

## **CHAPTER - V**

### **SUMMARY AND CONCLUSION**

#### **5.1 INTRODUCTION**

ICT is the buzzword today. The world has entered into an information and communication age. Whether it is a developed or developing country, north or south, east or west, ICT is omnipresent. It has helped in all walks of life in one-way or other. It is impossible to deny the importance of ICT in educational, cultural, agricultural, scientific and technical disciplines. Needs for information are increasing day by day and today every person is intending to be information oriented.

ICT can provide access to information sources, enable communications, create interacting learning environment and promote change in methods of teaching. Therefore the ways of learning have been transformed by ICT and are no more restricted to medium of print, bibliographies, and abstracts. The sources of knowledge for students and teachers have also broken out of all geographical boundaries. As such it becomes very important that those associated with teaching learning process should not only be familiarized with this technology but also realize and put into action its useful aspects. In this context, the investigator has taken a small piece of research work to study the ICT status of teachers in terms of their knowledge about ICT, use of ICT and need of ICT. It is very difficult to move further without understanding the meaning of ICT.

ICT is a tool for communication and presentation which helps in bringing individuals together on a common platform for exchange of views, presentation of ideas (through, chatting or E-mail) and increases the interactivities between individuals and between individuals and technologies.

The explosion of digital technology has created a revolution in educational instructions. The flexibility, high speed and huge storage capacity of ICT is causing teachers to redefine and rethink the traditional process of teaching. The challenges facing teachers are to evaluate relevant applications of information and communication technologies in the teaching learning process. At the same time, instruction utilizing information and communication technologies must reflect what is known about effectiveness of student-centered teaching and learning process. Therefore teachers should aware about all new technology and knowledge explosion through ICT.

In this new technology era, the role of teachers has changed and continues to change from being an instructor to a constructor, facilitator, and coach to create learning situation and environment. ICT is very useful for teachers with this new roles. Teachers can integrate ICT into teaching-learning process effectively if he developed various skills and competences like, creativity, flexibility, logistic skills, skill for project work, administrative and organizational skills and collaborating learning skill. So teachers should use all these ICT resources to justify his new role as a facilitator,

constructor and coach for his classroom teaching, professional development and personal development.

There is a need to change in each and every sphere of the society according to the tune of information and communication technology. It has the ability to enhance every type of development in the society. Education is the only means to incorporate information and communication technology in the developmental aspects of the society. ICT can also be used as a tool to improve the quality of education for preparing the society and its manpower to face the challenge of the future. It requires the proper manpower to handle and use ICT in school in a proper way. Therefore , teacher needs ICT resources to integrate in education and he may require some king of skill training to use ICT for classroom teaching, for professional development and for personal development.

By considering, its useful aspects in education, investigator has made an attempt to study the ICT awareness, ICT use and ICT needs of school teachers.

## **5.2 RATIONALE OF THE STUDY**

ICT is one of the recent developments of the twentieth century in India. It has changed each and every system around the globe from house related systems to industrial systems. Significantly, it has influenced the educational systems in all its forms. In the educational field different types of Information and Communication media are used to impart education. Radio, T.V., Tape recorder, OHP., LCD Projector, Computer and now with advancement in these technologies has changed the scenario. Internet and

advanced computers are now being used in education as an instrument of instruction. This digitization has made it possible to design, develop, deliver, manage and assess teaching –learning process. It increases the efficiency of the system and makes it more powerful.

The ability to use ICT effectively and appropriately is now seen as essential to allow learners to acquire and exploit information within every sphere of human activity. It can be assumed that specific forms of ICT will change with time. However, the need to be able to aware and use ICT purposefully will remain the key to full participation in an information society.

The school curriculum already reflects the perceived value and importance of developing ICT literacy and indeed, information literacy in all students. For example from 8 to 12 standards, computer is added into the curriculum. This emphasis is followed through in the proposals for the requirements of higher education and still ICT is identified as one of the core skills areas, and as such, the option for assessment and certification of achievement will available. There is also complementary move towards using, for example, multi-media packages in staff development for teachers by Intel. ICT has changed the scenario of school education and going to add more change in the system. It is also stated in the National Curriculum Framework for School education (2000). Changes in the perception of ‘learning environment’ have been highlighted by National Curriculum Framework (2000), which seek to exploit the potential of ICT. The National Curriculum Framework has emphasized on the utilization of ICT in schools. The success of ICT in school education depends on teachers,

students and authorities in the school. Teachers have a major role to play. Teachers can lead the journey forward.

Teacher is the gateway of information, teacher act as a mentor, instructor, director and guide to help students to grasp and make them understand. For that teacher should do best of his part, for that teacher uses different methods, approaches and techniques. But these are not enough in today's IT world. So he needs to utilize ICT resources in his teaching which is emphasized by National Curriculum Framework (2000) and many committees because future of the students depends on their performance in secondary and higher secondary education as it is considered as the base for professional courses and higher education. So it is the duty of teacher to clear the doubts of students and make them understand. It can be possible or enhanced by ICT awareness and use of ICT by teachers. So the investigator has made an attempt to conduct a study at secondary and higher secondary level to know the ICT awareness, use and need of secondary and higher secondary school teachers.

