



Investigating Integrated Accounting Software in FET Grades in Two Secondary Schools in the Chris Hani East District, South Africa

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Abstract

This study examines the integration of accounting software into the Further Education and Training (FET) accounting curriculum within the Chris Hani East District of the Eastern Cape, South Africa. Employing a qualitative case study approach at one public and one private secondary school, data were gathered via semi-structured interviews with principals, teachers, and learners. The findings reveal a significant disparity in awareness between the two types of schools. Stakeholders at the private school demonstrated a clear understanding of the software's role in fostering workplace-ready skills and conceptual learning. In contrast, awareness in the public school was minimal, though participants acknowledged its necessity after explanation. Common systemic challenges were identified, including an outdated curriculum fixated on examinable manual methods, a pervasive lack of teacher training, and critical infrastructure deficits. The private school faced network limitations, while the public school lacked computers entirely, rendering implementation impossible. The study concludes that the current educational framework is misaligned with the modern accounting profession, jeopardizing graduate employability. It consequently recommends a multifaceted intervention spearheaded by the Department of Education. Key recommendations include modernizing the FET Accounting syllabus and examinations to incorporate digital competencies, launching a national teacher development program, updating tertiary teacher education curricula, and allocating targeted funding. This funding must resource public schools with essential technology and subsidize private school infrastructure upgrades, potentially supported by public-private partnerships. These measures are presented as essential for bridging the digital divide and equipping learners with the indispensable 21st-century accounting skills required for the future workforce.

Keywords

integrated accounting software, FET phase, accounting education, curriculum modernization, teacher training

INTRODUCTION AND BACKGROUND

Recent technological advancements have significantly impacted the accounting profession, necessitating changes in the educational system. These developments have changed how accounting information is processed, analyzed, and recorded. Globally, the accounting field has shown the increasing importance of integrated accounting software. Accountants no longer use traditional bookkeeping methods with pen and paper; instead, they utilize integrated accounting software programs (Verma, Verma, and Tripathi, 2023). This software, which combines components such as accounts payable, accounts receivable, and a general ledger into a single platform, facilitates seamless data flow, reduces errors, and enhances productivity. Common examples include Xero, Sage, Microsoft Dynamics, and QuickBooks.

The increasing importance of integrated accounting in modern business trends has highlighted the need for its inclusion in high school curricula, particularly in the Further Education and Training (FET) grades, where learners are first introduced to the field of accounting (Jones, Jones, Pensiero, and Beattie, 2021). Technological advancements underscore the need for the application of accounting software programs, such as Sage, Xero, and QuickBooks, in these high schools (Alghafiqi, 2022).

Recently, scholars have shown an increased interest in integrating digital technologies into accounting subjects; however, few studies specifically address the need for integrated accounting software at the FET grade level. This study aims to address this gap by focusing on the benefits and challenges of implementing integrated accounting software in FET grades for schools in the Eastern Cape Province, specifically in the Chris Hani West District.

This gap in practical software skills has significant consequences. There has been an outcry from the commerce and business world about students who fail to perform in accounting roles due to a lack of skills in integrated accounting software. This has raised concerns among employers, who seek candidates who can seamlessly navigate modern accounting tools (Tesemma, 2018). Studies have shown that schools that have not incorporated accounting software into their curriculum are limiting students' exposure to the digital applications required for the job market. As a result, educational institutions are being urged to enhance their curricula to include comprehensive training in this essential software (Machera and Machera, 2017).

The number of studies on the use of integrated accounting software in schools has increased slightly due to growing awareness of how integrated software has revolutionized accounting duties, particularly in the workforce (Chandra and Dalam, 2020). Many studies have found that implementing this software in high schools has both benefits and challenges (Peens, 2021).

