were selected. The questionnaires were administered to 70 science teachers in each city, thus giving a total sample of 1470 primary science teachers for this study. A total of 1071 questionnaires were returned to be used in data analysis.

Tool used in the study:

The survey instrument was developed by the researchers after an extensive review of literature and scales used in different educational backgrounds guided by the theoretical base of the study.

Research Design:

Survey method was used in this study. Descriptive statistics were used to describe and summarize the properties of the mass of data collected from the respondents. Parametric statistics like ANOVA and t-test pair-wise comparison were conducted to analyze any differences between teachers’ attitudes and other dependent variables.
**Major findings:**

1. The results of the study showed that almost half of the Turkish science teachers use computers in their courses and they had high levels of computer access, especially in their school and at their homes.

2. Almost all Turkish science teachers have showed positive attitudes toward ICT in education.

3. The science teachers reported that they (almost half of them) had enough opportunity to attend in-service training related to use of ICT in classroom.

4. The findings of the study revealed no significant differences between ICT attitudes of Turkish science teachers in terms of gender. This would suggest that male and female science teachers in Turkey have the same perception about the use of ICT in education.

5. Female teachers have been found to be more anxious and less confident computer users in most of the studies. In addition, male teachers have been found to have more prior experience with computers and to be much more likely to implement computer use in their classrooms than female teachers.

6. In the study, statistically significant difference was found between teachers’ age and attitudes. Young Turkish science teachers in the group 1 (age group: 20-35) have more positive attitudes and significantly differ than the teachers in other groups (36-49 / 50- +).
Study 13:

IN SERVICE TEACHER’S ATTITUDE TOWARDS THE USE OF ICT IN THE CLASSROOM (Sánchez, Marcos, González & Guanlina, 2012)19

Objectives of the study:

Study aims at assessing in-service teachers’ attitudes towards ICT inclusion in the curriculum, their use in the classroom and the difficulties that they observe in their implementation.

Sample of the study:

170 in-service teachers from kindergarten to high school participated in ICT training courses offered by the Centro Internacional de Tecnologías Avanzadas (CITA) during 2008/2009 and 2009/2010.

Tool used in the study:

For quantitative data, ad hoc survey was used. Qualitative data was gathered by interviewing 11 teachers about their major motivations and beliefs towards ICT.

Research Design:

A mixed-method approach was chosen for the present study: descriptive statistical analysis was done for the Likert type questions (i.e. frequency analysis, measures of central tendency and dispersion) and content analysis for the eleven semi-structured interviews. Furthermore, a quasi-experimental study with one non-randomized study group was conducted with 85 teachers using a pre-and post-test design with the purpose of searching for differences in-service teachers attitudes before and after training. Under this design, data were scrutinized under Factorial Analysis (ANOVA), Student's t test and Chi Square.
Major findings:

1. The study investigated the attitudes of in-service teachers from kindergarten to high school towards ICT and their use in class. Results suggest that participants had positive attitudes with regard to the use of ICT as teaching tools.

2. Qualitative data also reported respondents’ positive attitudes within the affective, cognitive and behavioural domains.

3. Quasi-experimental study revealed that the impact of traditional training on both attitudes and ICT use is very low (and not significant) which makes us understand that new training alternatives should be incorporated to Teacher Education programs.

Study 14:

TEACHERS ATTITUDES AND PERCEPTIONS ON THE USE OF ICT IN TEACHING AND LEARNING AS OBSERVED BY ICT CHAMPIONS (Ang’ondi, 2013)²⁰

Objectives of the study:

This study aims at assessing ICT champions’ views on the attitudes and perceptions of teachers during the training and mentoring period as the teachers attempt to implement the use of ICTs in their teaching.

Sample of the study:

The questionnaire was emailed to 20 ICT champions on the Google group’s forum. 10 men and 10 women randomly selected but representing all the counties.

Tool used in the study:

An email survey was used in collecting data. The online survey was used because of its ability to connect with low-incidence respondents spread over a large geographic area at one time. Interviews of the five ICT champions were also done during this
period. And another five teachers, non-champions from five different schools in one district were interviewed.

Research Design:

Survey method was used in this study. All the teachers sentiments presented were categorized into four themes that seemed to emerge from the data collected.

Major findings:

1. The findings reveal that although teachers were enthusiastic about ICT integration, there were several challenges that were still holding them back from fully utilizing the ICTs.

