CHAPTER-II
REVIEW OF RELATED LITERATURE

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2.0 Introduction

In the first chapter, researcher presented with an introduction to the problem, stated the problem and brought out the rationale of the problem. Further researcher formulated objectiveness of the study and also framed research questions that guided the research work. At the end, the researcher has mentioned limitation of the study.

In the present chapter, researcher has dealt with the review of related literature, research takes advantage of the knowledge which has accumulated in past as a result of constant human endeavour. It can never be undertaken in isolation of the work that has already been done on the problem which is directly or indirectly related to study proposed by a researcher. A careful review of research journal, books, dissertation, thesis and other sources of information on the problem to be investigated is one of the important steps in the planning of any research study. A review of related literature must precede any well planned research study. It helps us to know about the research gaps. Good, Barr and Scates (1972), pointed out that reviewing assist in avoiding the risk of duplication, identifying appropriate research methods, searching theories, explanation and hypothesis, valuable in formation of research design, locating data for making comparison and interpretation having a vision of totality of fixed to be investigator.

2.1 Purpose of the review

Review of the related literature, besides allowing the researcher to acquaint himself with current knowledge in the field or area in which he/she is going to conduct his research, serves the following specific purpose:

i. The review of related literature enables the researcher to define the limits of his field.

ii. By reviewing the related literature, the researcher can avoid unfruitful and useless problem area.

iii. By reviewing related literature, the researcher can avoid unintentional duplication of well established findings.

iv. 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.

v. The advantage of reviewing the related literature is to be providing insight into the statistical through which validity of results to be established.

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

Thus, the literature in any field forms the foundation upon which all future work must be build. If we fail to built this foundation of knowledge provided by the review of literature, our work is likely to be shallow and will often duplicate work, that have already been done better by someone else. The insight and knowledge gained by the review inevitably lead to a better designed project and greatly improve the chances of obtaining important and sufficient result.

In this chapter, the researcher attempts to review literature that has been generated elsewhere on *theme i.e., perception of* Teachers and Students about ICT. From the past many years, research on perception of Teachers Students about has been conducted. Despite the fact, there is a need for conducting micro level studies as it is an emerging and fast changing area.

The review of related literature is an essential backbone of research. A review chapter needs to be organized systematically. It can be follow different models depending upon the kind of study. In fact, the review of related literature and research work of a particular area has to be as broad based as possible and it may focus on the case issues of research, surrounded by peripheral concerns.

A good review work is one where the researcher is logically presenting a particular set of theory supported with empirical evidences which in turn is unfolding itself effortlessly. This may follow a narration style, an analytical style, a descriptive style or an interpretative style differently at different place of review.

2.3 Review Related to Teachers' Perception about ICT.

Anitha (2013) conducted a study on:"A Study on the perceptions of Teacher Educators towards the Application of Computers in Teaching Learning Process" with the objectives: To study the perceptions of teacher educators towards application of Computers in Teaching Learning Process. The research Method for the present study was descriptive survey method. The sample for the study consisted of 200 teachers selected form purposive technique. Keeping in view the nature of the problem, researcher has used tools; Questioner for Teacher Educators and The Lickert scale technique in Andhra Pradesh. The study revealed:

i. The teacher educators had shown positive response in the aspects of Presentation Facilities, Computer Awareness, Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards the Application of Computers in Teaching Learning Process.
ii. There is a significant correlation between all areas of Presentation Facilities, Computer Awareness, Computer Operational Skills, Internet Applications, Computer Based Evaluation and overall response towards the Application of Computers in Teaching Learning Process.
iii. There is a significant difference among teacher educators perceptions based on their district with respect to Presentation Facilities, Internet Applications, Computer Based Evaluation and overall response towards the Application of Computers inTeaching Learning Process.

