



The Journal of Accounting
and Management

Benefits of Introducing Draftworx Software in Accounting Curricula: A University of Technology Student Perspective

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Abstract: The Competency-Based Education (CBE) approach has become increasingly relevant in the context of the fourth industrial revolution, as organizations seek to adopt and integrate emerging technologies to remain competitive in the rapidly changing digital landscape. **Objectives:** The main objective of the study was to gather and analyze the perspectives of students regarding the use of accounting software. The problem of the study is the failure by university accounting students to fully utilize the services provided by Draftworx software to enhance their teaching and learning. **Approach:** The study employed an interpretive research paradigm and a qualitative approach to elicit the perspectives of accounting students on the use of Draftworx accounting software. **Results:** The study found that accounting students feel that the software should be introduced earlier in their undergraduate program to help them acquire the basic skills needed for the job market after graduation. The study also highlighted the importance of early adoption and integration of new technology. The participants in the study believed that small class groups would be effective in ensuring they understand the use of the accounting software. The study found that students found the Draftworx software

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helpful and easy to use, making the process of learning accounting simpler, enabling them to complete their work accurately and on time. **Implications:** The findings of the study contributed to the CBE theory by highlighting the importance of using accounting Draftworx software in teaching and learning accounting modules.

Keywords: teaching; skills; employability; work readiness

JEL Classification: The Journal of Economic Literature

1. Introduction

Draftworx is financial management software designed to perform both accounting and auditing processes. Draftworx was developed by Data Prime Solutions Private limited in 2006. Making learners aware of computerized accounting software and that it uses the same accounting principles they are exposed to in lectures and tutorials, emphasizes the relevance of what they are being taught (Landberg & van den Berg, 2023). Supporting this notion, the International Federation of Accountants (IFAC) has emphasized the importance of information technology (IT) in the accounting curriculum (IFAC, 2015). Accounting 1990s this has been a controversial discussion, with Boyce (1999) concluding that professional accounting bodies and employer groups have increasingly urged that accounting students be equipped with a range of technological skills relevant to their discipline. Recent literature suggests that the workplace of the 21st century is constantly evolving, with technology driving much of this change (Hidayatulloh & Ashoumi, 2022). Within this context, it is imperative that graduates possess the skills and attributes necessary to succeed in such a rapidly evolving business environment.

Draftworx software offers a range of features that include automated financial statements, collaboration tools, audit, review, and compilation, cloud-based Storage and many other accounting processes (Stewart, 2021). The role of IT within accounting education has been investigated for several years. For example, Bagranoff (1993) concluded that acquiring software knowledge requires students to develop critical skills and must become solution orientated. Marriott (2004) argues that experience is an essential component of successful learning and explains that the central argument is that students learn best by actual involvement. Therefore, the use of technology should provide this concrete experience, subsequently enhancing students' learning curve. Recent studies on the inclusion of software into the accounting curriculum include Stainbank et al. (2023); Landsberg and Van den Berg, (2023); Qasim and Kharbat (2020); among others. Specific studies investigating the perceptions of students on the inclusion of software in the accounting curricula include Damerji and Salimi (2021); Machera and Machera (2017); among others. However, no such study has been conducted within a South African university of technology environment, where the curricula should be developed to ensure students are ready for the workplace. Hence, the objective of this study is to, viewed through the lens of competence-based education (CBE), gather, and analyze the perspectives of students regarding the use of software within the accounting curricula. Specifically, the study aims to understand how students perceive the use of accounting software in their learning process, including its benefits and drawbacks, as well as their overall level of proficiency and comfort with the technology. The study provides insights into how accounting software can be effectively integrated into accounting education and informs best practices for its use in the classroom.

2. Related Work

In this section, literature leading to the need and use of software in accounting education is discussed in the view of the CBE theory. Hence, the CBE theory is first contextualized.

2.1. The Competency-Based Education (CBE) Approach

The CBE approach has gained significant attention in recent years as an alternative to traditional education models (Stewart, 2021). Proponents of CBE argue that it offers a more personalized and flexible learning experience, focusing on students' mastery of specific skills and knowledge (Bianco & Fussell, 2021), relevant for this study. Factors like pervasive skills and individual attributes (Merino & Aucock, 2017) significantly contribute to our comprehension of the CBE model. In this framework, learning is frequently deconstructed into distinct competencies, which students are encouraged to autonomously master (Curry & Docherty, 2017). And so too, the use of accounting software must be mastered by students, but very often, the software changes frequently to keep abreast with changes in the technological environment. At this juncture, a dynamic CBE framework is also required to continuously inform teaching and learning within the dynamic digital environment. In fact, Merino and Aucock (2017) evaluated an intervention designed to develop personal attributes such as lifelong learning and the analytical decision-making and communication skills of prospective entrants into the accounting profession. Within this, a tutor role modelled self-regulated learning skills, strategies, and behaviours. It was found that students developed several generic or "pervasive" skills associated with lifelong learning and that the intervention facilitated self-motivation, group work, the setting of timetables, and interaction with mentors. The results also indicated that the intervention significantly influenced the performance of students compared to that of their peers.

