



# Integration of Information and Communication Technology [ICT] in Accounting Classroom in Chris Hani West District, Eastern Cape Province

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## Abstract

The comprehensive study titled “Integration of Information and Communication Technology (ICT) in Accounting Classrooms in the Chris Hani West District, Eastern Cape Province” is designed to investigate the effects and implications of integrating information and communication technology within accounting education. Specifically, it focuses on classrooms situated in the Chris Hani District, aiming to identify both the benefits and challenges that arise from this technological incorporation. To achieve these objectives, the research employs a qualitative methodology, which provides an in-depth exploration of the subject matter. Data collection was carried out through semi-structured interviews, which offered a flexible framework to engage with participants on nuanced topics related to ICT in education. A total of nine participants were involved in the study, comprising three schoolteachers and six learners from diverse schools within the district. This hybrid approach of involving both educators and students allows for a holistic understanding of the challenges and advantages perceived from both perspectives. The interviews and the transcripts were meticulously analysed using thematic coding techniques. This analysis aimed to pinpoint recurring patterns, themes, and insights that emerged from the discussions. The framework allowed the researchers to synthesize qualitative data effectively, highlighting key areas of consensus and contention among participants regarding the implementation of ICT in their accounting classes.

The primary objectives of the study are to assess and analyse the specific challenges teachers encounter when integrating ICT into their teaching practices, as well as the obstacles students face in adapting to these technological tools. By closely examining these issues, the research endeavours to shed light on how the infusion of technology can enhance the educational experience within accounting classrooms in the Chris Hani District. Moreover, the study recognises the potential of information and communication technology to transform the teaching and learning landscape in accounting education. The effective integration of ICT is anticipated to not only streamline instructional methods but also empower accounting teachers to execute accurate calculations and manage adjustments with increased precision. Minimising errors associated with traditional calculation methods and enhancing problem-solving capabilities, the utilization of such technology holds promise for improving overall academic outcomes in accounting courses. Through this research, valuable insights can be gleaned to inform educators and policymakers aimed at promoting effective ICT integration in the education sector.

## Keywords

Integration, ICT, Accounting classroom, Academic performance, Learner participation

## INTRODUCTION

In recent years, the field of accounting has witnessed significant transformations driven by advancements in Information and Communication Technology (ICT), because of the changing nature of the accounting and the growing need for professionals who can use digital tools and resources, it is now essential to incorporate ICT tools and resources into accounting education. With an emphasis on its application and use to improve teaching and learning, this introduction seeks to examine the function of ICT in accounting classrooms (Wanjau 2023). ICT includes a wide range of tools and applications that make information gathering, storing, processing, and sharing easier. ICT provides a variety of opportunities for learners to become more involved, acquire practical skills applicable to the modern workplace, and gain a deeper knowledge of accounting ideas in the context of accounting education. Several opportunities for interactive learning, real-world application, and cooperative problem-solving are made possible using ICT in the classroom, from accounting software and simulations to online resources and collaboration platforms (Hermawan et al., 2022).

Using accounting software is one of the main ways ICT is used into accounting education (Ghatrifi et al., 2023). Learners gain practical experience utilizing industry-standard accounting tools to generate financial statements, record transactions, and analyse business data through platforms like QuickBooks, Sage, and Xero. Learners acquire useful abilities that they can use in their future jobs in accounting and similar fields by interacting with these software programs (Narbita et al., 2017). Additionally, by using simulated business scenarios, learners can apply accounting principles in a dynamic learning environment provided by simulations. Through the replication of real-world problems and transactions, these simulations help learners make defensible choices, evaluate results, and comprehend the ramifications of their choices. Through risk-free environments, simulations help learners hone their critical thinking and problem-solving abilities in a variety of subjects, including managerial accounting, budgeting, and financial statement analysis (Pratiwi et al., 2018). ICT makes it easier for learners to have a clear understanding of accounting and a clear picture of accounting topics. also, ICT demonstrates the accounting calculations clearly to learners and makes the class effective for all learners (Palepu, Healy, Wright, Bradbury, and Coulton, 2020).