Alharbi (2014) conducted a study on "A Study on the Use of ICT in Teaching in Secondary Schools in Kuwait." With the major objectives: (i) To explore how ICT affects teachers" confidence in the classroom; (ii) It will be considered to be the first study in Kuwait which takes into consideration the different aspects of the application of ICT in the educational system.
The research Method for the present study Mixed methods (quantitative and qualitative approaches). The sample for the study consisted 331 teachers (10 male and 10 female) selected form random technique. Keeping in view the nature of the problem, researcher has used tools;

following tools were developed by the researcher herself: Components of the teacher's questionnaire, Components of the student's questionnaire in Kuwait.

Results from the students" perspective, in terms of answering the third research question, offer a number of incites. These include:

i.   Students are very critical of their use of ICT, reflective of the teachers" application of ICT, notably in features the research would hope to be utilised more, such as spreadsheets or use of the internet to look up information.

ii.   Considerably more use of ICT, even in a learning context, is actively undertaken in the home, which still points to the prevailing gap between home use and application in the classroom.

iii. Students are positive, to an extent, about the application of ICT in the classroom and its impact on their learning. However, there are still considerable reservations about the use of ICT and a belief amongst students that it can negatively impact their learning.

iv.   Students are extremely confident about their ICT use, similar again to teachers, which highlights the potentially wasted opportunity that the lack of ICT provision highlights.

Enos (2013) conducted a study on "Teachers Attitudes and Perceptions on the Use of ICT in Teaching and Learning as Observed by ICT."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. The Champions are mentors, support personnel and are always on call whenever teachers need help or would like to showcase their achievements. This paper therefore consolidates their observations on what teachers view as difficulties and therefore impediments in their endeavour in integrating ICTs in their lessons. The study attempts to bring to the fore according to the teachers - what works and what doesn't, what motivates them in using or not using ICTs, what de motivates them and what needs to be improved if integration is to be done smoothly. It is expected that the findings of this paper will provide in-sights into training manuals for future training in ICT integration.

The research design for the present study Online survey methods (quantitative and qualitative approaches).The sample for the study consisted 20 teachers (10 male and 10 female)selected form random technique. Keeping in view the nature of the problem, researcher has used tools; the teacher's questionnaire.

The aim of this paper is to provide information on some of the attitudes and perceptions of teachers as seen by the ICT Champions. The Champions spend most their time mentoring teachers as they attempt to integrate ICTs in their teaching. It would seem therefore that the Champions have heard it all suffice it to say that the sentiments expressed in this paper are actually the real issues derailing successful integration of ICTs. It would however be early to say that ICT integration in Kenya has been successful or unsuccessful. Some of the issues raised by the teachers such as inadequate infrastructure, lack of knowledge and skills on how to integrate ICTs, their own attitudes and beliefs and the curriculum, as reported by the ICT Champions are quite simple but indeed serious and need to be addressed if this noble project is to be fully realized. It is not the amount of dollars that the government has spent on the state of art equipment that matter, but the right attitudes and positive perceptions the teachers have in using the ICTs meaningfully. Splendid equipment without the right attitude is meaningless. Therefore the government needs to pay more attention on intensive training for both teachers and school administrators. Funds need to be pumped into training so that the right attitudes can be

developed by both teachers and administrators. The new enhanced ICT curriculum should thus be able to provide a paradigm shift from exam based teaching to provision of skills in managing ICT classes, and the knowledge of integrating ICTs with-out reliance to the curriculum. These indeed are facets that proper ICT training should impart in teachers.

Mwalongo (2011) conducted a study on "Teachers' perceptions about ICT for teaching, professional development, administration and personal use". The study has the following potential benefits. In the first place, it informs teachers' readiness to use ICT. Second, teachers' experiences of using ICT shade light on proper integration of ICT in teaching and learning, and, in turn, these experiences help to determine teachers' professional development needs for proper ICT integration in the classrooms. Finally, it informs teacher preparation colleges and educational technology curriculum developers on the actual use of ICT in context. It is from such contextual uses of ICT, the concerned parties can improve their programmes.

The research design for the present study case study.The sample for the study consisted 74 teachers selected form purposive technique. Keeping in view the nature of the problem, researcher has used tools; survey questionnaire in Tanzania.

