CHAPTER 5

FINDINGS, CONCLUSION AND SUGGESTIONS

5.1.0 Introduction

This chapter presents the major findings based on data analysis, draws conclusions aligned with the objectives and hypotheses, and provides suggestions for future practice and research. It also highlights the educational implications of the study**.**

5.2.0 Major Research Findings

Based on statistical analysis and interpretation, the following findings were observed:

I. There was no significant difference between the pre-test scores of the control and experimental groups, confirming that both groups were academically equivalent before the intervention.

II. Both group (control and experimental) achieved statistically significant improvement in academic achievement in social science from pre-test to post-test.

III. Although the control group also showed a statistically significant improvement from pre-test to post-test, the gain was much lower than that of the experimental group.

IV. There was no significant difference between the post-test scores of the control and experimental groups. Experimental group failed to yield statistically significant academic achievement in post-test at significance level of 0.05. however experimental group performed better than control group.

V. There was no significant difference between the gain scores of the control and experimental groups at 0.05 significance level..

5.3.0 Educational Implication

5.3.1 for teachers

The present study explored the impact of Information and Communication Technology (ICT) on the academic achievement of Class 6 students in Social Science. While the data analysis revealed no statistically significant difference in achievement between the ICT-integrated group and the traditional instruction group, both groups showed notable improvement from pre-test to post-test. This indicates that, although ICT did not significantly outperform traditional methods in this specific setting, it remains a powerful pedagogical tool when used strategically. The study offers several key implications for classroom teachers, especially those teaching Social Science at the middle school level.

I. Teachers should recognize ICT not as a replacement for traditional instruction but as a complementary resource that can enrich the learning environment. Digital tools can offer visual and interactive representations of historical events, political structures, and geographical features, making abstract concepts more tangible and accessible for young learners.

II. ICT aligns well with constructivist teaching philosophies, which emphasize active learning, exploration, and knowledge construction. Teachers can use technology to promote collaborative projects, inquiry-based learning, and experiential tasks that encourage students to engage deeply with content rather than passively receive information.

III. One of the strongest implications is the necessity of comprehensive teacher training. The effectiveness of ICT in education depends not only on the availability of tools but also on how competently and creatively teachers use them. Professional development should focus on digital pedagogy, lesson planning with ICT, and classroom management in tech-integrated environments.

IV. Teachers must ensure that ICT resources used in the classroom are directly aligned with the prescribed curriculum. Arbitrary use of technology can dilute learning objectives. Carefully selected multimedia content, educational games, and simulations should reinforce specific Social Science concepts as outlined in the Class 6 syllabus.

V. Teachers should blend ICT with traditional activities such as debates, map-making, and textbook exercises to maintain cognitive balance and cater to varied learning preferences. ICT offers new possibilities for assessment through digital quizzes, online polls, interactive assignments, and instant feedback. These tools can help teachers monitor progress in real-time and adapt instruction based on individual student needs.

VI. ICT can play a transformative role in inclusive education. For instance, visual presentations can support students with learning difficulties, and self-paced learning platforms can benefit both advanced and struggling learners. Teachers must be mindful to provide equal access and assistance to students from diverse backgrounds and with varying levels of digital literacy.

VII. Teachers can use ICT to instill values of digital citizenship, information literacy, and ethical technology use.

5.3.2 For learners

The findings of this study highlight important implications for students as the primary beneficiaries of ICT integration in education. Even though the research did not establish a statistically significant advantage of ICT-based instruction over traditional methods in terms of academic achievement, it clearly showed that both methods led to significant

learning gains. This reinforces the idea that ICT, when used thoughtfully, has the potential to enhance students' learning experiences, skills, and engagement levels, particularly in Social Science at the middle school level.

I. One of the most direct implications of ICT integration for learners is increased engagement. Digital tools such as animations, interactive maps, videos, and quizzes make Social Science topics livelier and more relatable. This can help reduce monotony and increase attention spans among Class 6 students, who often find conventional textbook learning less stimulating.

II. ICT tools offer students opportunities to learn at their own pace. Platforms that allow students to pause, repeat, or explore content outside of classroom hours support autonomous learning habits. This is particularly useful in Social Science, where students may need time to process complex historical or geographical concepts.

