

Chapter I

INTRODUCTION

1.0 INTRODUCTION

In the period of new progress and thus concerned for creating innovative approaches to teaching. Modern developments of innovative technologies have provided new possibilities to the teaching profession, but at the same time have placed more demands on teachers to learn how to use these new technologies in their teaching. It is not necessarily the technology that has to be innovative in the instructional process, but rather the approach to teaching and learning using the technologies.

In this process of change, information communication technology (ICT) tools resulting from new scientific and technological developments are present in every aspect of life, including education. Knowledge related to the effective use of educational technologies has become recognized as an important aspect of an educator's knowledge base for the 21st Century. In earlier stages of educational technology implementation, educators were taught in technology classes that focused primarily on technology skills independent from the pedagogical or content courses. As a result of educators' experience in the school environment showing that technical skills alone are not enough (because one could know how to operate a piece of technology without knowing how to use it effectively to promote student learning), the focus then shifted to preparing educators to integrate technology into their teaching.

1.1 Background of The Study

This study "Challenges faced by teachers in implementing ICT at upper primary level" is based on the aim to investigate the ground-level situation of implementing ICT in schools at the upper primary level. The major focus of this study is to identify that what are the factors that hinder the access to ICT for the betterment of the teaching-learning process for teachers as well as students. Through identifying these factors, suggestive measures have been made on cause-and-effect theory. Through this study, many direct and indirect factors have been identified.

1.2 Statement of the Problem

challenges faced by the Teachers in implementing ICT at the upper primary level

The main motive of this study that how to overcome challenges that become handled to implement ICT. It is well-known fact that the execution and implementation of any good idea is the prerequisite factor to achieving the target. Despite having knowledge and resources, implementing them is a futile practice that makes our educational system weaker.

1.3 Significance of the Study

Today, Information and Communication Technology (ICT) is been applied in different key sectors of the economy including education to improve efficiency. Information and Communication Technology (ICT) in the curriculum is to help the school pupils to be able to search, compose and send and receive information from various sources, which in turn will improve the communication skills in education, economic and political activities using both traditional and modern technologies. introduced ICT curriculum to foster ICT literacy amongst teachers and students. It is believed that ICT is a leading agent of change in development if used and applied appropriately in daily activities. However, until now the challenges of implementing an ICT curriculum in upper primary schools are not explored. Therefore, the study reported in this research investigated the challenges facing the implementation of the ICT curriculum in upper primary schools of the Bhopal district. educational institutions to be sufficiently insightful about methodologies that enable the implementation of information and communication technology in schools. Latest technologies can sprout novel education activities in addition to enhancing existing education systems. The rapid rate of technology growth in schools means a shake-up of the educational framework it occupies space in. To take full advantage of school management software, it is important to understand how they work. It is not enough to merely show on paper that educational technology is an option offered to students-efforts must be made to integrate its use into the current way of doing things at your educational institution.

1.4 ICT (INFORMATION AND COMMUNICATION TECHNOLOGY)

1.4.1 DEFINITION

ICT, or information and communications technology (or technologies), is the infrastructure and components that enable modern computing.

Although there is no single, universal definition of ICT, the term is generally accepted to mean all devices, networking components, applications, and systems that combined allow people and organizations (i.e., businesses, non-profitable agencies, governments, and educational institutes) to interact in the digital world.

1.4.2 Components of an ICT system

ICT encompasses both the internet-enabled sphere as well as the mobile one powered by wireless networks. It also includes antiquated technologies, such as landline telephones, radio, and television broadcasts, all of which are still widely used today alongside cutting-edge ICT pieces such as artificial intelligence and robotics. ICT is sometimes used synonymously with IT (for information technology); however, ICT is generally used to represent a broader, more comprehensive list of all components related to computer and digital technologies than IT. The list of ICT components is exhaustive, and it continues to grow. Some components, such as computers and telephones, have existed for decades. Others, such as smartphones, digital TVs, and robots, are more recent entries.

ICT commonly means more than its list of components, though. It also encompasses the application of all those various components. It's here that the real potential, power, and danger of ICT can be found.

1.4.3 ICT's societal and economic impact

ICT is leveraged for economic, societal, and interpersonal transactions and interactions. ICT has drastically changed how people work, communicate, learn and live. Moreover, ICT continues to revolutionize all parts of the human experience as first computers and now robots do many of the tasks once handled by humans. For example, computers once answered phones and directed calls to the appropriate individuals to respond; now robots not only can answer the calls, but they can often more quickly and efficiently handle callers' requests for services.