This research examined teachers' perceptions about ICT for teaching, administration, professional development and personal use. It was found that; first, the level of ICT competence was influenced by training. Second, the frequency of certain ICT resources was influenced by access. Third, ICT use for teaching included preparation of notes, teaching-learning materials, examinations and searching materials with students. Such uses helped to clarify difficult concepts, save time, make learners active, and simplify teachers' work. Fourth, administratively ICT was used for preparing reports, letters, timetables and schemes of work, and for students' registration. Fifth, personal use included communication with friends, entertainment, storage of resources and online application. Finally, professional development included self study and accessing materials for their assignments; this ultimately increased their confidence in their areas of specialisation. In general, teachers did not use ICT to radically change their pedagogical practices, instead, ICT in some cases were used to maintain teachers' traditional pedagogical practices.

Belwanshi (2010) conducted a study on: " Information and communication technology preparedness and practices of secondary school of Bhopal city: An investigation". The major objectives of the study were: (i) To study the existing ICT infrastructure of secondary schools; (ii) To study the ICT competencies of secondary school teacher's; and (iii) To study the current level of ICT integration practices in secondary school of Bhopal.

The research design for the present study descriptive survey.The sample for the study consisted 74 teachers (41 male and 33 female)selected form purposive technique. Keeping in view the nature of the problem, researcher has used tools; Questionnaire in Bhopal.

The study revealed that the private school have more average number of hardware and the government school. Both the school have some average number of application software. Both the school have some average number of colour scanner. The private school have more average number of infrastructure in computer lab then government school. The private school have more average number of human resource then government school. The government school have more average number of internet connection then private school. The both school have some average number of maintenance in school. The private school have more average number of computer in

administration then government school. The both school have some average level of ICT use among student. Both the school have some average number of ICT among teachers. Both the school have some average use of ICT in administration. The both school shows some average number of ICT use in library. Both the school use average number of ICT in training.

Jones (2012) conducted a study on: "Teacher perceptions and use of ICT in unfamiliar classroom situations". The study based on findings from two quite distinct research projects, this paper proposes that the reluctance of some teachers to make ICT an integral part of classroom teaching and learning is, at least partly, a consequence of several factors beyond their control. This reluctance occurs even though most teachers use one more forms of social networking as part of their out of classroom lifestyle. Two particular examples of teacher reluctance to consider and use ICT as an integral part of teaching are presented and discussed. Both examples arose from recent research projects conducted in Australian schools, and it is argued that the teacher behaviour observed could be largely overcome with appropriate professional development.

The research design for the present study case study.The sample for the study consisted secondary schoolteachers selected form purposive technique. Keeping in view the nature of the problem, researcher has used tools; Online teaching, online assessment project in Australia.

Teacher education as well as in professional development for practicing teachers. It appears that a majority of teachers did not experience learning with ICT when they were students, and they struggle to determine how best to teach with the technology. In addition there is a predominant focus on whole class teaching in teacher education courses, and this can cause problems in coping with small groups with special needs, including gifted and talented students, and students who are absent for extended periods from school.

Teachers at all levels of education from pre-school to tertiary will continue to be expected to make increased use of computers and other learning technologies. For beginning teachers the focus has shifted away from concerns about access to technology and the acquisition of skills towards the lack of example being shown by some experienced classroom teachers and teacher educators.

Padmavathi (2013) conducted a study on "A Survey of Secondary School Teachers' Perceptions, Competency and Use of Computers". The major research questions of the study were: (i) What are teachers' perceptions towards usefulness of computers in teaching-learning process ; (ii) What are teachers' competencies in using computers; and (iii) What are the purposes of use of computer by teachers; What is the extent of use of computers in teaching-learning processes?

The research design for the present study cross-sectional survey method. The sample for the study consisted 134 teachers selected form random sampling technique. Keeping in view the nature of the problem, researcher has used tools; Self-administered questionnaire in Pondicherry. And The data were analyzed using frequency distribution, percentages, mean, t-test and ANOVA.