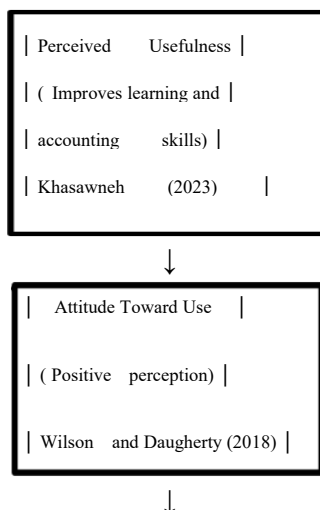
The accounting classroom is continually evolving due to the impact of technology on both the curriculum and the labour market. Due to these changes, accounting teachers are expected to incorporate integrated technology, including hardware and software, into their teaching. Skhepe, Caga, Mawuli, and Boudzo (2020) examined the challenges that affect the implementation of this technology in accounting classrooms and how these obstacles hinder learners' performance.

Although higher education institutions are implementing integrated accounting software to enhance students' skills for the digital age (Wibawa, Sintadevi, Utami, and Saputra, 2024), it is equally crucial to initiate this exposure at an earlier stage. The current researcher's view is that the implementation of integrated accounting software, despite its challenges, might have a positive impact on FET students in acquiring essential 21st-century basic accounting skills. Therefore, high school students in the FET grades also need to be exposed to integrated accounting software to build a skilled and job-ready workforce.

LITERATURE REVIEW

Theoretical Framework

The Technology Acceptance Model (TAM) is a widely utilized theoretical framework for explaining individual acceptance and use of information technology across various domains (Weerasinghe and Hindagolla, 2017). This study was guided by TAM, which provided a valuable framework for examining how students and teachers in FET grades adopt and engage with integrated accounting software in secondary schools within the Chris Hani East District. By focusing on perceived usefulness and perceived ease of use, TAM helped to explain the factors influencing technology acceptance in this educational setting. Integrated accounting software provides automation, efficiency, and practical financial applications, thereby enhancing students' learning experiences. This aligns with the findings of Khasawneh (2023), who indicates that when learners see technology as beneficial for improving their accounting skills, they are more likely to engage with and adopt it.



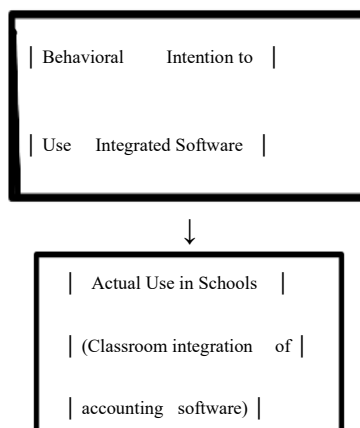


Fig. 1 The flow-style activity diagram and its impact on teaching and learning based on the TAM framework

To identify the challenges of implementing integrated accounting software in FET grades in high school

The integration of computerized accounting software into high school curricula has received considerable attention in recent years, particularly within Further Education and Training (FET) grades (Sithole, 2025). In the realm of modern accounting education, technology plays an integral role, especially as the Fourth Industrial Revolution has fundamentally transformed the field, necessitating the incorporation of Information and Communication Technology (ICT) within pedagogical methodologies (Enaifoghe, Balogun, and Afolabi, 2021).

The advantages of employing integrated accounting software in high schools are extensively documented. Empirical studies have shown that students who engage with these tools experience improved learning outcomes, characterized by enhanced comprehension and retention of financial concepts. Furthermore, exposure to accounting software aligns educational practices with industry standards, thereby equipping students with practical skills applicable in professional environments. Additionally, automation helps reduce human error, ensuring accuracy and efficiency in financial reporting, while also enhancing student interest and engagement in accounting subjects (Miller et al., 2025). This shift is crucial, as small, medium, and large-scale businesses increasingly utilize accounting software to minimize errors and enhance productivity (Sulia, Mie, and Situmorang, 2023).

Despite its numerous advantages, implementing this software in secondary schools presents significant challenges. Limited funding and inadequate technological infrastructure pose significant barriers (Njoka, Githui, and Ndegwa, 2020). Furthermore, the absence of comprehensive teacher training programs inhibits effective adoption (Marcelo and Yot-Domínguez, 2019). Curriculum alignment remains another critical concern, as existing syllabi may lack provisions for integration, thus necessitating potential policy revisions (Birt, Safari, and de Castro, 2023).

