CHAPTER 1
INTRODUCTION

1.1.0 Background of the Study

The incorporation of Information and Communication Technology (ICT) in education is a crucial focus outlined in Section 23. 6 of the National Education Policy (NEP) 2020. ICT is instrumental in modernizing the education by facilitating interactive, adaptable, and tailored learning experiences. It encourages student participation, improves access, and aids teachers in applying creative teaching methods. Clause 24. 4 (d) of NEP 2020 highlights the importance of building a robust collection of digital educational resources. ICT tools support educators in offering accurate explanations, tailored assistance, and thorough evaluations. Consequently, social sciences education becomes increasingly engaging, accessible, and intellectually enriching.

In the realm of social sciences education, ICT resources are vital for addressing various learning requirements. Digital platforms, multimedia resources, and online tools create opportunities for enhanced classroom instruction. These technologies allow teachers to convey intricate concepts in engaging and straightforward ways, thereby making education more effective. Conventional teaching strategies in social sciences often fail to accommodate the diverse learning preferences of students. ICT tools empower teachers to create interactive and student-focused activities that foster deeper comprehension. By integrating simulations, digital narratives, and geographic information systems, learners can investigate historical events, cultural studies, and geographical phenomena in a more engaging way. ICT has positive impacts on teaching teaching-learning process and the provision of any educational content with only one click (Moore, 2013). The ICT platforms i.e., the internet provide great opportunities for students to learn anytime, anyplace as well as teachers may benefit from its effectiveness in the classrooms and they may develop digital culture (Michael, 2011). Through the wide use of ICT, the transfer of knowledge and skills to a larger number of students is possible within no time (Smith et al., 2005; ven Zanden, 2023). Information and Communication Technology (ICT) is an effective way of delivering education to the masses as it is a lost cost (O, Neill et al., 2004; Feng & Qi, 2024). Any digital or virtual university can provide digital education on a large basis with limited

human resources (Gladeieux,2000; Audi et al., 2021). Information and Communication Technology (ICT) can be managed in any location, at any time, with no need to travel from one place to another and the learners can spend the saved time for their learning (Adedara & Onwuegbuzie, 2014; Ash, 2009; Abulrub & Attridge, 2011).

Upcoming technologies such as immersive settings, digital mapping, and visualization tools improve analytical abilities and critical thinking. Interactive platforms like Google Earth and Bhuvan provide fresh insights into spatial analysis and socio-economic studies. These resources encourage inquiry-based learning, allowing students to actively investigate and assess real-world challenges.

1.2.0 Social Science

Social science, as an academic field, is broad and complex both in terms of the scope of study and the complexity of the subject matter. Social science is unique from the natural sciences which focus on the physical and biological world, while social science concentrates on the human experience, examining how individuals interact, organize themselves, and give meaning to their lives. In its simplest form, social science is the scientific study of society. As a discipline, social science relies on systematic methods of inquiry to understand and explain human behaviour, social structures, cultural contexts, and systemic forces that have shaped our world. It seeks to answer fundamental questions about why societies function the way they do, what drives human actions, and how various social, economic, and political systems operate. Social science examines individuals, communities, and societies, exploring their interactions with each other and their environments (built, technological, and natural). social science utilizes rigorous research methodologies, data collection, and analysis to develop theories and draw conclusions. It aims for objectivity and empirical evidence wherever possible. Key features of social science involve understanding of how individuals relate to one another, form groups, and establish social norms and institutions. It examines the institutions that shape human relationships, including governments, economic structures, educational systems, and cultural traditions. Social science tries to explain a broad array of phenomena in society, from economic development and unemployment to political regimes, cultural changes, and the determinants of happiness or war. Social Science is not just an academic subject; it is a fundamental pillar for human and societal development. It nurtures thoughtful, informed, and responsible individuals who can

contribute meaningfully to society. In an era of rapid social, economic, and environmental change, the importance of Social Science is more vital than ever.

1.2.1 Branch of Social Science

The field of social science is incredibly diverse, encompassing a wide array of disciplines, each offering a unique lens through which to analyse human society. Some of the major branches include:

1) **Anthropology** is the study of humanity, encompassing human behaviour, cultural relations, and the evolution of humanity. It often uses ethnographic methods to understand how different groups create and give meaning to their social world.