This paper examines the teachers' perceptions, competency and use of computers by the in service teachers. Results of the present study suggest that majority of the teachers acknowledged

the importance of using computers in teaching. The mean perception of the teachers regarding the use of use of computers for teaching-learning was found to be favorable.

Results of the present study indicate that computers ownership has an effect on computer perception and computer use by the teachers. This was possible because increased home access allows flexibility of time to use computers and increased use may improve confidence in using computers which has led to increased use in the school.

From the above observations we can conclude that teachers' training, computer competency, and home access to computers are important for teachers to use computers effectively in the classroom.

Gebremedhin & Fenta (2015) conducted a study on "Assessing Teachers' Perception on Integrating ICT in Teaching- Learning Process: The Case of Adwa College". The major objectives of the study were: (i)To assess on which Hardware or software instructional tools are ACTE teachers familiar; (ii)To assess the information and support resources that ACTE teachers used/need; (iii)To assess the Perceptions of Teachers about use of ICT; and (iv)To assess the barriers to technology usage.

The research design for the present study Cross-sectional study.The sample for the study consisted 74 teachers selected form random sampling technique. Keeping in view the nature of the problem, researcher has used tools; Questionnaire in Ethiopia.

Majority of the teachers are unable to use hardware in teaching learning process due to mainly shortage of resources. This indicates that most teachers in the college are not integrating ICT in the course they teach.

Most of the teachers in the college agree that the contribution of the college on employing technical support units in ICT sector is good to satisfactory. Few teachers are responded that the contribution is very poor. The respondents' percentage on Very Good and poor is the same. This indicates that there is no equal support service by the technical support units in ICT sector. Adwa College is found as poor by most of the teachers in preparing ICT trainings. Few teachers agree the contribution of the college in preparing ICT trainings is very good. But the trainings are mainly on computer basics rather than on how to integrate ICT to each course.

Afamasaga-Wright (2008) conducted a study on "teacher perceptions of information and communication technologies in a secondary school in Samoa". The major research questions of the study were: (i) How do teachers in Samoa perceive the use of information and communications technology in education; and (ii)What are Samoan teachers' perceptions about how they manage factors that encourage or inhibit use of ICT to enhance student learning.

The research design for the present study phenomenological research (case-study approach).The sample for the study consisted 34 teachers selected form Purposive sampling technique. Keeping in view the nature of the problem, researcher has used tools; Interview schedule in Samoa.

The teachers who participated in the study had definite perceptions about the in-service training in ICT that had been carried out at various instances during the year. As can be seen in their comments in their previous chapter, some teachers perceived the training opportunities as useful, and some considered it irrelevant.

For teachers who perceived the training instances as useful, they explained that this was because they learnt new skills from the training, such as how to use the cut and paste functions in the Microsoft Office applications. Other teachers did not perceive it to be useful because it covered skills in which they were already proficient and they subsequently did not learn anything from the training. There were also comments made about the availability of the training to a few selected staff when it could have been made available to all. However, these comments may have been referring to training for computer coordinators from School Net schools, and four teachers were selected from Manuao College staff to attend this training.

Faggiano & Fasano (2004) conducted a study on "teachers' perceptions and usage of ICT: an issue for educators to deal with". The study presents an on-going research project, carried out at the University of Bari in conjunction with the University of Basilicata, aiming at investigating mathematics teachers' perceptions of technologies and of their usefulness in promoting a meaningful learning. Discussion suggested by the remarkable researches in this field and by the analysis of the experience led us to reflect on and to underline that an adequate preparation is essential for teachers to cope with technology-rich classrooms. In particular we believe that, as educators, we also have to deal with the need to lead teachers to develop a more suitable and effective awareness of the usage of Information and Communication Technology (ICT).