Information and communication technology (ICT) in accounting classes has grown in popularity and significance (Gauldi et al., 2020). The availability of Internet materials provides an even more enhanced accounting classroom experience. Supplementary materials that give real-life case studies, extra explanations, and classroom reinforcement can be found in e-books, articles, films, and interactive tutorials. With these readily available materials, learners can enhance their comprehension of accounting principles at their own pace, regardless of their learning style or inclination. Furthermore, the introduction of online learning environments and virtual classrooms has completely changed how accounting education is delivered. Instructors can conduct live lectures, lead discussions, and give exams to learners at a distance using video conferencing, screen sharing, and interactive whiteboards. Geographical constraints are removed via virtual classrooms, which gives learners all over the world access to high quality accounting education while encouraging peer collaboration and connection.

ICT integration in accounting classrooms is revolutionising the field and improving learner learning through a paradigm change in accounting education. Teachers may give learners the knowledge, skills, and competencies they need to succeed in the digital age by utilizing accounting software, simulations, online resources, and virtual classrooms (Stumke, 2021). ICT adoption in the classroom is essential to educate the next generation of accounting professionals for success in a world that is changing quickly, as the accounting profession continues to change. Although there are obstacles to overcome, there are more advantages than disadvantages to ICT integration in accounting education. Accounting instructors help the accounting profession grow in the digital era and better prepare learners for success in the workplace by embracing ICT. This study intends to address the effects of integrating Information and Communication Technology by the accounting Teachers in the classroom for the schools that are in the Eastern Cape Province at Chris Hani district.

## LITERATURE REVIEW

### Impact of Using ICT in Teaching and Learning of Accounting

ICT enables learners to develop practical skills and gain real-world experience in accounting. According to Wang and Sun (2018), the use of accounting software and simulations allows learners to simulate real-world accounting processes, such as financial statement preparation and data analysis. This hands-on experience enhances learners' technical skills and prepares them for the demands of the professional accounting environment.

Numerous studies highlight the positive impact of ICT on enhancing the learning experience in accounting education. For instance, according to Alali and Youssef (2018), the use of multimedia resources and interactive software improves learner engagement and comprehension of accounting concepts. Similarly, Chen and Yang (2019) found that learners exposed to ICT-based learning materials demonstrated higher levels of motivation and satisfaction with their learning experience compared to those in traditional classrooms. Research suggests that ICT facilitates improved understanding and retention of accounting knowledge among learners. A study by Kim and Shin (2020) revealed that learners who utilized accounting software and simulation programs exhibited better retention of accounting principles and demonstrated greater proficiency in applying theoretical concepts to practical scenarios. Additionally, Liu et al. (2017)

found that interactive learning activities enabled by ICT promoted deeper learning and long-term knowledge retention among accounting learners. From enhancing the learning experience and improving understanding to facilitating real-world application and fostering collaborative learning environments, ICT plays a crucial role in shaping the future of accounting education. As technology continues to evolve, further research is needed to explore emerging trends and best practices in leveraging ICT for effective accounting instruction. ICT offers flexibility and accessibility in accounting education, catering to diverse learning preferences and lifestyles. Studies by Zhang and Liu (2021) highlight the role of online learning platforms and virtual classrooms in providing flexible learning opportunities, allowing learners to access course materials and lectures at their convenience. This flexibility accommodates the needs of non-traditional learners and those with busy schedules, ultimately improving overall access to education. ICT offers flexibility and accessibility in accounting education, catering to diverse learning preferences and lifestyles. Studies by Zhang and Liu (2021) highlight the role of online learning platforms and virtual classrooms in providing flexible learning opportunities, allowing learners to access course materials and lectures at their convenience. This flexibility accommodates the needs of non-traditional learners and those with busy schedules, ultimately improving overall access to education.