2. Issues such as inadequate infrastructure, lack of knowledge and skills on how to integrate ICTs, their own attitudes and beliefs and the curriculum, were challenges that the teachers seemed to point out as major impediments to the smooth integration of ICTs.

Study 15:

ATTITUDE OF TEACHERS AND STUDENTS TOWARDS USE OF INFORMATION AND COMMUNICATION TECHNOLOGY IN THE IMPLEMENTATION OF BIOLOGY CURRICULUM IN SELECTED SECONDARY SCHOOLS (Omollo, Indoshi & Ayere, 2013)21

Objectives of the study:

The specific objectives for this study were to establish teachers’ attitude towards ICT use, to find out students’ attitude towards ICT use and to compare the attitude of teachers and students across gender in the implementation of Biology curriculum in selected secondary schools in Rachuonyo South District, Kenya.

Sample of the study:

In this study, purposive sampling technique was used to select secondary schools which offer computer studies as a subject while saturated sampling technique was use
to select study participants which included: 1 DQASO, 4 principals, 8 Biology teachers, and 316 Form 4 Biology (type of biology syllabus) students from four secondary schools in Rachuonyo South District.

**Tool used in the study:**

The data collection instruments used for this study were: questionnaire, interview schedule and document analysis guide. There were two types of questionnaire: Student Questionnaire and Teacher Questionnaire, while interview schedule included principal and DQASO.

**Research Design:**

Descriptive survey was used to gather accurate information. Quantitative data were analyzed using descriptive statistics: frequency counts, percentages, means and standard deviations to analyze data obtained from questionnaires. Inferential statistics (t-test) was also used to test for any significant differences in attitudes of students and teachers across gender. Qualitative data yielded by research instruments were transcribed (arranged) into written texts by combining notes taken into a coherent discourse, and analyzed through generation of categories and themes related to research objectives.

**Major findings:**

1. Analysis of the study established that majority (68.038%) of students and all teachers (100%) had positive attitude towards ICT use in implementing Biology curriculum having in general, mean scores of 3.6110 and 3.9946 respectively.

2. In both teachers and students there were no statistically significant differences across gender towards ICT use in the implementation of Biology curriculum even though males had slightly more positive attitude toward ICT use than females. Thus it may be deduced that attitude towards ICT use is not gender related and both male and female students and teachers appear to be similarly motivated to use ICT in the implementation of Biology curriculum.
3.5 STUDIES RELATED TO TEACHER EFFECTIVENESS

Study 16:

A STUDY OF TEACHER EFFECTIVENESS IN RELATION TO SCHOOL ORGANIZATIONAL CLIMATE AND ADMINISTRATIVE BEHAVIOUR OF SCHOOL HEADS OF HIMACHAL PRADESH (Riti, 2010)\textsuperscript{22}

Objectives of the study:

The objectives of this research were to find out the teacher effectiveness of secondary school teachers in relation to school organizational climate and to the administrative behaviour of school heads and also to study the relation of administrative behaviour of school heads in relation to school organizational climate.

Sample of the study:

The sample for the study was 3 districts randomly selected out of 12 districts of Himachal Pradesh - Solan, Una and Bilaspur. 60 Government Secondary schools from these 3 districts were then selected again by applying random selection method. 18 schools from District Una, 25 schools from District Solan and 17 schools from District Bilaspur were taken for the study. These 60 schools consisted of 35 rural and 25 urban schools. From these schools, 60 school heads and 350 randomly selected teachers at secondary level were taken and administered the tools.

Tool used in the study:

There were 4 types of tools in this study - Teacher Effectiveness Scale by Umme Kulsum (2000), Numerical rating scale developed by the investigator, School Organizational Climate Description Questionnaire (SOCDQ) by M.L. Sharma (1978) and Administrative Behaviour Scale by Dr Haseen Taj (1998).

Research Design:

The researcher employed a survey research method. To study main and interaction effect of school organizational climate and administrative behaviour of school heads
on teacher effectiveness, analysis of variance was applied and to test the significance of difference between different groups, 't' test was applied.

**Major findings:**

1. Different types of school organizational climate existed in different schools. Controlled type of school organizational climate was the most prevalent in the schools.

2. Teacher effectiveness of teacher teaching in urban schools was found to be significantly higher than that of teachers teaching in rural schools.

3. No significant difference was found in the teacher effectiveness between male and female teachers.

4. The teacher effectiveness significantly differed in schools with different types of school organizational climate. The mean teacher effectiveness score was highest in case of open school organizational climate.

5. There was a significant difference in the administrative behaviour of school heads across different school organizational climate.