The research design for the present studycase-study approach.The sample for the study consisted 32 teachers (16 pre-service teachers and 16 in-service teachers)selected form Purposive sampling technique. Keeping in view the nature of the problem, researcher has used tools; Questionnaire for pre service teachers and in service teachers in University of Basilicata, Italy.

Findings from the first anonymous questionnaire revealed that, as supposed, in-service student teachers perceived that technology can bring support to their teaching only as much as it is a motivating tool enabling students understanding per se. Answers given by the pre-service teachers, as supposed, were instead a little bit more didactically oriented: some of them recognise that, if nothing else, the knowledge of the instrument functionality is probably not enough for a teacher to use it in an effective way in terms of construction of meanings by the students. None of the in-service teachers recognised that technology could bring a great support in creating new interesting and attractive learning environments. While, at least some interesting observation could be revealed among answers given by the pre-service teachers: some of them suggested the use of technological tools to allow students "collaboratively solve intriguing problems".

2.4   Review **Related to Student's Perception about ICT**

Mohammed (2015) conducted a study on "Students' Perception of the Effectiveness of ICT Usage in Improving Teaching and Learning Process in Nigeria: The Example of Federal College of Education, Kontagora, Niger state." major research questions of the study were: (i)   Which perceived ICT source(s) cost more in information retrieval in FCE Kontagora; (ii) What perceived purpose(s) are ICT skills used for as viewed by NCE students in Federal College of Education, Kontagora; (iii)   What perceived frequency of use is ICT use by FCE, Kontagora students; and (iv) What is the perceived usefulness of ICT to students of FCE, Kontagora.

The research design for the present study Descriptive survey.The sample for the study consisted 300 students (male 189 and female 111) selected form Purposive sampling technique. Keeping

in view the nature of the problem, researcher has used tools; Questionnaire on Students of FCE in Nigeria.

ICT has a major impact to facilitate and improve learning. In our study, the findings revealed the students' perception of the effectiveness of ICT usage in improving teaching and learning process at Federal College of Education, Kontagora. It revealed that Majority of the respondents makes use of ICT while searching for information and see the benefit though expensive than the use of textbooks. It's also revealed that the most preferred place for accessing information by the students were the internet sources.

Makura (2014) conducted a study on "Students' Perceptions of the Use of ICT in a Higher Education Teaching and Learning Context: The Case of a South African University". The major research questions of the study were: What is the nature and extent of ICT use by academics at an institution of higher learning as perceived by students.

The research design for the present study case study. The sample for the study consisted 44students selected form Purposive sampling technique. Keeping in view the nature of the problem, researcher has used tools; Questionnaire-interview guide (quest-view) in South Africa.

Central in this study was establishing the perceptions of university students regarding ICT availability and the pedagogical practices of academics relating to ICT usage in a South African university. Despite the challenges such as an underutilisation of other ICT's by lecturers, the students perceived ICT in their learning as useful. Students' perceptions in the use of ICT by themselves and their lecturers did not differ much. Results showed that students acknowledged the existence within the institution, of traditional ICT teaching gargets such as computers, projectors, microscopes and photocopying machines. A few respondents disclosed that their lecturers used 'computer databank', Power Point presentation, slides, Emails and Blackboard for teaching purposes. It was these gadgets that lecturers tended to use most during their teaching and learning activities. Respondents did not cite the Cell phone as a useful teaching aid since their lecturers did not use it. The library was perceived as part of ICT probably because it harboured ICT related gargets. The paper concluded that students yearned for more functional gargets and ICT venues within the institution. A compelling finding is the suggestion that lectures needed to work through student assistants in their quest to diversify ICT usage.

Fabunmi (2012) Conducted a study on "Undergraduate students' perception of the effectiveness of ICT use in improving teaching and learning in Ekiti State University, Ado-Ekiti, Nigeria". The research questions of the study were: (i) Which perceived ICT source(s) cost more in information retrieval in EKSU; (ii)What perceived purpose(s) are ICT skills used for as viewed by undergraduate students in Ekiti State University; (iii)What perceived frequency of use is ICT use by EKSU students; and (iv)What is the perceived usefulness of ICT to students of EKSU?