In recent years there has been increase in the availability of computer hardware and software in schools, often as a result of Government funded initiatives, and/or sometimes as a result of schools effort to raise funds for ICT resources. However, having technology does not mean that it will automatically be integrated as resources in day to day teaching. The effective and efficient use of ICT will be out of question unless institutions have these and teachers are aware of this technology integration. Successful integration into the curriculum depends on teachers being convinced of the relevance of ICT as a means of providing access to a

range of resource for themselves and students. The emphasis must be on using appropriate technologies to enhance and support effective teaching. Indeed, teachers require to be able to select and utilize technology in a useful manner. Even teachers need to be able to exploit modern information sources such as internet for themselves as continuing learning for their personal and professional development. As a result, potential impact of information and effective use of ICT in the classroom has far and wider implications. Sometimes, teachers may not be aware of ICT due to the unavailability of resources and lack of skills. Teachers may be interested to have these skills. For these purpose, teachers have specific 'needs' like skill training, availability of resources. Therefore investigator has selected ICT need of teachers as one of the variable.

Several studies conducted with this regards revealed that teachers are aware of the potentials of ICT in education but only few teachers use ICT resources in their teaching due to lack of skill or unavailability of resources. So keeping in mind ICT awareness, use and need of teachers the investigator has decided to conduct a survey. Several variables may be linked with the ICT awareness, use and need of teachers like more education may lead to more awareness in ICT or English medium background may lead to be more aware in ICT. Hence investigator in interested to know the relationship of few background variables with ICT awareness, use and need of secondary and higher secondary teachers.

Amreli is known as the cultural city of Gujarat. It has strong cultural and educational heritage due to the former rulers of Gaikwad rein. The culture of this city use to be changed according to the change of the time for which

it has retained its status as the cultural city of Gujarat. Whether the teachers of Saurashtra region are managed themselves according to the needed demand of ICT and computer Education. Hence the investigator has taken the proposed study to know ICT awareness, use and need of secondary and higher secondary school teachers of Saurashtra region. It will also help the investigator in term of feasibility of conducting the study. Further, keeping the time factor in mind, the investigator has decided to limited the study only to the schools of Saurashtra region. Even very few research studies have been conducted in this regard to know the ICT awareness, use and need in different dimensions, like, for academic development, professional development and personal development. The present study may through some light on these matters. Hence the present study is an attempt to know the ICT awareness, use and need of secondary and higher secondary teachers.

### **5.3 STATEMENT OF THE PROBLEM**

“A STUDY OF ICT AWARENESS, USE AND NEED OF SECONDARY AND HIGHER SECONDARY SCHOOL TEACHERS OF SAURASHTRA REGION”

## **5.4 OBJECTIVES OF THE STUDY**

Following objectives were formulated to realize the present study which are given as follows:

1. To study the ICT awareness of secondary and higher secondary school teachers of Saurashtra region.
2. To study the ICT use of secondary and higher secondary school teachers of Saurashtra region.
3. To study the ICT need of secondary and higher secondary school teachers of Saurashtra region.

## **5.5 DEFINITIONS OF THE TERMS**

ICT : For the present study ICT (Information and Communication Technology) means (computers for word processing, power point, spreadsheet, CAI(Computer Assisted Instruction) and related software, internet for e-mail, chat, searching, web designing, and for giving project work, LCD projector for PowerPoint presentation, and T.V. presentation and OHP, Television, and Radio) it meant for classroom practice, professional development and personal development of teachers of secondary and higher secondary schools.

ICT AWARENESS: It means the knowledge of teachers of secondary and higher secondary schools regarding the components of ICT like, computers for word processing, power point, spreadsheet, CAI(Computer



Assisted Instruction) and related software, internet for e-mail, chat, searching, web designing, LCD projector for PowerPoint presentation, and T.V. presentation and OHP, Television, and Radio.

For present study ICT awareness is defined operationally as the awareness score secured by a teacher in the awareness scale prepared by the investigator.

ICT USE: It means the use of the ICT components of ICT like, computers for word processing, power point, spreadsheet, CAI(Computer Assisted Instruction) and related software, internet for e-mail, chat, searching, web designing, and for giving project work, LCD projector for PowerPoint presentation, and T.V. presentation and OHP, Television, and Radio by the teachers of secondary and higher secondary schools for classroom practice, professional development and for personal development.

For the present study ICT is defined operationally as the score secured by a teacher in the scale prepared by the investigator.

ICT NEED: It means the need for skill training and ICT resources for classroom practices, professional development and for personal development of the teachers of secondary and higher secondary schools.