One of the significant benefits of ICT in accounting education is its ability to simulate real world accounting scenarios. Studies by Chen et al. (2021) and Zheng et al. (2018) revealed that accounting simulations and software applications allowed learners to apply theoretical knowledge to practical situations, fostering the development of critical thinking and problem-solving skills essential for accounting professionals. ICT facilitates immediate feedback and assessment, enhancing the learning process for accounting learners. Research by Wang et al. (2020) demonstrated that automated grading systems and computerized assessments provided timely feedback to learners, enabling them to identify and address misconceptions promptly. This feedback loop contributes to a more iterative and adaptive learning approach. ICT tools, such as visualization software and interactive modules, have been shown to enhance learners' comprehension and retention of accounting knowledge. According to Li and Zhang (2018), visual representations and interactive exercises helped learners grasp abstract accounting principles more effectively. Furthermore, Hsieh and Hsu (2019) demonstrated that learners who engaged with online quizzes and self-assessment tools demonstrated higher levels of knowledge retention compared to those using traditional methods.

### **The Use and Implementation of ICT in Accounting Classroom**

The use and implementation of ICT in the accounting classroom have transformative effects on teaching and learning. Among the key benefits of integrating ICT into accounting education are enhanced learning resources, interactive learning experiences, real-world application, efficiency in teaching and administration, and collaborative learning opportunities. However, addressing challenges and advancing research in this area are essential to maximize the potential of ICT in preparing accounting learners for success in the digital age. ICT tools enable interactive and experiential learning experiences in the accounting classroom. According to Cheng and Li (2018), interactive simulations and virtual laboratories allow learners to explore complex accounting scenarios in a hands-on manner, promoting active learning and critical thinking skills. Additionally, Chen et al. (2021) reported that gamification elements, such as quizzes and competitions, increased learner motivation and participation in accounting courses. The use of online tutorials and interactive software enhanced learners' access to supplementary materials, facilitating self-directed learning. Similarly, research by Hoque and Rahman (2020) demonstrated that multimedia presentations and digital textbooks improved learners' engagement and comprehension of accounting concepts. The integration of ICT in the accounting classroom facilitates the application of theoretical knowledge to real-world scenarios. Research by Rahman et al. (2019) demonstrated that accounting software applications and case studies allowed learners to gain practical experience in financial analysis and reporting. Furthermore, Almeida et al. (2020) emphasized the importance of incorporating industry-relevant tools and technologies to prepare learners for the demands of the modern accounting profession. While the use of ICT in the accounting classroom offers numerous benefits, challenges such as access barriers, technical issues, and resistance to change need to be addressed. Future research should focus on developing effective strategies for integrating ICT into accounting curricula, addressing the digital divide, and evaluating the long-term impact of ICT on learner learning outcomes and professional development.

## **THEORETICAL FRAMEWORK**

### **Technological Pedagogical Content Knowledge (TPACK) Framework**

The integration of Information and Communication Technology (ICT) in accounting classrooms within the Chris Hani West District, Eastern Cape Province, can be effectively analysed through the Technological Pedagogical Content Knowledge (TPACK) framework. This framework emphasises the need for teachers to possess an intricate balance of technological knowledge, pedagogical skills, and content expertise (Mishra & Koehler, 2006). In this context, accounting educators need to develop a thorough understanding of accounting principles (Content Knowledge), innovative teaching methods (Pedagogical Knowledge), and the effective use of digital tools (Technological Knowledge) to enhance learning outcomes. Applying the TPACK framework, educators must integrate digital tools such as accounting software, online simulations, and interactive platforms into their teaching strategies (Shahroom & Hussin, 2018; Ceylan, 2020). For instance, using accounting software can help learners gain practical experience with real-world tools, while online simulations can provide a dynamic and engaging way to understand complex accounting concepts. These technological tools should be seamlessly incorporated into the curriculum to ensure that they complement and enhance traditional

teaching methods, thereby fostering a more interactive and effective learning environment. Moreover, professional development for teachers is crucial to achieve this integration (Scalzo, 2022). Training programs should focus on equipping educators with the necessary skills to navigate and implement these technologies in the classroom. This includes not only technical training but also pedagogical strategies that leverage technology to improve student engagement and understanding. By fostering a comprehensive TPACK approach, the Chris Hani West District can enhance the quality of accounting education and better prepare students for the technological demands of the modern accounting profession.