The research design for the present study survey research. The sample for the study consisted 200 students selected form Purposive sampling technique. Keeping in view the nature of the problem, researcher has used tools; Questionnaire for the Students in Ekiti State University, Nigeria.

With the results stated above, it can be concluded that students find the internet very useful and accessible. The implication is that ICT culture has come to stay globally and in all higher institutions. This is so because Information and Communication Technology is now the modern

means of improving teaching and learning especially in the university system. This study found that Ekiti State University students were generally favorable to ICT in an academic setting. The use of Information and Communication Technology (ICT), no doubt, is gaining momentum in Nigerian universities. Once students embrace the use of ICT, the teaching, learning and research activities in the universities will be made easier in the university community. ICT usage will facilitate development since there will be free flow of information.

McLachlan, Craig, & Coldwell (2010) conducted a study on "Student Perceptions of ICT: A Gendered Analysis". This paper investigates the attitudes and perceptions of secondary school students to ICT. During the last decade there have been decreasing numbers of students completing ICT subjects at secondary school in their senior years. The data was collected from university students enrolled in a range of first year units. Although the survey was undertaken by university students, the data collected related to their opinions whilst still at secondary school. This study explored two areas: firstly, the reasons why students had elected not to study ICT in their senior years at secondary school; and secondly, it describes a gender analysis of the attitudes and perceptions of students who had elected to study ICT. The analysis found that many students were not interested in studying senior ICT subjects, and for those that were, there were only a few differences between the gendered opinions to ICT.

The research design for the present study was cross-sectional research. The sample for the study consisted 681 students selected form Purposive sampling technique. Keeping in view the nature of the problem, researcher has used tools; Questionnaire for the Students in Deakin University, Australia.

This research paper explored students' opinions of ICT. In order to evaluate the data, the sample was divided into two, those who had elected to study ICT in their senior years of secondary school and those that had not. Those students who had not elected to study an ICT subject in their senior years of secondary school made their decision mainly based on their lack of interest in this area. There were however a few students who had not studied ICT at school who were now undertaking an ICT related degree. Further research into similar students may provide useful insights. The remainder of the paper concentrated on those students who had elected to study ICT during their final two years at secondary school. These students had a positive outlook of their experiences in their past ICT studies as well as a positive view of the industry. Despite this, students still hold the stereotypical perceptions that ICT involves an abundance of programming while sitting alone at a desk all day. Most of these students had commenced using a computer by their mid-teen years, and now used a computer daily.

Gaba & Sethy (2010) conducted a study on "Learners' Perception towards Information and Communication Technologies: A Case Study of Indira Gandhi National Open University". The major objectives of the study were: (i) Which of the ICTs are liked by the learners; (ii) How learners perceived that they will be benefited and in what sense; (iii) How far they are acquainted with all these ICTs before registering/admitted to their respective programmes through ODL mode; and (iv) Does it benefit them in true sense.

The research design for the present study was cross-sectional research. The sample for the study consisted 681 students selected form Purposive sampling technique. Keeping in view the nature of the problem, researcher has used tools; Questionnaire for the Students in IGNOU University, India.

The present study proves that recent steps taken by IGNOU to offer its various programmes through ICTs are in right direction. Some of them are: webcast programmes, online programmes, online learning, SMS Alert Services, etc. These will facilitate the availability of an integrated database to all the concerned. In addition to this, the university has already introduced online admission in most of the programmes of study. At present, the University is in the process of developing and testing the system of on-demand examination. The findings of the study indicate that the learners' awareness of online/ distance learning programmes and preference towards it. The policy-makers can reformulate the structure of ICTs by taking into account the positive and negative views on ICTs expressed by the learners in the present study.