ICT's importance to economic development and business growth has been so monumental that it's credited with ushering in what many have labeled the Fourth Industrial Revolution.

ICT also underpins broad shifts in society, as individual masses are moving from personal, face-to-face interactions to ones in the digital space. This new era is frequently termed the Digital Age.

1.4.4 How to embrace ICT in education to get the best out of it

The internet has become an integral part of every individual's life. Our nation has become known for it. So, it is no surprise that the use of the internet, even in school, has increased at a rapid rate. ICT, or Information and Communication Technology, has given wings to scholars, educators, and allied staff in a multitude of ways. Software in schools has empowered them to uplift their communities through the use of technology-related activities in the world of education. But there remains a negative image of management software in the minds of many people.

Educational institutions are key to eliminating these misconceptions through the reasonable implementation of educational management software in schools. They do this by implementing ICT to create positive outcomes for their most visible stakeholders – their students.

Nowadays, when schools are increasingly transforming themselves into smart schools, the importance of educational technology also increases. This rising ubiquity of ICT has meant that we must monitor its role in education. It is necessary for decision-makers like education ministers, and school administrators. We have spoken extensively about the role of information technology in education.

1.4.5 The challenges of Information and Communication Technology (ICT) in School

There is a huge impact of the internet on students' lives. Learning exercises have to be reoriented and reformulated, shifting the focus from obsolete and constraining manual sources to dynamic open-source ones. For this to be realized, the broad utilization of web access has to be a strategy that is thought through and implemented by the powers that be at the school

Teachers Turn Information and Communication Technology from a Zero to a Hero

School establishments cannot deny their imperative part to overcome technological distractions. Their key is to engage students by encouraging the practice of edutainment through the use of information and communication technology in schools. Schools can give their students a chance to be acquainted with educational diversions monitored by their educators.

Simultaneously, instructors have to be the primary spark and directors of information and communication technology execution at schools. They should be the operators of progress from the traditional technique to present-day techniques resulting in a worldwide change in learning. Teachers making advancements in this realm today might think this is just a supplementary aspect to the more formal parts of teaching, but they are the architects who will establish how the educational management system, will be utilized in new ways in the future.

1.4.6 How to Manage the Use of ICT in Schools?

The repetitive cry we hear from teachers and parents alike is what a distraction some technologies can be to their students. This is an undeniable fact. The mere presence of interactive media recreations and engaging web amusements has been a time sink for otherwise hard-working students. Schools cannot afford to tiptoe around the issue – they must boldly and firmly handle these issues, by realizing that the solution lies in choosing the right technology and not attempting to change human behavior. Frankly, schools do not have enough time and resources to stop students from engaging with technology. Nor do their

guardians. A better solution would be to direct this interest into more constructive systems. Engaging a child through the use of dynamic content in the course readings shared on

School software helps in involving them in lively group discussions created according to subject matter interest, and providing one on one attention through personalized communication is likely to give us better results than outright banning of the inevitable.

1.5 OPERATIONAL DEFINITION OF KEY TERMS

Challenges- something new and difficult that forces you to make a lot of effort.

Teacher- A teacher, also called a school teacher or formally an educator, is a person who helps students to acquire knowledge, competence, or virtue.

Implement- the act or process of carrying out a plan, putting a law or policy into effect, fulfilling a promise, etc.

ICT- Information and Communications Technology (ICT) can impact student learning when teachers are digitally literate and understand how to integrate it into the curriculum. In the present study ICT tools are used to communicate, create, disseminate, store, and manage information in science teaching at the elementary level.

Upper Primary Level -Upper Primary (Middle school, Class VI-VIII).

1.6 OBJECTIVES OF THE STUDY

1. To assess the awareness of science teachers towards using ICT in the classroom.
2. To identify the difficulties of implementing ICT in the classroom.
3. To identify the causes of difficulties in implementing ICT by a science teacher.
4. To find out the suggestive measures for overcoming the difficulties of implementing ICT.

1.7 Delimitations

The present study will be delimited as follows-

1. The present study will consider only the upper primary level teachers.
2. The present study will be delimited to Madhya Pradesh state board schools of Bhopal District only.
3. The investigator will confine the study to a small sample that is 30 teachers only.

1.8 SUMMARY

In this chapter, the investigator has discussed the problem, its background, and the operational definition of the terms.

The objectives of the study have been formulated and presented. The delimitations of the study have been also been mentioned