2) **Economics** is the study of how societies produce, distribute, and consume goods and services. It examines economic systems, market behaviour, resource allocation, and factors influencing wealth and poverty.

3) **Political Science** is the study of systems of governance, political activity, political thoughts, and political behaviour. It analyses power structures, international relations, public policy, and the functioning of governments.

4) **Sociology** is the study of society, social behaviour, patterns of social relationships, social interaction, and culture. It examines groups of people, social structures, and the way individuals relate to each other within a society.

5) **Psychology** is the scientific study of the mind and behaviour. While sometimes considered a separate field or bridging social and natural sciences, social psychology specifically examines how individuals' thoughts, feelings, and behaviours are influenced by the actual, imagined, or implied presence of others.

6) **Geography** Focuses on the spatial organization of landforms, climate, human activity and the relationship between people, places, and environments. It explores population distribution, cultural landscapes, physical landscapess and the impact of human activities on the planet.

7) **History** is the study of past events, providing context and understanding for present societal conditions. Historians analyse sources to reconstruct and interpret human experiences over time.

8) **Linguistics** is the scientific study of language, including its structure, meaning, and use in different contexts. It explores how people communicate and create meaning through language.

9) **Demography** is the statistical study of human populations, including their size, structure, distribution, and changes over time (births, deaths, migration, aging).

10) **Development Studies** Investigates global, national, and local processes of change, focusing on social, economic, political, cultural, environmental, and technological aspects, often in contexts characterized by poverty and inequality.

11) **Social Work** is an applied social science that focuses on social change, problem-solving in human relationships, and the empowerment and liberation of people to enhance social justice.

12) **Law** (Socio-Legal Studies) Explores the social, political, and economic influences on law and the legal system, and how law shapes society.

1.2.2 Importance of Social Science

Social science plays a crucial role in understanding and addressing the complex challenges facing humanity. Its importance stems from several key contributions:

- **Understanding Human Behaviour and Society**: It provides deep insights into why people behave the way they do, how societies operate, and the factors that influence individual and collective actions. Social Science helps individuals understand social structures, cultural diversity, and human behaviour. This understanding promotes empathy and tolerance toward others, reducing prejudice and discrimination. It also encourages respect for cultural heritage and traditions, fostering unity in diversity.
- **Informing Public Policy and Governance**: Social science research provides vital information for governments, policymakers, and organizations to develop effective and equitable solutions for social issues like poverty, inequality, crime, health, and education.
- **Promoting Critical Thinking and Analysis**: Social Science enhances critical thinking by encouraging learners to ask questions, analyse evidence, and develop reasoned arguments. It helps in understanding different perspectives, evaluating social issues, and finding solutions to complex problems such as poverty, inequality, and conflict. This critical approach is essential for decision-making in both personal and public life.
- **Fostering Cultural Understanding and Global Awareness**: By exploring diverse cultures, histories, and social systems, social science promotes empathy, respect for different viewpoints, and a better understanding of global issues like migration,

climate change, and human rights. Social Science education inculcates a sense of national pride while promoting global citizenship. By learning about the history and culture of one's nation and others, students develop an appreciation for global interdependence and international cooperation.

- **Addressing Real-World Challenges**: Social scientists actively research pressing contemporary issues, such as urbanization, climate change, unemployment, and public health crises, contributing to the development of practical solutions.
- **Driving Economic Progress**: Fields like economics analyse resource management and policy creation, contributing to sustainable economic growth and fair resource distribution.
- **Strengthening Democracy and Justice**: Social sciences promote civic responsibilities, the rule of law, and legal systems, contributing to fairness and equality in society. By studying government, law, and politics, individuals understand their rights and duties. It encourages active participation in democratic processes, such as voting and public debate. Through civic education, Social Science fosters values like justice, equality, and freedom, which are essential for the functioning of a healthy democracy.
- **Preparing Future Leaders**: The knowledge and analytical skills gained through social science education equip individuals to lead and create positive change in various sectors.