Sang, Valcke, Braak, &Tondeur (2009) conducted a study on "Student teachers' thinking processes and ICT integration: Predictors of prospective teaching behaviors with educational technology". The most previous studies have centered on the influence of one single or two internal/external teacher thoughts. Therefore, little is known about direct and indirect impact of the variables and processes discussed above, when we focus on their complex interplay to explain classroom ICT integration. Earlier studies tend to ignore the systemic nature of ICT integration. The main objective of the present study is as a consequence to examine the effect of student teachers' gender and their thinking processes (constructivist teaching beliefs, teacher self efficacy, computer self-efficacy, attitudes toward computers in education) on prospective ICT integration in education. This guiding research question can be stated as follows: to what extent do student teachers' thinking processes (constructivist teaching beliefs, teaching efficacy, computer self-efficacy, attitudes toward computer in education) and/or gender influence their interests to integrate ICT into future teaching practices?

The research design for the present study was survey research. The sample for the study consisted 727 students selected form Purposive sampling technique. Keeping in view the nature of the problem, researcher has used tools; self administered Questionnaire for the Students in Belgium.

Our study has provided insight into the interrelated nature of student teachers' thinking processes and gender on the potential level of ICT integration in a Chinese context. The findings suggest that successful ICT integration is clearly related to the thinking processes of classroom teachers, such as teacher beliefs, teacher efficacies, and teacher attitudes toward ICT. The results underpin the importance of an integrated and concurrent understanding of teachers' thinking processes. The study also suggests that in order to improve the innovation of classroom activities, teachers' thinking processes should be challenged.

Gay, Mahon, Devonish, Alleyne & Alleyne (2006) conducted a study on "Perceptions of information and communication technology among undergraduate management students in Barbados". The major research questions of the study were: (i) What are the attitudes of undergraduate students to ICT; (ii)To what extent do students use ICT (iii) How does gender and age impact on the use of and attitudes to ICT; and (iv)What are the main reasons behind students' ICT usage?

The research design for the present study was descriptive survey design. The sample for the study consisted 166 students (39 male and 127 female) selected form Purposive sampling technique. Keeping in view the nature of the problem, researcher has used tools; self administered Questionnaire for the Students in West Indies, Barbados.

This study found that management students were generally favourable to ICT in an academic setting. In addition, males were more favourable towards the use of computers as replacements to other teaching activities. Older students were more favourable to computer use as a supplement to other teaching activities, compared to younger students.

Students had access to computers and the Internet off campus. There also seems to be widespread usage of various forms of information technology such as Internet, WebCT and email. No significant gender differences were found with the exception of the access to a computer off campus; Females to a larger degree than males (87%), reported that they had access to a computer off campus. With respect to age, no significant differences found. The main reasons for the use of the Internet offered included research and email.

2.5   Conclusion of the Review of Literature

From the review of research studies, in the past, to see the students' and teachers' perception about the use of ICT in teaching learning process, unfamiliar classroom situations, and their professional development, it can be seen that they reflect on the selected dimensions of the use of ICT. Further, none of the studies reviewed here attempted to explore the grassroots realities pertaining to the use of ICT in different curricular areas, e.g. curricular activities, Personal Social Qualities. The findings of these studies are, thus, quite generic revealing general interest or opinion of the subjects about ICT use in education. The studies reviewed here are mostly descriptive in nature demonstrating the perception of teachers and students about ICT use in a locality. Hence, the outcomes of the study cannot be applied to other locales. Thus, there is a need to conduct studies so as to reveal the perceptions of the stakeholders that reflect the local conditions pertaining to availability of ICT resources and their use in teaching learning process. These studies, however, provide a base for the present study, particularly with reference to selection of samples, variables and tools for the present study. Most of the researches that have been conducted in the field of teachers' and students' perception of ICT have shown the effect of ICT use in teaching learning process, particularly in curricular subjects. But the present study seeks to go few more steps ahead by trying to see their usefulness in other curricular subjects, curricular activities, and personal social qualities (PSQs). Thus, the study encompass the entire curriculum in view of massive use of ICT in education. This type of study need to be replicated not only in different locales but also at different points of time in the same locales keeping in view the fast change in the area.