6. Administrative behaviour had a significant and positive effect on the teacher effectiveness.

**Study 17:**

**TEACHER EFFECTIVENESS OF SCHOOL TEACHERS IN RELATION TO THEIR JOB SATISFACTION, PERSONALITY AND MENTAL HEALTH (Goel, 2011)**

**Objectives of the study:**

The objectives of present study were to identify teacher effectiveness of school teachers in terms of gender and area. Study also attempted to find teacher effectiveness of school teachers having low and high job satisfaction, personality
dimensions and mental health and to ascertain the relationship among teacher effectiveness, job satisfaction, personality, and mental health.

Sample of the study:

Out of 1720 Senior Secondary schools, 2323 High, 2481 Middle and 13291 elementary schools in Punjab (as per record of 2008), 70 schools were selected from 3 districts. 22 out of 199 schools from Muktsar district, 27 out of 246 schools from Bathinda district and 21 out of 429 schools from Jalandhar district were selected. A sample of 600 teachers in the equal number in terms of gender was obtained randomly for the conduct of study.

Tool used in the study:

Four tools have been selected by researcher for collection of data - Teacher Effectiveness Scale by Umme Kulsum (2000), Job Satisfaction Scale by Meera Dixit (1993), Differential Personality Inventory by Ashish Kumar Singh and Arun Kumar Singh (2002) and Mental Health Check list constructed by Parmod Kumar (1992).

Research Design:

The study was conducted through descriptive method of research. The collected data was analyzed by applying mean, S.D., t-test and correlation.

Major findings:

The findings of the study revealed that

1. Majority of the teachers were found highly effective.
2. Nearly half of the teachers in the sample had high job satisfaction.
3. Majority of the teachers had high decisiveness, responsibility and heterosexuality personality.
4. Majority of the teachers had less emotional stability, masculinity, friendliness, ego-strength, curiosity, dominance and self-concept personality.
5. More than half of the teachers in the sample had low mental health.

6. Teacher effectiveness of female school teachers was significantly more as compared to male teachers.

7. Teacher effectiveness of urban school teachers was significantly more as compared to rural school teachers.

8. Teacher effectiveness of teachers having high job satisfaction was more as compared to teachers having low job satisfaction.

9. Teacher effectiveness of teachers having high decisiveness, responsibility, emotional stability, masculinity, friendliness, hetero sexuality, ego-strength and self-concept was more as compared to teachers having low decisiveness, responsibility, emotional stability, masculinity, friendliness, hetero sexuality, ego-strength and self-concept but teachers having low and high curiosity and dominance thus did not differ significantly in teacher effectiveness.

10. Teacher effectiveness of teachers having high mental health was more as compared to teachers having low mental health.

11. Teacher effectiveness, job satisfaction, personality dimensions and mental health were found positively correlated.

**Study 18:**

**TEACHER EFFECTIVENESS OF SECONDARY SCHOOL TEACHERS OF PUNJAB IN RELATION TO SCHOOL ORGANIZATIONAL CLIMATE (Sodhi, 2010)**

**Objectives of the study:**

The present study was undertaken with the objectives: To study teacher effectiveness among secondary school teachers of Punjab in relation to their school organizational climate, gender, location, teaching experience and stream (science, social science and languages).
Sample of the study:

The sampling for the study was made in two phases. In first phase three districts out of 17 i.e. Fatehgarh Sahib, Mansa and Ropar were selected randomly, having average, low and high literacy level respectively. In second phase 30 urban and 45 rural schools from these districts were selected on random basis. Thus, a total sample of 75 schools was drawn for the conduct of the study. The distribution of sample was based on four main personal variables namely gender, location, stream and teaching experience. Total 451 teachers working in these schools were administered.

Tool used in the study:

There were 4 types of tools in this study - Teacher Effectiveness Scale by Umme Kulsum (2000), School Organizational Climate Description Questionnaire (SOCDQ) by M.L. Sharma (1978), Teacher Attitude Inventory (TAI) by S.P. Ahluwalia and Teachers Job Satisfaction Questionnaire by Kumar and Mutha (1996).

Research Design:

Analysis of variance was used to study main and interaction effects of school organizational climate in combination with gender, location, teaching experience (less i.e. below 5 years, average i.e. 5-10 years, and more i.e. above 10 years) and stream on teacher effectiveness among secondary school teachers. The t-test was applied to test significance of mean difference between more effective and less effective teachers in their attitude towards teaching, job satisfaction and eight dimensions of school organizational climate description questionnaire, namely disengagement, alienation, spirit, intimacy, psycho-physical hindrance, controls, production-emphasis, humanized thrust.