1.2.3 Social Science in Class 6

The Class 6 Social Science textbook, 'Exploring Society India and Beyond' was published by NCERT. It offers a foundational and integrated approach to social studies, moving away from a compartmentalized study of history, geography, civics and economics. Its content is structured around five major themes, designed to provide young learners with a holistic understanding of their world, India's place within it, and the complexities of human society. Content of this textbook is broadly divided into themes that encompass the core disciplines of social science. These are:

- **Theme A: India and the World: Land and the People (Geography):** This section introduces fundamental geographical concepts such as locating places on Earth, understanding oceans and continents, and recognizing different landforms and their impact on life. It provides a global perspective while specifically highlighting India's unique geographical identity, emphasizing how its diverse physical features

have shaped its history and culture. Theme B: Tapestry of the Past (History): This theme delves into the study of history, teaching students about timelines, sources of historical information (like archaeological finds), and the early beginnings of Indian civilization, including the Indus-Sarasvati Civilization. It aims to connect the past with the present, helping students understand their cultural roots and the evolution of society.

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- **Theme C: Our Cultural Heritage and Knowledge Traditions (History/Culture):** This part focuses on India's rich and ancient cultural heritage, exploring its guiding principles, manifestations in history, and relevance to contemporary issues. It promotes an appreciation for India's diverse traditions, languages, and knowledge systems.
- **Theme D: Governance and Democracy (Political Science/Civics):** This crucial theme introduces students to the functioning of political systems, particularly India's democratic structure. It covers concepts like grassroots democracy, the roles of different levels of government (central, state, local), the three organs of government (legislature, executive, judiciary), and the rights and responsibilities of citizens. It also briefly touches upon different governmental systems globally and international relations.
- **Theme E: Economic Life Around Us (Economics):** This section provides an elementary understanding of economic activities. It differentiates between economic and non-economic activities, explains how various activities are grouped into primary, secondary, and tertiary sectors, and highlights the interdependence among these sectors. It aims to lay the groundwork for understanding how economies function and resource management.

The importance of this social science content for Class 6 students is manifold. Firstly, it moves beyond rote learning by focusing on "big ideas" and encouraging students to explore, discover, think, and ask questions. This approach is aligned with the National Curriculum Framework for School Education (NCF-SE) 2023, which emphasizes

critical thinking, analytical, descriptive, and narrative capabilities. Secondly, by integrating different social science disciplines within single themes, the textbook fosters a multidisciplinary perspective, bringing learning closer to real-life complexities. For instance, understanding a region involves not just its geography but also its history, culture, and economic activities. Moreover, the textbook aims to develop informed and responsible citizens. By teaching about governance and democracy, it equips students with knowledge about their political system and encourages participation. By exploring India's cultural heritage and unity in diversity, it inculcates a sense of national identity, cultural appreciation, and empathy. The economics chapters provide a basic understanding of how societies sustain themselves, fostering an early awareness of economic principles. The inclusion of engaging visuals, exercises, and projects further enhances student engagement and facilitates a deeper, more meaningful learning experience, making social science not just a subject but a tool for understanding themselves, their country, and the world around them.

1.3.0 Information and Communication Technology

ICT is made up of information and communication technology. Information technology (IT) is the study or application of electronic devices, particularly computers for storing, analysing and transmitting information. It is concerned with the application of computer and its software to convert, store, safeguard, process, transmit and recover information. information Technology (IT) is made up of the knowledge, skill and awareness required to utilize information and communication technologies properly, safely and beneficially in learning, work and daily life. Communication is the act of sending, receiving and exchange is enabled by a chain of connected local networks spreading and linking to other networks internationally. Multimedia information can be transmitted and exchanged taking high quality real-time interaction. ICT stand for information and communication technologies are defined, as a “diverse set of technological tools and resources used to communicate, and to create, disseminate, store and manage information”. These technologies include computers, computer works stations, display facilities, hardware, software recording and processing system for sound, still and moving pictures, graphical calculator, the internet, broad casting technologies (Radio and Television) and other wide range of communication facilities.

