

**CHAPTER 5:**  
**SUMMARY AND IMPLICATIONS**

## 5.1 INTRODUCTION

The development of ICT technologies for learning offers new way in which learning can takes place in schools and the home. Enable teachers to have access ICT learning resources to which support constructivism concept development, will allow the teacher to focuses more on being a facilitator of learning talking with individual learner.

The information provided in this research will help one to better understand why this study was conducted. Because technology is prominent in education, there was focus between two different methods of delivering simple step directions: audio video instructions (ICT) versus traditional lecture. Educators' today use both modes of instruction, but one will better result in the method of retaining information. The study is to determine the effectiveness of audio, video instruction as opposed to the traditional lecture. Within a group of 60 students, students are going to be separated into two groups, and each group of 30 students each group will going to be taught in totally different manner, one will attend normal chalk-n-talk other group will be taught through ICT based methodology. It will be expected that the students who receive video instruction recalled more information than those who receives the traditional lecture instruction of the teacher in chalk-n-talk method. Because of the expected results, this study will

suggest that the effectiveness of video instruction will be used as a method to support student learning.

In the current scenario of educational institutions, ICT has dug up its own kind of space in some or the other way as a tool of educational technology. ICT has overcome the barriers of time and space and provides evidence to be accepted as an anytime and anywhere tool for educating multi-disciplinary masses. The process of knowledge acquisition becomes more efficient when the learners experience an event through a ICT stimulation. ICT technology empowers the educational process by means of increased interaction between teachers and the students. Apart from the fact that ICT can provide educators and students with endless possibilities of quality teaching and learning, taking vital considerations of the pedagogical strengths and limitations of ICT, it can be used to its fullest potency, and reach the eminence of “New Educational Technology tool”.

In this study researcher aimed to study about the use of ICT in teaching learning process. Researcher compares the effectiveness of ICT with traditional approach. Study reveals that teaching through ICT is very effective and is changes the paradigm of learning also. The use of ICT enables the children who r unable to learn in traditional approach.

## **5.2 Need and Justification of the study:**

Today's world is that of technology, and education keeping in view with pace of it, has to inculcate technology into it cater properly to the needs of today's students. In the same context, reviews of related literature has emphasized the fact that it is now unproductive to a large extent, outdated to use the chalk and talk method in the classroom, as it cannot promote constructing the knowledge by the student. Use of ict makes the students active learners in the classroom, and not passive entities, day dreaming, or waiting for the bell to ring. We know that learning can be effective the most when one is taught engaging the maximum number of senses possible. The famous quote," I hear, I forget; I see I remember; I do and I learn" very much denotes the ICT style of learning in favor of the student.

The reviews, illuminating as they were, were largely of a different state than M.P and even of other countries. The deep insight offered by them in the world of teaching-learning by ICT will be utilized in the performing of this research. Looking at the gaps, the previous researches have been done on college and higher secondary levels.

The researcher is hopeful that the results of the research will prove to be helpful for teachers teaching std. IX Science. In addition, the students will be benefited in their learning, if their teachers have the knowledge of multimedia and will prove to be a felicitator of bringing about a change in their learning style.

### **5.3 Statement of the problem**

**A study of effectiveness of ICT on students' performance in science at secondary stage”**

### **5.4 Objective of the study**

A study of effectiveness of ICT on students' performance in science at secondary stage”

### **5.5 Hypothesis**

Students taught through ICT based methods of teaching will gain significantly higher score as compare to their counter parts in the control group.

### **5.6 Delimitation of the Study:**

- This study is delimited to Bhopal District of Madhya Pradesh.
- The study is delimited to Hindi medium school only.
- It is further delimited to students studying in IX<sup>th</sup> standard only.
- The study is delimited to the schools affiliated to Madhya Pradesh Board of Secondary Education (MP board)
- This study is delimited to the science content only.
- This study is delimited to one school only.