Major findings:

It was concluded that

1. The secondary school teachers perceiving autonomous and familiar type of school organizational climate have exhibited significantly higher levels of
teacher effectiveness as compared to those perceiving school climate to be of closed type.

2. There were no significant gender differences in teacher effectiveness of secondary school teachers.

3. There were no significant mean differences in teacher effectiveness of rural and urban secondary school teachers.

4. There were significant mean differences in teacher effectiveness of secondary school teachers teaching in science, social studies and language streams.

5. There were no significant mean differences in teacher effectiveness of secondary school teachers varying in their teaching experience.

6. There was significant interaction effect of school organizational climate with gender, location and streams on teacher effectiveness of secondary school teachers.

7. There was significant interaction effect of gender, location and stream on teacher effectiveness of secondary school teachers.

8. Less effective secondary school teachers were significantly higher on disengagement and alienation dimensions of group behaviour characteristics and psychophysical hindrance and control dimensions of leadership behaviour characteristics.

9. More effective secondary school teachers were significantly higher on spirit and intimacy dimensions of group behaviour characteristics and production-emphasis and humanized thrust dimensions of leadership behaviour characteristics.

10. Significant mean differences of job satisfaction between more effective and less effective groups indicate that more effective teachers have a higher level of job satisfaction as compared to less effective teachers.
11. The analysed data depicts that teacher effectiveness was highly and positively related to teaching attitude. It also shows that more effective secondary school teachers have significantly more healthy and favourable attitude towards teaching than less effective teachers. It can also be concluded that teaching attitude is the significant determinant of teacher effectiveness.

**Study 19:**

EVALUATING THE TEACHER EFFECTIVENESS OF SECONDARY AND HIGHER SECONDARY SCHOOL TEACHERS (Pachaiyappan & Ushalaya, 2014)

**Objectives of the study:**

Objectives of the study were to find out the difference in teacher effectiveness of male and female school teachers, rural and urban school teachers, secondary and higher secondary school teachers. Study also attempted to find out the difference in teacher effectiveness of school teachers with respect to - arts and science streams, their teaching experience and type of management.

**Sample of the study:**

Random sampling technique has been used for selecting the sample. The investigator randomly selected 130 secondary and higher secondary school teachers in and around chennai and Tiruvannamalai Districts of Tamilnadu.

**Tool used in the study:**

Teacher Effectiveness Scale (2000) developed and standardized by Umme Kulsum, was used to collect the data.

**Research Design:**

Survey method of research has been used in the present study. For analyzing the data mean, standard deviation, ‘t’-test, and one way ANOVA have been computed.
Major findings:

1. The male and female school teachers do not differ significantly in their teacher effectiveness.

2. The urban school teachers were more effective in their teaching than compared to rural teachers.

3. The higher secondary school teachers were more effective in their teaching than compared to secondary school teachers.

4. The science teachers were more effective in their teaching than compared to arts teachers.

5. It was found that there was a significant difference in teacher effectiveness among the school teachers with respect to teaching experience.

6. The study reveals that there was a significant difference in teacher effectiveness among the school teachers with respect to type of school management.

Study 20:

EFFECTIVENESS OF SECONDARY SCHOOL TEACHERS IN RELATION TO THEIR GENDER, AGE, EXPERIENCE AND QUALIFICATION (Roy, 2014)²⁶

Objectives of the study:

Objectives that the present study attempted to achieve were to find out the level of teachers effectiveness among secondary school teachers in terms of teaching-learning process. Study also tried to find out if there is any difference between the mean score of teachers effectiveness of secondary school teachers with respect to their – Gender, Age, Experience and Qualification.
Sample of the study:

All the teachers in different secondary schools of Tinsukia District, Assam constitute the population of this study. A sample consisting of 250 teachers belonging to different communities was taken from the 20 government secondary schools spreaded in and around the Tinsukia district of Assam, The schools were selected through random sampling method and teachers were selected through incidental or purposive sampling technique.

Tool used in the study:

Teacher effectiveness scale developed by Dr. Shallen Puri and Prof. S.V. Gakhar published by the National Psychological Corporation was adopted by the Investigator for collecting data required for the present study.

Research Design:

Simple survey method was used in this study. The investigator used the statistical technique like percentage, mean, standard division (SD) and critical ratio (CR) etc. for analyzing and interpretation of the data collected for the study.