ICT is a scientific, technological and engineering discipline and management technique used in handling information, its application and association with social, economic and

cultural matters. (UNESCO, 2002**)** ICT in education refers to the use of digital tools and resources that facilitate teaching and learning and support the educational process. **(**Siraj-Blatchford, 2003**)** ICT in education refers to the use of digital tools and resources to support teaching and learning. These include computers, digital cameras, interactive whiteboards, and the internet. **(**Kent & Facer, 2004**)**

1.3.1 Importance of ICT in School Education

Information and Communication Technology (ICT) has become a part of contemporary education, revolutionizing the conventional methods of teaching and learning. The use of ICT in schools is not just about the adoption of new tools but about redefining the education system to suit the needs of the 21st century.

1. Improving Teaching and Learning Processes: ICT tools like multimedia presentations, educational software, and interactive whiteboards enhance learning. They support diverse learning styles by enabling students to understand complex ideas through visual and auditory channels. Adaptive learning technologies enable students to learn at their own learning pace. Tools like Edmodo adapt content according to individual performance, filling targeted learning gaps with ease.

2. Enabling Access to Information: ICT offers access to a wide range of online materials, such as e-books, scholarly journals, and educational videos. Such an abundance of information aids research and expands the knowledge base of students. Students are able to pursue their studies irrespective of geographical locations through online courses and virtual classrooms, thereby maintaining continuity in learning in the event of unexpected situations such as pandemics.

3. Enhancing Communication and Collaboration: ICT allows for improved communication between teachers and students via emails, discussion forums, and instant messaging, supporting an environment of mutual learning. Projects can be done collaboratively using cloud-based tools, supporting teamwork and interpersonal skills necessary in the workplace in the future.

4. Simplifying Administrative Processes: Administrative processes such as attendance recording, grading, and report preparation are automated using school

management software, freeing educators to spend more time teaching. ICT protects the safe storage and handling of student records and ensures sensitive data is not accessible by unauthorized users.

5. Fostering Inclusive Learning: ICT applications can be adapted to suit students with special needs, offering alternative ways of learning and provision of materials to provide equitable access to education. By offering access to good quality learning materials, ICT closes the urban-rural divide in education, facilitating fairness in learning outcomes.

6. Enabling Students for the Future: Integrating ICT in education enables students to develop vital digital competencies that enable them to navigate the technological needs of the contemporary workplace. ICT supports a culture of ongoing learning, allowing learners to seek learning beyond the classroom with online materials and courses.

7. Improving Assessment and Evaluation: Computer assessment instruments offer feedback immediately, allowing learners to realize what they need to improve upon and permitting educators to make appropriate changes to their teaching. ICT enables several formats of assessment, such as quizzes, simulations, and project-based assessments, to suit multiple learning styles and abilities.

8. Fostering Creativity and Innovation: ICT applications such as multimedia software and digital storytelling websites inspire students to present their ideas in new and unique ways, promoting innovation. Using technology forces students to be analytical and problem-solve, helping them deal with complicated real-life scenarios.

9. Facilitating Teacher Professional Development: ICT offers teachers online training courses, webinars, and educational forums, enabling ongoing professional development.Teachers can interact with colleagues from all over the world, exchanging best practices and resources, improving teaching methods and classroom management techniques.

10. Environmental Sustainability: Online assignments and materials reduce paper usage, ensuring environmental conservation efforts in schools. Modern ICT devices are also energy-efficient, minimizing the carbon footprint of schools and encouraging

environmentally friendly practices. The implementation of ICT in school education provides a myriad of advantages, ranging from improving the teaching and learning processes to empowering students to confront future challenges. By adopting technology, schools can establish more inclusive, efficient, and dynamic learning environments that are responsive to diverse student needs as well as to society in general.

1.3.2 Need and importance of ICT in Social Science

In today's educational environment, Information and Communication Technology (ICT) has emerged as a vital tool, particularly in the context of Social Science education. The use of ICT in teaching and learning activities not only enhances the learning experience but also equips students to live and participate in a more digital and globalized world.

1. Revolutionizing Traditional Pedagogies: Passive reception was the norm with traditional Social Science education, where lectures and readings from textbooks dominated. ICT applications like interactive simulations, digital stories, and virtual field trips have, however, changed this practice. These technologies allow students to actively participate in learning about historical events, cultural practices, and geographical phenomena, leading to increased understanding and recall of knowledge. ICT promotes a transition from memorization to inquiry-based learning. Learners can use online databases, digital archives, and multimedia resources to research areas of interest, develop questions, and carry out research, hence cultivating critical thinking and analytical abilities needed for Social Science inquiry.