## **METHODOLOGY**

This study employed a qualitative research approach to collect and interpret data. According to Bhandari (2020), the qualitative strategy involves gathering and examining non-numerical data, such as a screenplay, videotape, or audio, to comprehend viewpoints, attitudes, or proficiencies. The use of the qualitative research method in this study is influenced by various theoretical constraints, focusing on understanding the effectiveness of integrating ICT in the teaching and learning of accounting. This qualitative study utilises a case study approach to explore how ICT can be effectively integrated into the teaching and learning of accounting to improve the outcomes in the Chris Hani East District. The case study method allows for an in-depth examination of specific instances within their real-life context, providing rich insights into the complexities of integrating ICT in accounting classes (Grossman, 2024). In this study, semi-structured interviews were used as a primary tool for data collection to explore the use and implementation of Information and Communication Technology (ICT) in accounting classrooms in the Chris Hani West District, Eastern Cape. The semi structured interviews provided an in-depth understanding of participants' experiences, perspectives, and the contextual factors that influenced the integration of ICT in these educational settings. Through this method, valuable insights were obtained from accounting teachers, learners, and administrators, offering a rich narrative about the challenges and benefits associated with ICT in the classroom. The interviews were conducted using a semi-structured format, allowing for flexibility in the conversation while maintaining focus on key themes related to ICT implementation (Park et al, 2018). This approach is particularly useful in gaining detailed information about the participants' personal experiences and perceptions. The semi-structured nature of the interviews allowed the researcher to probe deeper into specific areas of interest, such as the type of technology used, the frequency of its use, and the perceived effectiveness of ICT in enhancing learner learning (Purnell et al, 2019).

In this study, a smaller sample group was employed to ensure efficiency in data collection while maintaining a manageable scope. Due to time constraints, it was not feasible to interview the entire school population. Instead, the sample included only learners and teachers, specifically selected based on their involvement with the use and implementation of ICT in accounting classrooms. This approach was chosen to provide focused insights on the perspectives of both Teachers and learners without overwhelming the study with a larger, more time-consuming sample. By narrowing the participants, the research gathered meaningful data while ensuring the process remained timely and practical. The researcher worked with a small, focused sample consisting of three Teachers and six learners from different schools in the Chris Hani West District, Eastern Cape Province. The final sample comprised nine participants, selected to provide diverse perspectives on the use and implementation of ICT in accounting classrooms. These participants were carefully chosen to represent the educational process's teaching and learning sides. Each of the participants, including both teachers and learners, was interviewed to gather in-depth insights on their experiences and perceptions regarding the integration of ICT in accounting education. The inclusion of participants from different schools allowed for a broader understanding of the variations in ICT usage across the district, providing valuable data for the study. The data for this study was gathered through interviews conducted with both teachers and learners. The data analysis process in this study involved interpreting and organizing the qualitative data gathered from the interviews with teachers and learners by Selwyn (2016). A thematic analysis approach was employed to identify patterns and recurring themes in the responses. This method allowed the researcher to uncover key insights related to the use and implementation of ICT in accounting classrooms. The analysis began with transcribing the interview recordings, ensuring that every detail of the conversations was accurately captured. The transcriptions were then coded, where specific segments of the data were labelled based on recurring ideas, keywords, or concepts. These codes helped in organizing the data and breaking it down into manageable units for further analysis by Sign (2022). the researcher categorized the codes into broader themes that represented the main findings of the study. These themes reflected key areas such as the perceived effectiveness of ICT in enhancing accounting education, the challenges related to ICT infrastructure and training, and the differing levels of ICT integration across the schools. For example, one common theme that emerged was the impact of ICT on learner engagement, where both teachers and learners highlighted how technology made learning more interactive and accessible.

### **Data presentation and analysis**

The coding of participants, based on interviews with teachers and learners, provide significant insights into the use and implementation of Information and Communication Technology (ICT) in accounting classrooms in the Chris Hani West District, Eastern Cape Province.

Learners are coded as: L1 – L6

Teachers coded as: T1 – T3



The school learners responded to the interview questions, providing valuable insights into their experiences with ICT in accounting classrooms. Their responses highlighted both the challenges they faced in language comprehension and technology's supportive role in enhancing their understanding of accounting concepts.