Major findings:

The study revealed that

1. Majority of the teachers both male and female has average level of effectiveness in their teaching learning process.

2. There is no significant difference in the effectiveness of secondary school teachers in terms of their gender, age, experience and qualification.
Study 21:

A STUDY OF TEACHING EFFECTIVENESS OF SECONDARY SCHOOL TEACHERS IN RELATION TO THEIR DEMOGRAPHIC CHARACTERISTICS (Tyagi, 2013)\textsuperscript{27}

**Objectives of the study:**

Objectives of the study were to study demographic characteristics of Secondary school teachers and demographic characteristics-wise perception of Secondary school teachers with references to their teaching effectiveness.

**Sample of the study:**

Population of the proposed study comprised of all secondary school teachers, in Ghaziabad District of U.P. Sample consisted of 100 secondary school teachers which were selected using stratified sampling technique.

**Tool used in the study:**

The questionnaire which was used in the study is self constructed by the investigator.

**Research Design:**

Survey cum explorative descriptive research method was used under the proposed study. Mean, standard deviation and t-test were used for statistical analysis of the data.

**Major findings:**

1. The social background and School teaching experiences were influenced on the teaching effectiveness of secondary school teachers with reference to their Knowledge. Urban teachers have higher level than rural teachers. Secondary school teachers having School teaching experience above 3 years have higher level of perception than secondary school teachers having upto 3 years School teaching experience.
2. Marital status and teaching subjects were influenced on the teaching effectiveness of secondary school teachers with reference to their Organization. Unmarried teachers have higher level than married teachers. Arts and Commerce stream teachers have higher level of teaching effectiveness than science teachers with reference to their Organization.

3. Teaching subjects were influenced on the teaching effectiveness of secondary school teachers with reference to their Leading. Arts and Commerce stream teachers have higher level than science stream teachers with reference to their Leading.

4. Social background and qualification were influenced on the teaching effectiveness of secondary school teachers with reference to their Professionalism dimensions. Urban teachers have higher level than rural teachers. Post graduate teachers have higher level than graduate teachers with reference to their Professionalism.

5. Teaching subjects were influenced on the teaching effectiveness of secondary school teachers with reference to their Clarity and Presentation dimensions. Arts and Commerce stream teachers have higher level than science stream teachers.

6. Teaching subjects and school teaching experience were influenced on the teaching effectiveness of secondary school teachers with reference to their Enthusiasm dimensions. Arts and Commerce stream teachers have higher level than science stream teachers. Teachers having School teaching experience of above 3 years have higher level than secondary school teachers having upto 3 years School teaching experience with reference to their Enthusiasm.

3.6 **UNIQUENESS OF THE PRESENT STUDY**

After review of twenty one past researches and the documentary studies on literature related to Teacher effectiveness, Use of media and Use of ICT in education; and the comparison with the present research, it was found the uniqueness of the present study as follow:
1. It was found from the past studies that teacher effectiveness was investigated in relation to,

- School organizational climate and administrative behaviour of school heads
- Job satisfaction, personality and mental health
- Teacher effectiveness of male and female, rural and urban, secondary and higher secondary school teachers with respect to arts and science streams, teaching experience and type of management
- Their gender, age, experience and qualification of secondary school teachers.
- Their demographic characteristics - background and school teaching experiences, area, marital status, educational qualification, teaching subjects

In the present study, the investigator decided to evaluate teacher effectiveness of Primary school teachers of Bharuch district of Gujarat state with respect to gender (Male and Female), area (Rural and Urban) and school type (Government and Private).

No such research found for Primary school teachers for Gujarat state.

2. It was found from the past studies that Media utilization was investigated in different areas as follows:

- Electronic Media Utilization by Distance Learners of Indian Open Universities
- Pattern of usage of various electronic media by higher education students
- Utilization of the non-projected media resource for the teaching of geography in the secondary schools
- Comparative effectiveness of the projected and non-projected teaching aids at the secondary level
- Effectiveness of lecture, demonstration & power point presentation methods
In the present study, the present investigator decided to evaluate Media utilization of Primary school teachers of Bharuch district of Gujarat state with respect to gender (Male and Female), area (Rural and Urban) and school type (Government and Private).

No such research found for Primary school teachers for Gujarat state.