2. Improving Accessibility and Inclusivity: ICT tools dismantle geographical boundaries, enabling students from remote or disadvantaged regions to access quality learning resources. Digital libraries and online platforms offer equal learning opportunities, making it possible for all students, irrespective of their location or socioeconomic background, to enjoy enriched Social Science education. The flexibility of ICT enables teachers to customize content in order to suit different learning needs and styles. For example, visual learners are able to take advantage of infographics and videos, while those who are auditory can use podcasts and audio files. This

personalization creates a diverse learning environment where all the students are able to excel.

3. Facilitating Collaborative Learning and Communication: ICT enables collaboration among students using such tools as discussion boards, shared documents, and virtual classrooms. These enable students to collaborate on assignments, exchange viewpoints, and give feedback, enhancing their communication and team working capabilities. By means of ICT, students can interact with fellow learners and professionals from across the globe, having cross-cultural communication and international discourse. This widens their horizons towards understanding international concerns, facilitates cultural tolerance, and gets them ready to take on an active citizenship role in an increasingly globalized world.

4. Enhancing Critical Thinking and Digital Competencies: The sheer volume of information online requires the cultivation of critical thinking and digital literacy. ICT integration in Social Science education educates learners to evaluate the credibility of sources, identify biases, and integrate information from various points of view, preparing them to make informed choices. Teachers can utilize ICT to educate pupils on how to recognize and debunk misinformation, a skill that becomes more valuable in the age of the internet. Through case studies and fact-checking activities, pupils learn to engage information critically and responsibly.

5. Facilitating Professional Development Of teachers: ICT equips teachers with abundant resources such as lesson curriculum creation, and network for sharing expertise. These groups of practice reinforce ongoing learning as well as enhancing the proper inclusion of ICT into Social Science plans, interactive resources, and courses on professional development. These materials help teachers remain updated on teaching practices, embrace innovative pedagogy, and strengthen their classroom practice. Online sites facilitate teachers to access peers, collaborate on learning.

6. Alignment to Educational Policies and Frameworks: The use of ICT in Social Science education supports national education policies focusing on digital literacy and 21st-century skills. The incorporation of technology in the curriculum helps schools to contribute to larger educational goals and prepare students for upcoming challenges. ICT facilitates the integration of up-to-date current events and real-world issues into

the curriculum, enhancing Social Science education as more relevant and interesting. Students are able to examine contemporary social phenomena, and this promotes a closer link between academic content and social contexts.

7. Meeting Challenges and Facilitating Effective Implementation: Successful ICT integration demands proper infrastructure, such as stable internet connection and newer hardware. Infrastructure investment is critical to provide all students and teachers with access to technological innovation. Regular training is necessary for teachers to incorporate ICT meaningfully into the curriculum. Professional development training must address technical as well as pedagogical methods to realize the full potential of ICT to advance Social Science education.

8. Preparing Students for the Future: ICT encourages independent learning by offering students the tools to access and explore material in their own time. This independence develops a culture of lifelong learning that is central to a constantly changing global economy.ICT proficiency is key to success in today's workforce. Through the integration of technology into Social Science studies, schools provide students with the digital skills needed for diverse careers and civic life. The incorporation of ICT in Social Science education is not an add-on but a requirement in gearing students for the intricacies of the contemporary world. Through its ability to reshape pedagogical practices, ensuring inclusivity, encouraging collaboration, and enhancing critical skills, ICT is a catalyst for academic excellence and social development.

1.3.3 ICT Initiatives by Government of India

The Government of India has initiated a large number of ICT (Information and Communication Technology) initiatives in its vision to digitally empower the society and create a knowledge-based economy.

- The **Digital India Mission** was initiated in 2015. It is the flagship initiative of creating a digitally empowered society and a knowledge-based economy by bridging the digital divide between urban and rural spaces. Its core mission is to provide digital infrastructure as a utility to every citizen, offer governance and services on demand, and digitally empower every Indian. The goals are to ensure

high-speed internet access in all Gram Panchayats, encourage digital literacy, provide digital identity through Aadhaar, and make government departments and services electronically integrated. It also aims to establish participative, transparent, and responsive government.