## 5.7 Sample

In present study purposive sampling is done. Sampling of the study were drawn from one school. The population of the sample were 60 students studying in IX standard under MP board syllabus Govt School, Bhopal (M.P). The sample included both boys & girls.

**Table 5.1**                    **Detail of the sample**

<b>Group</b>	<b>Boys</b>	<b>Girls</b>	<b>Total</b>
<b>Experimental group</b>	<b>14</b>	<b>16</b>	<b>30</b>
<b>Control group</b>	<b>13</b>	<b>17</b>	<b>30</b>
<b>Total</b>	<b>30</b>	<b>30</b>	<b>60</b>

## 5.8 Variables

A variable is something that varies. Variables are the conditions or characteristic that experimenter manipulate, controls, or observe there are following types of variables.

Independent variable- In present study instructions of teaching is independent variable.

## **5.9 Tool Used**

To select the proper tool for the research is the main mechanism of educational research. Sometimes researcher uses tool constructed by other, in this study tools constructed by researcher. Tool constructed according to the requirement of the study. It is an achievement test. This test focused on some chapter of related subject.

## **5.10 Finding**

The ICT approach was found to be effective in terms of achievement in science than the traditional approach of teaching.

## **5.11 Educational Implication**

The present study has its implication for all personalities who involves in teaching learning process directly or indirectly. It is the study for school teacher. Teacher can play a very important role in the implementation of ICT approach in teaching process. ICT is fast emerging as a basic skill that will be as important to life in the twenty-first century as reading is now. In fact, ICT is changing the nature of reading itself. Instead of limiting you to the linear presentation of text as printed in books, ICT makes reading dynamic by giving words as important new dimension. In addition to conveying meaning, words in ICT serve as triggers that readers can use to expand the text in order to

learn more about a topic. This is accomplished not only by providing more text but by bringing it to life with sound, pictures, music, and video.

### **5.11.1 Implications for teachers**

This study will help to spread the information age to millions of teachers/learners who have not yet used the computer. This study will enable teachers to create course material, ICT in the classroom which include Power Point presentations that are created by the teacher, commercial software (such as ICT encyclopedia) that is used for reference or instruction, use of audio-visual clipping of the content or activities that directly engage the students in using ICT to construct and convey knowledge. For the purposes of this course, the teacher will focus on the final category...engaging students in the use of ICT to construct and convey knowledge.

### **5.11.2 Implication for students**

ICT activities encourage students to work in groups, express their knowledge in multiple ways, solve problems, revise their own work, and construct knowledge. The advantages of integrating ICT in the classroom are many. Through participation in ICT activities, student can learn:

- Real-world skills related to technology
- The value of teamwork



- Effective collaboration techniques
- The impact and importance of different media
- The challenges of communicating to different audiences
- How to present information in compelling ways
- Techniques for synthesizing and analyzing complex content
- The significance of presentation and speaking skills
- How to accept and provide constructive feedback
- How to express their ideas creatively

### **5.11.3 Implication for parents**

The present study will be very helpful to parents also, parents can teach their children with the help of ICT tools largely available on the internet. Pictures, musical rhymes, animated videos, cartoon animation etc. will develop positive interest in the behaviour of the children towards learning, they enjoy the fullest it will create curiosity in child mind to explore new things which is related to their subject area.

### **5.11.4 Implication for curriculum designers**

Present study prevails the effectiveness of the ICT; various type of activities which is related to ICT can be applied at several levels in the design of curriculum material and instructional sequences.

## **5.12 SUGGESTIONS FURTHER RESEARCH**

1. The study in future can be done in the other school subjects.
2. The same study can be done on big sample.
3. Research can be done by selecting sample from different types of schools at different places.
4. Further research can be done on students of different age groups /classes.
5. Effect of multimedia can be evaluated differently also.
6. Comparative study can be done on those students who have computers in their home and who do not have computer in their home.