3. It was found from the past studies that Use of ICT was investigated in different areas as follows:

- Integration of ICT in secondary school education
- ICT usage and the perceptions of social studies teachers in primary schools
- Towards improving the quality of education by integrating ICT in teacher education in natural science and social science colleges
- ICT usage in higher education
- Male and female, Senior and junior & Science and arts Teachers' attitude towards information and communication technology (ICT) in teachers' training colleges
- Primary science teachers' attitudes toward information and communication technologies in education
- In service teacher’s attitude towards the use of ICT in the classroom
- Teachers attitudes and perceptions on the use of ICT in teaching and learning
- Attitude of teachers and students towards use of information and communication technology in the implementation of biology curriculum in selected secondary schools
In the present study, the present investigator decided to evaluate Use of ICT of Primary school teachers of Bharuch district of Gujarat state with respect to gender (Male and Female), area (Rural and Urban) and school type (Government and Private).

No such research found for Primary school teachers for Gujarat state.

4. In the present study, the present investigator decided to find out response analysis of different media items of Primary school teachers of Bharuch district of Gujarat state. For this purpose, Media utilization checklist was developed by researcher.

Different media items were divided into three categories namely Non Projected, Projected and Electronic & Mass media. 49 media items were included under three categories.

No such research found for Primary school teachers for Gujarat state.

5. It was found from the past researches that one or two of the factors from teacher effectiveness, media utilization and use of ICT were considered to be the topic of research. Therefore, this research is a unique research or only one research which investigated all the three factors.

6. It was found from the past researches that relationship between Teacher effectiveness and Attitude towards media utilization as well as relationship between Teacher effectiveness and Attitude towards use of ICT is not investigated. Therefore, this research is a unique research or only one research which investigated the relationship between Teacher effectiveness and Attitude towards media utilization as well as relationship between Teacher effectiveness and Attitude towards use of ICT.

7. It was found from the past studies that several tools were used for data collection. i.e. scale which measures teacher effectiveness developed by Umme Kulsum, Dr. Shallen Puri and Prof. S.V. Gakhar, Kumar and Mutha; scale
which measures attitude towards media utilization and scale which measures attitude towards use of ICT.

In the present study, the scale which measures teacher effectiveness, scale which measures attitude towards media utilization and scale which measures attitude towards use of ICT were constructed and validated by researcher which were used for the data collection. There were 32, 40 and 30 statements respectively in three scales which were differed from the past scale. Each statement has five levels of frequency i.e. “Completely agree”, “Agree”, “Undecided”, “Disagree” and “Completely disagree”.

All three tools and checklist used in the present study were constructed and standardized by the researcher.

For establishment of discrimination of the scales, the Phi-Coefficient correlation (Ø) and Chi-square ($\chi^2$) were applied. In order to establish the reliability of the scales, Split-half method, Flangan method and Cronbach’s alpha method were applied. Construct validity was used for the establishment of the validity of the scales. The Pearson Product Moment was calculated for the ‘$r_{xy}$’ value from the total scores and the score of each item.

All three tools and checklist were unique and cannot be seen in any research before.

8. It was found from this study that gender, area and school type of primary school teachers were considered to be the independent variables of the study. No such research found for primary school teachers. Therefore, this research is a unique research or only one research which investigated teacher effectiveness, attitude towards media utilization and attitude towards use of ICT using teacher’s gender, area and school type to be the independent variables.

9. Sample of the past research was the secondary school teachers, higher secondary school teachers, Distance Learners of Indian Open Universities, higher education students, In service teachers and Principals of primary schools
but the sample of the present research was the primary school teachers. This is also the uniqueness of the present study.

3.7 SUMMARY

The third chapter discussed about the review of the past studies related to Teacher effectiveness, media utilization and use of ICT.

There are 21 past studies in this chapter. First 9 studies are related to Teacher effectiveness. Next 8 studies are related to Media utilization and last 11 studies are related to use of ICT.

Some researchers studied about Teacher effectiveness in relation to different factors like school organizational climate and administrative behaviour of school heads; job satisfaction; personality and mental health; gender, age, experience and qualification; & background and school teaching experiences, area, marital status, educational qualification, teaching subjects.

Some researchers studied about Media utilization and effectiveness of media amongst Distance Learners of Indian Open Universities, higher education students and secondary schools.

Some researchers studied about use of ICT and attitude towards use of ICT in secondary school, social studies teachers in primary schools, higher education, male and female, senior and junior & science and arts Teachers, Primary science teachers, and Principals of primary school.

After theoretical orientation and review of the past studies related to media utilization, use of ICT and teacher effectiveness; plan and procedure was discussed in chapter 4.
REFERENCE