L1 answered the question thus:

**How do you feel about using ICT tools (e.g., accounting software, online resources) in your accounting classes?**

- ✓ *I feel that using ICT tools in my accounting classes makes learning more engaging and easier. They help me understand complex concepts better and allow me to access additional resources outside of class, which is helpful.*

**Can you describe a specific instance where ICT helped you understand an accounting concept better?**

- ✓ *Yes, there was a time when we used accounting software to create financial statements. The software provided step-by-step guidance, and I could see how each transaction affected the overall statement in real time. This hands-on experience made it much clearer for me to understand concepts like debits and credits, which I had struggled with before.*

**Are there any ICT tools or applications you wish were used more frequently in your accounting classes? Why?**

- ✓ *Yes, I wish we could use more interactive simulation tools that mimic real-life accounting scenarios. These applications would allow us to practice decision making in a safe environment and see the consequences of our choices. I believe this kind of hands-on experience would help reinforce what we learn in class and make the concepts more relatable and easier to grasp.*

L2 answered the question thus:

**Have you faced any challenges or difficulties while using ICT tools in your accounting studies? If so, can you explain?**

- ✓ *Yes, I have faced challenges while using ICT tools in my accounting studies. Sometimes, the software can be confusing, especially when I'm not familiar with certain features. Additionally, there have been instances when the internet connection was slow or unstable, which made it difficult to access online resources during class. These issues sometimes disrupt my learning experience and make it harder to keep up with lessons.*

**What recommendations would you make to enhance the use of ICT in your accounting education?**

- ✓ *I recommend providing more training sessions for both teachers and learners to better understand ICT tools. Additionally, ensuring reliable internet access and updated software would significantly improve our learning experience.*

**How has using ICT changed your approach to studying accounting?**

- ✓ *Using ICT has made me more independent in my studies. I can explore additional resources online, watch tutorial videos, and practice with software at home. It encourages me to take initiative and learn at my own pace.*

L3 answered the question thus:

**Do you think ICT helps you collaborate better with your classmates? Why or why not?**

- ✓ *Yes, I think ICT helps us collaborate more effectively. We can easily share documents, work on group projects using online platforms, and communicate through chat applications. This makes group work more efficient and allows everyone to contribute, even outside of school.*

**What specific features of ICT tools do you find most helpful in your accounting studies?**

- ✓ *I find features like tutorials, automated feedback, and the ability to track my progress most helpful. They guide me through assignments and help me identify areas where I need improvement, making my study sessions more productive.*

**What is your overall impression of how ICT has changed the learning environment in your accounting classes?**

- ✓ *My overall impression is very positive. ICT has transformed our learning environment into a more dynamic and interactive space. It encourages collaboration and provides various resources that make learning accounting less intimidating and more enjoyable.*

The school Teachers responded to the interview questions given to them and their responses are presented.

T1 answered the question thus:

**What types of ICT tools do you use in your accounting classroom?**

- ✓ *In my accounting classroom, we use various ICT tools, including accounting software like QuickBooks and Sage to practice real-world financial tasks. We also utilize online platforms such as Google Classroom for assignments and discussions. Additionally, interactive presentation tools like PowerPoint and educational apps like Kahoot! for quizzes make learning more engaging.*

**How do you integrate ICT tools into your accounting lessons?**

- ✓ *I integrate ICT tools into my accounting lessons by using accounting software for hands-on activities where we can practice creating financial statements and managing budgets.*

**Can you provide an example of a lesson where ICT significantly enhanced learner learning in accounting?**

- ✓ *One lesson that stands out involved teaching learners how to prepare financial statements. I used accounting software, specifically QuickBooks, to demonstrate the entire process in real time. Learners followed along on their own devices, creating a simulated company and entering transactions.*

**What challenges have you encountered when using ICT in your accounting classes?**

- ✓ *I have encountered several challenges while using ICT in my accounting classes. One major issue is the lack of reliable internet access in the classroom, which sometimes disrupts lessons and prevents learners from fully engaging with online resources.*

**In what ways has ICT changed your teaching methods or approach to accounting education?**

- ✓ *ICT has significantly transformed my teaching methods and approach to accounting education in several ways. Firstly, I now prioritize a more interactive and learner-centred learning environment. Instead of solely lecturing, I incorporate digital tools that encourage learner participation, such as live polls and quizzes through Kahoot! or Google Forms.*

T2 answered the question.