- **National Knowledge Network (NKN)** aims to interconnect all the educational and research institutions in India through a high-speed broadband network to facilitate knowledge collaboration and innovation. Its goal is to allow free flow of ideas and resources between leading institutions such as IITs, IIMs, and universities to facilitate high-end research and education.
- The **National Mission on Education through ICT (NMEICT)** is an initiative of government of India under the Ministry of Education (MoE). It focuses on utilizing ICT to improve the quality of education, enhance access to knowledge, and train students and teachers in digital resources. The mission is to enable equal access to quality educational material throughout the nation. Its main initiatives are SWAYAM (online courses and MOOCs), SWAYAM PRABHA (DTH TV channels for educational programs), ePathshala (for electronic textbooks), Virtual Labs (for practicing experiments virtually), and the National Digital Library of India (NDLI) which has a huge repository of education resources. The role of e-NMEICT is to close the digital divide in education and make no learner left behind due to shortage of resources.
- The Indian government initiated the **PM eVIDYA** programme to provide unbroken learning during covid-19 pandemic. Its aim is to bring all digital learning programmes under one platform and its goals are to provide quality e-content on various platforms such as TV, radio, and online websites. Central components are DIKSHA (digital learning platform with interactive content, training, and textbook-linked QR code), One Class One Channel (special TV channels from Class 1 through Class 12), and radio-based content for far-flung students. The target is inclusive education, particularly among students who do not have adequate access to digital devices.
- **DIKSHA** specifically wants to help the teachers and the students through access to high-quality, curriculum-following content available in different languages. It further acts as the national repository of teacher training. The idea here is to

systematize the teaching process along with ensuring greater quality of it and equally ensuring quality learning for all the students.

- **The UMANG (Unified Mobile Application for New-Age Governance)** program is designed to provide a single platform for citizens to access different government services through smartphones. Its objective is to enhance transparency, minimize paperwork, and improve service delivery in areas such as education, health, agriculture, finance, and others.
- **Common Services Centres (CSCs)** was established under the Digital India initiative. It acts as access points for the delivery of basic public utility services, social welfare programs, and banking services in rural and remote places. They aim to make government services reach the doorstep of citizens and advance digital inclusion at the grassroots.
- **BharatNet Project** was initiated to enhance rural digital connectivity. It aims to connect all 2.5 lakh Gram Panchayats through high-speed Fiber optics/ optical fiber internet. Its mission is to provide last-mile connectivity and enhance digital accessibility in villages for applications such as e-health, e-education, and e-governance.
- **The National Digital Literacy Mission (NDLM)** and **PMGDISHA (Pradhan Mantri Gramin Digital Saksharta Abhiyan)** focus on making one member of each household digitally literate, particularly the rural and underprivileged sections. The mission is to empower the citizens by equipping them with basic digital skills so that they can use a computer and avail internet-based services on their own. The final objective is to bring about digital inclusion and economic empowerment through digital literacy.

These efforts together seek to make India a digitally empowered and inclusive country, enhance delivery of services, ensure transparency, and enable citizens through ICT in every aspect of life such as governance, education, health, and financial services.

1.4.0 Academic Achievement

Dictionary of Psychology by Chaplin (1959) defines educational or Academic Achievement as specified level of attainment or proficiency in academic work as evaluated by the teachers, by standardized tests or by a combination of both. Good (1959) defines Academic Achievement as the knowledge attained or skill developed in the school subjects, usually designated by test scores or marks assigned by the teachers.

Academic achievement refers to the level of success a student attains in educational activities, often measured through grades, test scores, completion of coursework, and overall academic performance. It is a key indicator of a learner's understanding, skill development, and ability to apply knowledge across various subjects.