Consequently, a critical problem emerges. Unfortunately, not many schools have introduced or implemented learning about accounting software into their curriculum, especially in high school (Sulia et al., 2023). Hence, if curriculum developers and school management do not implement integrated accounting software, they risk producing graduates who cannot compete in the global business world, equipping them with outdated skills that fail to prepare them for their future careers.

To identify the challenges of implementing integrated accounting software in FET grades in high school

The integration of accounting software in high schools presents tremendous potential for enhancing financial education and preparing students for the demands of the modern accounting industry. However, its implementation in FET grades encounters several significant challenges that impede its widespread adoption. One of the primary obstacles is limited resources and infrastructure, as many schools lack sufficient computers and reliable internet access to support these systems (Mdingi, 2024). Financial restrictions further limit schools' ability to invest in the necessary software licenses and updates, complicating implementation efforts (Zerrad and Schechter, 2025). Another significant challenge involves teacher training and preparedness, as many educators have limited exposure to accounting software and struggle to adapt without adequate professional development programs (Mdingi and Mpuangnan, 2024).

Curriculum alignment also presents a barrier. Existing syllabi may not fully accommodate digital tools, and transitioning from traditional methods necessitates adjustments to ensure students receive comprehensive instruction in both theoretical and practical aspects (Apostolou, Dorminey, and Hassell, 2020). To address these obstacles, the study proposed a framework for integration, emphasizing the need for policy support, infrastructure investment, and teacher training programs to facilitate the successful adoption of the framework (Asare, Amponsah, Owusu, Abrefah, and Frimpong, 2023). By implementing these strategic interventions, including curriculum reforms, professional development initiatives, and increased funding, a clear pathway for effective implementation can be established (Fasinro, 2024).

To identify effective strategies for integrating accounting software in schools, enhancing teaching and learning outcomes

One of the significant objectives of accounting education is to prepare learners for successful professional lives by developing well-equipped graduates with core skills (Nyamboga, 2024). In this modern era, classroom setup and

instructional technologies are crucial levers for implementing good practices and improving the core competencies of learners (McVay, Murphy, and Wook Yoon, 2008). However, due to several challenges confronting technological operations in basic education, computer software is yet to be fully implemented in teaching and learning processes, including accounting (Dangi, Saat, and Saad, 2023).

Therefore, this study identified strategies that could be used to enhance the utilization of e-learning and accounting software in accounting education. Key findings revealed that the primary strategy includes providing adequate IT support, well-equipped ICT centers in every institution, and implementing standard software (Obidile, 2023). Furthermore, the study found no significant difference in the mean ratings of respondents on these enhancement strategies based on gender (Abanyam and Terkuma, 2021). Based on these findings, the researcher believes that the effective use of technological tools in the classroom requires educators to be proficient in their application to maximize learning benefits. Recommendations were also offered to support this goal.

METHODOLOGY

Research Method

This study adopted a qualitative research method, which is exploratory in nature and focuses on understanding distinctive findings within a specific context rather than generalizing results (Malik, 2013). The qualitative approach allowed the researcher to gain in-depth insights into the implementation of accounting software in senior schools within the Chris Hani West District, Eastern Cape, South Africa. In qualitative research, data collection, analysis, and interpretation occur concurrently, allowing flexibility and adaptability as the study progresses. Researchers avoid imposing predetermined perspectives by refraining from formulating overly specific research questions at the outset of the study, thereby maintaining an open approach to emerging themes and insights.

Research Design

A case study design was used for this research. The case study design is appropriate for exploring complex issues in their real-life context and is particularly useful for uncovering challenges, benefits, and strategies associated with implementation processes (Indu and Vidhukumar, 2019). This design provided the flexibility to adapt to new challenges or insights that emerged during the research process, making it highly suitable for the exploratory nature of this study.