III. Regular exposure to ICT in the classroom naturally fosters digital literacy—a key 21st-century skill. Learners begin to develop competence in navigating educational software, interpreting online content, and using technology for research and presentations, which are essential for higher education and future employment.

IV. ICT enables experiential learning by simulating real-world scenarios and facilitating role-plays, virtual tours, and decision-making games. These experiences deepen students' understanding by placing them in realistic, context-based situations, which is especially effective in subjects like history, civics, and geography.

V. Learners benefit greatly from instant feedback provided by many ICT platforms. This helps them identify mistakes, correct misconceptions, and feel a sense of accomplishment through gamified elements such as badges or progress bars. Such features motivate students to improve continuously.

VI. Many ICT tools promote collaborative learning, where students work together on projects, online forums, or presentations. This cultivates important interpersonal skills like communication, teamwork, and peer learning, which are valuable beyond academics.

VII. Interactive ICT modules that include problem-solving tasks, simulations, and analytical questions help learners build critical thinking skills. This is particularly

important in Social Science education, where students must analyze events, understand cause-effect relationships, and evaluate social systems.

VIII. ICT can help bridge learning gaps by providing equal access to quality resources. Learners from underprivileged backgrounds or remote areas can access multimedia content and interactive lessons, thereby reducing disparities in educational opportunities.

5.4.0 Conclusion of the Study

The present study aimed to investigate the effect of Information and Communication Technology (ICT) on the academic achievement of Class 6 students in Social Science. Two groups were studied—an experimental group taught through ICT-integrated instructional strategies and a control group taught through conventional methods. Pre-test and post-test scores were collected and analyzed to determine whether ICT had a significant impact on learning outcomes.

The findings revealed that both instructional approaches led to statistically significant improvements in student performance. However, the comparison between the post-test scores and gain scores of the experimental and control groups indicated no statistically significant difference. This suggests that, within the scope and duration of the study, ICT did not provide a superior advantage over traditional teaching methods in terms of measurable academic achievement.

Despite this, qualitative observations and broader educational literature support the idea that ICT offers several pedagogical benefits, including increased student engagement, flexibility in learning, and opportunities for differentiated instruction. The use of ICT in Social Science may not immediately translate into higher test scores, but it does contribute positively to the development of 21st-century skills such as digital literacy, collaboration, and critical thinking.

Therefore, the study concludes that while ICT may not dramatically outperform traditional methods in short-term academic assessments, it holds strong potential as a transformative educational tool. When implemented thoughtfully and systematically, ICT can enhance both the teaching and learning experience, especially in content-rich subjects like Social Science.

5.5.0 Limitation of the Study

While the present study contributes valuable insights into the role of ICT in enhancing academic achievement in Social Science at the Class 6 level, certain limitations must be acknowledged:

I. The study was conducted with a relatively small group of students from a specific grade and locality. As such, the findings may not be generalizable to all educational settings, schools, or regions.

II. The ICT-based instructional intervention was implemented over a limited time frame. A longer duration might have yielded more pronounced differences in academic performance or other qualitative benefits.

III. The ICT-based instruction was implemented in last period, which may significantly hamper the result of the study.

IV. The study focused solely on Social Science. The effect of ICT may differ across subjects, especially in domains like Science, Mathematics, or Language where interactivity and visualization might play a different role.

V. The research primarily measured academic achievement through test scores. It did not account for other important learning outcomes such as student attitudes, retention, conceptual understanding, or creativity.

VI. Some students may have had prior exposure to technology at home or in school, while some were untouched to technology. potentially influencing their comfort level and learning outcomes during the intervention.

5.6.0 Suggestions for Further Research

To build upon the findings of this study and address its limitations, the following areas are recommended for future research:

I. Future research should consider conducting long-term studies to observe the sustained impact of ICT on learning outcomes and skill development over a full academic year or more.

II. Comparative studies across different subjects can help determine whether ICT has varying degrees of effectiveness depending on the nature of the content being taught.

III. Further research should focus on Including students from different regions, socio-economic backgrounds, and educational systems. That would enhance the generalizability of findings and offer broader perspectives.

IV. In addition to test scores, future studies should include qualitative tools such as interviews, observations, and student feedback to gain deeper insights into learning experiences and attitudes toward ICT.

V. Studies can be designed to test the effectiveness of particular ICT tools (e.g., educational apps, simulations, gamified platforms) to determine which digital resources have the highest impact on specific learning outcomes.