**Do you believe ICT prepares learners better for their future careers in accounting? Why?**

- ✓ *Yes, because it equips learners with essential skills and familiarity with the tools they will use in the workplace.*

**How do you assess learner understanding using ICT?**

- ✓ *I use online quizzes, simulations, and project-based assessments to evaluate learner understanding in a practical context.*

**What training do you think teachers need to use ICT effectively?**

- ✓ *Teachers need ongoing training in new technologies, software updates, and best practices for integrating ICT into their lessons.*

**How do you ensure all learners can effectively use ICT tools?**

- ✓ *I provide additional support and resources for learners who struggle, ensuring that everyone gets the help they need to succeed.*

**What improvements would you suggest for better ICT integration in accounting education?**

- ✓ *I suggest improving school infrastructure, providing more professional development, and ensuring access to updated software for all learners.*

T3 answered the questions as follows:

**In your opinion, what are the key benefits of using ICT in accounting education?**

- ✓ *The key benefits of using ICT in accounting education include enhanced engagement and interactivity, improved accessibility to resources, and the ability to simulate real-world scenarios. ICT also allows for immediate feedback, which is crucial for learner learning and helps them understand concepts more deeply.*

**How do you manage the balance between traditional teaching methods and ICT integration in your lessons?**

- ✓ *I manage this balance by incorporating ICT where it adds the most value, such as during practical exercises or when explaining complex concepts. I still use traditional methods for foundational knowledge, but I blend them with technology to create a more dynamic learning environment. For example, I might explain a concept using a lecture and then follow it up with an interactive session using accounting software.*

**What strategies do you use to evaluate the effectiveness of ICT tools in your accounting teaching?**

- ✓ *I evaluate the effectiveness of ICT tools by collecting learner feedback through surveys and discussions, analyzing their performance on assessments, and observing their engagement levels during lessons. I also reflect on my own teaching experiences and adapt my methods based on what works best for my learners.*

**Have you observed any differences in learning outcomes since implementing ICT in your accounting classes?**

- ✓ *Yes, I have observed improved learning outcomes since implementing ICT. Learners demonstrate a better understanding of complex concepts and are more willing to participate in class discussions. Their grades have improved, particularly in practical assignments where they apply what they've learned using ICT tools.*

**How do you ensure that learners are effectively using ICT tools to enhance their learning, rather than becoming distracted?**

- ✓ *To ensure that learners effectively use ICT tools, I set clear expectations and guidelines for their use during class. I also monitor their progress and provide structured activities that keep them focused. Incorporating engaging tasks that require active participation helps minimize distractions and encourages productive use of technology.*

## DISCUSSION OF FINDINGS

The Integration of Information and Communication Technology (ICT) in accounting classrooms has gained significant attention due to its potential to enhance teaching and learning processes (Smith et al., 2019). This discussion synthesizes findings from interviews with teachers and learners regarding their experiences and perceptions of ICT in accounting education, specifically within the context of the Chris Hani West District in the Eastern Cape Province.

One of the most notable findings from the study is the substantial increase in learner engagement attributed to the use of ICT tools. Teachers reported integrating accounting software, such as QuickBooks and Sage, into lessons significantly transformed traditional teaching methods. These tools facilitated a more interactive and practical learning environment, where learners could engage in real-world accounting scenarios (Taylor, 2021). Educators noted that hands-on experience with these technologies helped demystify complex concepts, making them more accessible to learners. Learners echoed this sentiment, stating that the interactive nature of ICT tools, including online resources and multimedia presentations, greatly improved their understanding of accounting principles. The ability to visualize financial processes through software simulations allowed learners to grasp concepts such as budgeting and financial reporting more effectively (Uden, 2017). Additionally, the immediate feedback provided by online quizzes and assignments facilitated a deeper understanding of their strengths and areas for improvement, thereby enhancing overall learning outcomes.