Data Collection Tools

The primary tool for data collection was semi-structured interviews. These interviews were conducted with principals, accounting educators, and learners to explore their experiences and perceptions regarding the implementation of integrated accounting software in secondary schools.

Semi-structured interviews were preferred because they allow for in-depth, one-on-one discussions while maintaining flexibility to probe further based on participant responses. In addition, focus group discussions with teachers and learners were conducted to collect diverse opinions efficiently and promote interaction that might reveal deeper insights. Data were collected systematically following guidance on effective data collection procedures (Sadan, 2017), ensuring that the information gathered was detailed, relevant, and credible.

Sampling

A selective sampling technique was used to select participants who had direct experience with implementing accounting software in schools. The sample consisted of six participants, all from schools located within the Chris Hani East District of the Eastern Cape Province.

The participants included:

- Two school principals (coded as RSP)
- Two accounting educators (coded as RST)
- Two learners (coded as RSL)

To capture diverse perspectives, three participants were selected from a public school and three from a private school, ensuring representation from different educational contexts. The use of coding helped maintain confidentiality and protect the participants' real identities.

Research Procedures

The study proceeded through the following stages:

Preparation Phase

The researcher identified suitable participants and sought permission from relevant educational authorities and school heads. Participants provided informed consent before participating.

Data Collection Phase

Semi-structured interviews and focus group discussions were conducted. Each interview and discussion was recorded (with consent) to ensure accuracy during transcription and analysis.

Data Analysis Phase

Data were analyzed using a thematic approach, which involved identifying, categorizing, and interpreting themes that emerged from participant responses. Themes were derived from the main research focus areas, including challenges, benefits, and implementation strategies for accounting software. Consistent with qualitative principles, data analysis occurred concurrently with data collection, allowing emerging insights to guide subsequent interviews.

Validity and Reliability Measure

To enhance the credibility and trustworthiness of the study, several measures were implemented. Data were collected from multiple sources, including principals, educators, and learners, as well as across different school types (public and private), to enhance the depth and validity of the findings. Participants were given the opportunity to review and confirm the accuracy of the interview transcriptions and interpretations, ensuring that their views were accurately represented. Detailed descriptions of the research context, participants, and thematic findings were provided to allow for the transferability of results to similar contexts. The researcher consistently reflected on personal biases and assumptions to minimize their impact on data interpretation and ensure objectivity throughout the research process.

This study utilized a qualitative case study approach to explore the implementation of accounting software in secondary schools within the Chris Hani West District. Through semi-structured interviews and focus groups, data were collected and analyzed thematically to uncover key challenges, benefits, and strategies. Rigorous validity and reliability measures ensured the study's trustworthiness and integrity.

PRESENTATION OF FINDINGS

The researcher followed a structured process to collect and analyse the data. Firstly, the answers of the 6 participants were recorded correctly and directly through interviews conducted via Google Form questions then, the researcher analyzed the data in-depth to provide detailed descriptions of the participants' views; secondly, categorized and coded the data; thirdly, grouped the codes into overarching themes; and finally, the researcher interpreted the information from participants to draw a conclusion.

The section below details how participants were coded to protect their real identities.

Respondent (School Principal): RSP

Respondent (Subject Teacher): RST

Respondent (School Learner): RSL

The analysis of responses to each question, along with excerpts and examples from participants, is presented. The respondents, who are from a private school, responded to the interview questions, and their responses were presented. RSP1, RST1, RSL1 answered the questions thus:

RSP1 answered the questions thus:

1. What is your understanding of integrated accounting software in the context of FET Accounting education?

✓ *It is a technological tool used to teach Accounting, i.e., the usage of OneNote to teach an income statement.*

2. Is integrated accounting software currently being used in your school? If yes, which one(s)?

✓ *NO*

3. If not, what are the challenges that the school faces in implementing integrated accounting software?

✓ *The school does not have a network to sustain the program.*

4. Do you believe this software is necessary for teaching Accounting in the current curriculum? Why or why not?

✓ *Yes, the software allows learners to understand accounting software better, which will be advantageous for them in the workplace should they pursue an accounting career.*