For the present study ICT is defined operationally as the score secured by a teacher in the scale prepared by the investigator.

## **5.6 DELIMITATION OF THE STUDY**

The present study is delimited to the Secondary and Higher Secondary Schools of Saurashtra region .

## **5.7 MAJOR FINDINGS OF THE STUDY**

The major findings of the present study are presented as under.

1. There was a low degree of awareness of secondary and higher secondary teachers in computer, internet and other components of ICT.
2. There was a low level of usage of ICT resources by the secondary and higher secondary teachers.
3. Majority (44.51%) of the teachers told that they were not using ICT resources due to lack of skills.
4. Secondary and higher secondary teachers have shown low level of need for ICT for their knowledge and use.
5. Medium of Instruction at Secondary level of the secondary and higher secondary teachers was found not related with the ICT awareness, use and need of the teachers.

6. Type of School where secondary and higher secondary teachers were teaching was found significantly related with their ICT use. Private school teachers were found more in ICT usage in comparison to that of the private aided school teachers. Whereas, the same variable was found not related with the ICT awareness and need of secondary and higher secondary school teachers.
7. Age was not related with the ICT awareness, use and need of secondary and higher secondary teachers.
8. Gender was found not related with the ICT awareness, use and need of secondary and higher secondary teachers.
9. Stream was found not related with the ICT awareness, use and need of secondary and higher secondary teachers.
10. Degree was found related significantly with the ICT need of secondary and higher secondary teachers. ICT need of graduate secondary and higher secondary teachers was lower than that of the post graduate teachers. Whereas it was found not related with ICT awareness and use of secondary and higher secondary teachers.
11. Training of teaching was found not related with the ICT awareness, use and need of teachers.

12. Designation was found not related with the ICT awareness, use and need of teachers.
13. Marital Status of the teachers was found not related with the ICT awareness, use and need of teachers.
14. Category was found not related with the ICT awareness, use and need of teachers
15. Teaching Experience was found related significantly with the ICT awareness of secondary and higher secondary teachers. That is less experienced teachers more aware about ICT in comparison to more experienced teachers. Whereas it was found not significant for the ICT use and need of secondary and higher secondary teachers.
16. Total salary was found related in case of ICT awareness and use of teachers. That is less salary paid teachers know more or aware more about ICT than the more salary paid teacher and their degree of use of ICT was more in comparison to the more salary paid teachers, whereas it was not related with the ICT need of secondary and higher secondary teacher.
17. Level of teaching was found not related with the ICT awareness, use and need of secondary and higher secondary teachers.

18. Teaching subject was found not related with the ICT awareness, use and need of secondary and higher secondary teachers.
19. Medium of Instruction at higher secondary level was found not related with the ICT awareness, use and need of secondary and higher secondary teachers.
20. Computer training was found related significantly with the ICT use of secondary and higher secondary teachers. That is computer trained teachers use more ICT resources for their classroom teaching, professional development and personal development than the computer untrained teachers. Whereas it was not related significantly with ICT awareness and need of secondary and higher secondary teachers.
21. Possession of Personal Computer was found not related with the ICT awareness, use and need of teachers.

## **5.8 IMPLICATION OF THE STUDY**

The findings of the present study can be used mainly in the process aspect of the secondary and higher secondary level. With the help of findings of the present study following implication have been felt on the part of the investigator:

There is a need of skill training to the school teachers because the findings of the study suggest that computer trained teachers were using more ICT

resources than the computer untrained teachers. The finding of the study should be given to the government authority so as to take the necessary steps in this direction.

The variables like Type of school in which teachers are teaching, teaching experience have great impact on ICT awareness, use and need of teachers. For example, private school teachers were using ICT resources more than that of private aided school teachers. It may be due to availability of ICT resources. So Government should increase the school infrastructure in terms of ICT so as to increase and improve the teachers use of ICT.

## **5.9 SUGGESTIONS FOR FURTHER STUDY**

The following suggestions can be used for further study those want to do some study in this area.

1. The population and sample can be expanded at least to the geographical area of the state which can be helpful for more generalization.
2. Similar study can be conducted taking other levels of teaching like primary school and higher education.
3. More standardized tool can be used instead of non-standardized tool. Even tool used in the present study can be standardized.
4. Similar study can be conducted with other research designs.

5. Other statistical techniques can be used to analyze the data of similar studied.

## **5.10 CONCLUSION**

The world is changing so rapidly that it is difficult to foot step with this change. The knowledge explosion is a concept of today's world. ICT has made it more complex that it is very difficult to pace with this fast changing. The education has great implication of ICT. Now there is a need to improve the quality of our education which is possible only through improving our quality of teaching particularly secondary and higher secondary education. For that, ICT need to be used in education to keep the pace with this fast changes. In this regard teachers has great roles to play. Teachers need to be aware about ICT and should use ICT in their teaching learning process. The present study through some lights on ICT awareness, use and need of secondary and higher secondary school teachers.