The findings also highlight the critical role of ICT in bridging the gap between theoretical knowledge and practical application in accounting education. Traditional teaching methods often focus on theoretical aspects, which may leave learners unprepared for real-world applications (Wheeler, 2020). However, the incorporation of ICT tools enabled teachers to create authentic learning experiences. For example, one teacher described a lesson where learners simulated managing the finances of a virtual company using accounting software. This approach not only enhanced their understanding of financial processes but also developed essential skills required in the accounting profession.

The use of online resources and collaborative platforms, such as Google Classroom, has facilitated group projects and discussions, encouraging learners to work together and apply their knowledge in practical settings. This collaborative learning approach fosters critical thinking and problem-solving skills, which are essential in the field of accounting. However, the study also revealed several challenges associated with the implementation of information and communication technology (ICT) in accounting classrooms. One significant issue is the disparity in learners' technological proficiency. Teachers noted that not all students enter the classroom with the same level of comfort and familiarity with ICT tools, leading to varied engagement levels. This digital divide necessitates additional support for some learners, which can slow down the overall pace of instruction.

Furthermore, infrastructural limitations, such as inconsistent internet access and inadequate access to devices, pose significant challenges (Xu, 2016). Teachers reported that these limitations sometimes hindered their ability to fully integrate ICT into their lessons. For example, when technical issues arose, valuable class time was lost, detracting from planned learning activities. To address these challenges, teachers emphasized the need for ongoing training and support for both learners and educators in effectively using ICT tools. Professional development emerged as a crucial factor in the successful implementation of ICT in accounting education. Teachers expressed a need for continuous training to stay updated on emerging technologies and pedagogical strategies. Many teachers acknowledged that while they were enthusiastic about integrating ICT, they required guidance on best practices and effective methods for incorporating these tools into their teaching (Zhang, 2021).

Providing teachers with opportunities to engage in collaborative professional development sessions focused on ICT integration could enhance their confidence and competence in using these tools. Additionally, creating a supportive network among teachers within the district can foster the exchange of ideas and experiences, ultimately leading to improved teaching practices.

## RECOMONDATIONS

Based on the findings, Schools need to make investing in sufficient technology infrastructure a top priority if they want to enable the efficient use of ICT in accounting classes. This entails keeping software current, supplying enough access to PCs and tablets, and guaranteeing dependable internet connectivity. Schools can improve the overall learning experience for both teachers and learners by setting up a conducive learning environment with the required resources. For Teachers to stay proficient in incorporating ICT into their teaching practices, they must engage in ongoing professional development. Schools should offer training sessions on emerging technologies, accounting-related software, and efficient ICT pedagogy on a regular basis. Teachers can develop their confidence in utilizing these tools and exchanging best practices by participating in online courses, collaborative workshops, and peer mentorship. As a core element of accounting education, curriculum development ought to prioritize the incorporation of ICT tools. To build lesson plans that include real-world applications of accounting software and internet resources, curriculum developers and Teachers should work together. Learners will be able to gain practical experience while learning accounting topics, which will strengthen their comprehension and get them ready for real-world applications in the workplace.

## CONCLUSION

This study has effectively illustrated the transformative potential of innovative Information and Communication Technology (ICT) tools in enhancing learner engagement, improving academic performance, and bridging the gap between theoretical knowledge and practical application in education. The findings underscore the critical importance of establishing a robust technological infrastructure to support the integration of ICT in accounting education. Additionally, the research emphasizes the need for ongoing professional development for educators, ensuring they are well-equipped with the latest pedagogical strategies and technological skills necessary to facilitate effective learning. Furthermore, tailored support for learners is essential, allowing for personalized guidance that meets diverse educational needs. Educators who embrace modern teaching methodologies and thoughtfully incorporate real-world experiences into their

lessons are instrumental in cultivating a dynamic learning environment. This environment is characterized by its encouragement of critical thinking, collaboration among peers, and the development of practical problem-solving skills. By leveraging ICT resources strategically, these educators can create immersive learning experiences that not only engage students but also prepare them for the complexities of the accounting profession in the real world.

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