5. In your view, what are the potential benefits of using integrated accounting software in teaching Accounting?

✓ *Through globalisation, the usage of technology is increasing, thus as a learner, it acquaints them with accounting software. Furthermore, it makes the work more relatable, which will in turn improve their understanding of the subject. Lastly, it is a skill that could be added to your CV.*

The Accounting subject teachers' respondents in private schools responded to the interview questions given to them, and their responses were presented.

RST1 answered the questions thus:

1. What is your understanding of integrated accounting software in the context of FET Accounting education?

✓ *It is the use of computerized accounting programs that combine different accounting functions, like ledgers, journals, and financial statements, into a single system. Instead of teaching learners only through manual methods, educators expose students to real-world accounting processes using digital tools that businesses actually rely on.*

2. Have you received any training in using accounting software in the classroom? If NO, why

- ✓ *No. The curriculum places more emphasis on manual accounting methods that are directly examined; schools and teachers focus on what prepares learners for exams rather than software skills. The department hasn't really invested in 'practicals of accounting. Teachers and learners in the FET phase often do not receive training on integrated accounting software due to limited resources and funding. Most schools in these areas lack reliable internet or access to the latest software, making it challenging to introduce learners to digital accounting systems. Even when computer labs are available, issues such as load shedding, outdated equipment, and the high cost of software licenses often prevent regular use. Since schools often operate on tight budgets, priority is given to essential teaching resources, leaving little room for investment in accounting technology. Because the curriculum places more emphasis on manual accounting methods that are directly examined, schools and teachers focus on what prepares learners for exams rather than software skills. The curriculum places more emphasis on manual accounting methods that are directly examined, schools and teachers focus on what prepares learners for exams rather than software skills. The curriculum places more emphasis on manual accounting methods that are directly examined, schools and teachers focus on what prepares learners for exams rather than software skills.*

3. What would you recommend for the use of accounting software in FET grades and why?

- ✓ *I would recommend the use of accounting software in the FET phase because it prepares learners for the modern world of work. As we all know, most businesses today rely on integrated accounting systems rather than the manual method. Providing access to integrated accounting software equips them with the essential digital skills. Even basic training with affordable accounting software can empower learners, making them more confident, employable, and ready to participate in a technology-driven economy. One software that can be employed is GNU Cash (Free & Open-Source), a desktop-based accounting program that works offline once installed. It is free, user-friendly, and covers basics such as ledgers, journals, and financial statements, making it suitable for teaching learners without ongoing costs.*

The respondents who are school learners in a private school responded to the interview questions given to them, and their responses were presented:

RSL1 answered the questions thus:

1. What is your understanding of integrated accounting software in the context of FET Accounting education?

- ✓ *Integrated accounting software is a vital digital tool for preparing students for the modern, technology-driven workplace*

2. Have you used any accounting software as part of your lessons? If yes, which software?

- ✓ *No*

3. If not, would you like to use accounting software in class, and why?

- ✓ *Yes, I would like to use accounting software in class because by using accounting software in class, I would receive benefits that extend beyond traditional bookkeeping, focusing on practical skills, a deeper understanding, and future career readiness.*

The analysis of responses to each question, along with excerpts and examples from participants, is presented. The respondents, who are from a public school, responded to the interview questions, and their responses were presented. RSP2, RST2, RSL2 answered the questions thus:

RSP2 answered the questions thus:

1. What is your understanding of integrated accounting software in the context of FET Accounting education?

- ✓ *Use of Computerised software in the teaching of accounting.*

2. Is integrated accounting software currently being used in your school? If yes, which one(s)?

- ✓ *No*

3. If not, what are the challenges that the school faces in implementing integrated accounting software?

- ✓ *Availability of laptops/ Tablets and Network problems*

4. Do you believe this software is necessary for teaching Accounting in the current curriculum? Why or why not?

- ✓ *Yes*

5. In your view, what are the potential benefits of using integrated accounting software in teaching Accounting?

- ✓ *Improved Accounting skills and understanding*

The Accounting subject teachers' respondents in a public school responded to the interview questions given to them, and their responses were presented.