Historically, the concept of academic achievement has evolved from rudimentary measures tied to basic literacy and religious texts in ancient civilizations to highly standardized and multifaceted assessments in modern schooling systems. Early educational paradigms often focused on memorization and the mastery of specific vocational or philosophical texts, with "achievement" broadly understood as the successful transmission of knowledge across generations, often within apprenticeships or religious institutions. The advent of formal schooling, particularly from the 19th century onwards with the rise of industrialization and mass education, necessitated more standardized methods of evaluation. This led to the development of grading systems, examinations, and curricula, transforming academic achievement into a quantifiable outcome that could be compared across students and institutions. The 20th century further refined these measures with the introduction of standardized tests, IQ assessments, and more sophisticated psychometric tools, attempting to objectively measure learning outcomes and cognitive abilities, pushing the field towards a more data-driven understanding of student progress.

The importance of academic achievement lies in its role as a gateway to higher education, employment opportunities, and personal development. It serves as a benchmark for teachers to assess instructional effectiveness and for policymakers to evaluate educational systems. For students, academic success boosts self-confidence, opens doors to scholarships and careers, and contributes to social mobility. At a broader level, nations rely on the academic performance of their citizens to drive innovation, economic growth, and social well-being. Academic achievement fosters critical thinking, problem-solving, and communication skills that are essential in today's knowledge-based society. In a rapidly changing global context, students who achieve academically are better prepared to face the challenges of the future and contribute meaningfully to society.

1.5.0 Rationale of the Study

In recent years, the educational landscape has transformed with the advent of digital technology. Schools are increasingly adopting ICT to enhance student engagement,

facilitate learning, and improve academic performance. Despite the potential of ICT to revolutionize teaching and learning, its implementation in Social Science classrooms remains inconsistent. Many teachers either lack adequate training or are reluctant to adapt due to systemic challenges. At the same time, students today are digital natives who respond better to visual, interactive, and media-rich content. This discrepancy creates a gap between learners' needs and instructional practices. This study aims to address that gap by empirically evaluating the effect of ICT-based instruction on academic achievement in Social Science. The outcomes are expected to provide evidence-based recommendations for educators.

1.6.0 Statement of the Problem

The statement of the problem is “A study of the effect of ICT on the academic achievement of class 6 students in social science.”

1.7.0 Objective of the Study

1) To assess the pre-test academic achievement levels in Social Science of Class 6 students in both control and experimental groups.

2) To implement ICT-based instructional strategies for the experimental group while teaching Social Science.

3) To compare the post-test academic achievement levels in Social Science between the control group (taught using traditional methods) and the experimental group (taught using ICT tools).

4) To determine the effectiveness of ICT-integrated instruction in enhancing academic achievement in Social Science among Class 6 students.

5) To analyse the difference in academic gains (post-test minus pre-test scores) between the control and experimental groups.

1.8.0 Research Question

1) Is there any significant difference in the pre-test academic achievement scores in Social Science between the control and experimental groups?

2) What is the effect of ICT-based instruction on the academic achievement of Class 6 students in Social Science?

3) Is there any significant difference in post-test academic achievement scores between students taught using traditional methods and those taught using ICT tools?

4) Do the students in the experimental group show greater academic improvement (gain scores) in Social Science compared to the control group?

1.9.0 Hypothesis

The hypothesis will be tested at 0.05

- H_0 1: There is no significant difference in the mean score of pre-test academic achievement scores in Social Science between the control (taught with traditional method) and experimental group (taught with ICT).
- H_0 2: There is no significant difference between the mean score of academic achievement in social science of pre-test control group and post-test control group (taught with traditional method).
- H_0 3: There is no significant difference between the mean score of academic achievement in social science of pre-test and post-test experimental group (taught with ICT).
- H_0 4: There is no significant difference in the mean score of post-test academic achievement scores in Social Science between the control (taught with traditional method) and experimental groups (taught with ICT).
- H_0 5: There is no significant improvement in academic achievement (gain scores) of Class 6 students taught using ICT-based methods compared to those taught using traditional methods.

1.10.0 Delimitation of the Study

This study is delimited to Class 6 students studying Social Science in DMS Bhopal (CBSE-affiliated) in Bhopal district of Madhya Pradesh. The sample size is limited i.e. 49, and the duration of the intervention was short i.e. 1 week. The study is restricted to measuring academic achievement through an achievement test and does not evaluate other aspects such as attitude or retention of learning.