RST2 answered the questions thus:

- 1. What is your understanding of integrated accounting software in the context of FET Accounting education?**
✓ *It is a unified system that merges core financial tasks such as bookkeeping, invoicing, accounts payables/receivables*
- 2. Have you received any training on using accounting software in the classroom? If NO, why**
✓ *No*
- 3. What would you recommend for the use of accounting software in FET grades and why?**
✓ *Yes. It's time-saving and efficiency, accuracy and data security*

The respondents who are school learners in a public school responded to the interview questions given to them, and their responses were presented:

RSL2 answered the questions thus:

- 1. What is your understanding of integrated accounting software in the context of FET Accounting education?**
✓ *I don't know*
- 2. Have you used any accounting software as part of your lessons? If yes, which software?**
✓ *No*
- 3. If not, would you like to use accounting software in class and why?**
✓ *Yes, because I think it would help me a lot and I would improve in accounting*

FINDINGS AND DISCUSSION

The research reveals a distinct difference in the understanding of integrated accounting software between private and public schools. Within the private school, the principal, teacher, and learner all demonstrate a clear grasp of the concept. More importantly, they understand its importance, believing that its integration will enhance learners' comprehension of accounting principles and better equip them with practical skills for the modern workplace. Conversely, in the public school, the understanding is more foundational. While the principal has a general idea of what accounting software is, he lacks knowledge of its specific functions, and the learner had no prior exposure to the software; it was only the teacher that has knowledge about accounting software. However, after the software's functions were explained, all public-school stakeholders recognized the urgent need for its implementation, agreeing it would greatly improve learners' understanding of accounting software and also help in learners' career readiness (Skhephe, Caga, and Boadzo, 2020).

Despite this recognition, both schools face significant and layered challenges in implementing accounting software. A primary obstacle common to both is an outdated national curriculum that emphasizes manual accounting methods, which are the sole focus of final examinations (Apostolou, Dorminey, and Hassell, 2020). This forces schools to prioritize exam preparation over teaching practical software skills. Compounding this issue is a severe lack of formal training for teachers, with no support provided by the Department of Education or universities to equip them with the necessary expertise (Mdingi, 2024).

Beyond these common systemic challenges, each school faces other unique challenges. The private school, although it possesses computers, suffers from an inadequate network infrastructure that cannot reliably support the software. The public school's situation is far more critical, as it lacks the most fundamental requirement, computers (Mdingi, 2024). This complete absence of hardware renders implementation impossible, creating a significant disadvantage for its learners.

CONCLUSION AND SUGGESTION

The study highlights that without the Department of Education intervention to modernize the curriculum, provide training, and allocate resources, schools will continue to struggle to prepare students with the essential accounting skills demanded by the workforce.

Based on the findings of this study, a multi-faceted approach is necessary to address the challenges of integrating accounting software into schools. The primary recommendation is for the Department of Education to modernize the curriculum by updating the syllabus for FET grades to include integrated training in accounting software. This would ensure that digital literacy becomes a fundamental part of accounting education, aligning student skills with workplace demands.

Furthermore, the Department should launch a national training program for all accounting teachers to provide them with the necessary skills and confidence to teach using these tools. Simultaneously, teacher training institutions

must update their own syllabi to ensure future educators graduate with proficiency in accounting software, creating a sustainable pipeline of qualified teachers.

To support these initiatives, adequate funding must be provided. Public schools require direct financial assistance to purchase essential resources, such as computers and software, while private schools would benefit from subsidies to improve their network infrastructure. Finally, seeking partnerships and donations from local businesses can supplement government efforts, providing additional resources, expertise, and financial support to ensure the successful implementation of these crucial changes.

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