Incorporating the perspectives of students regarding the use of accounting software within the accounting curriculum aligns with the principles of Competency-Based Education. It allows for a more personalized, adaptive, and skills-oriented approach to education, catering to the individual needs and proficiencies of students in a rapidly evolving technological landscape. For instance, there is a shared understanding of the importance of students acquiring a relevant set of IT skills through the integration of IT with the professional subjects (Wessels, 2008). In this sense, professional subjects accounting software is an integral part of the modern accounting profession. By incorporating students' perspectives on the use of such software, educational institutions can better align their curricula with the demands of the professional world, ensuring graduates are better prepared to rapid changes in the business environment emanating from technological advancements (Landberg & van den Berg, 2023), such as the Fourth Industrial Revolution (4IR). In a similar vein, understanding how students perceive the use of accounting software in their learning process helps in designing a curriculum that is more adaptive and responsive. It allows for the integration of software in a way that aligns with students' comfort levels, maximizing their learning experience and potentially increasing their engagement and motivation. And so too, CBE involves evaluating students based on demonstrated skills and knowledge rather than just traditional testing. Gathering students' perspectives on their proficiency and comfort with accounting software helps in assessing their actual competencies. This information can be used to create targeted assessments that measure their real-world skills and provide a more accurate evaluation of their understanding and capabilities in using the software.

However, upon closer examination, several critical concerns arise regarding the CBE approach. One of the primary criticisms of CBE is its excessive emphasis on measurable outcomes and the neglect of

broader educational goals (Lassnigg, 2017). By reducing education to a checklist of skills, the CBE approach tends to overlook the development of critical thinking, creativity, and other essential qualities that are difficult to measure quantitatively (Harris, Hobart & Lundberg, 1995), undermine the holistic development of students and restrict their capacity for innovation and adaptability. Further, while CBE purports to offer a personalized learning experience, its implementation often falls short in practice (Gravina, 2017), leading to a standardized approach that fails to accommodate diverse learning styles, interests, and aptitudes. Some scholars are of the view that CBE relies heavily on frequent assessments to gauge students' mastery of competencies (Clayton & Clopton, 2019). Potentially creating a high-pressure learning environment that may undermine students' intrinsic motivation and inhibit their ability to develop a deep understanding of the subject matter. However, the disadvantage may be preventing a comprehensive and coherent understanding of various subjects. Lastly, CBE often requires a significant shift in the role of teachers, from being instructors to facilitators or mentors (Malhotra, Massoudi & Sindal, 2023). While this change can be positive, it requires substantial training and support for educators to effectively guide students through the competency-based learning process.

2.2. Western Perspectives of CBE

Recent research highlights the Western CBE's strength in emphasizing real-world application and outcomes (Katoue & Schwinghammer, 2020). By prioritizing specific skills, CBE readies students for workforce demands, aligning with the evolving job market needs. Furthermore, CBE offers personalized learning, diverging from the uniform educational approach, enabling tailored pathways based on individual strengths and knowledge (Açıköz & Babadogan, 2021). This flexibility enhances student engagement and learning outcomes. Previous studies also suggest that the Western perspective of CBE encourages active student engagement and promotes self-directed learning (Hammond & Collins, 2013). In fact, students are actively involved in setting learning goals, monitoring their progress, and demonstrating mastery of competencies (Morris, 2019). Within this context, there are opportunities to foster a sense of ownership and responsibility for one's own learning, which can enhance motivation and engagement among students (Brammer & Goodrich, 2021).

However, it is important to acknowledge the limitations and potential drawbacks of the Western perspective of CBE. One concern is the potential for oversimplification of complex subjects (Hanks et al. (2021). Competencies are often defined in a narrow and specific manner, which may neglect the interconnectedness and broader context of knowledge (Falloon, 2020). In fact, this reductionist approach may hinder the development of critical thinking, creativity, and the ability to synthesize information across different domains. The Western CBE approach's focus on easily measurable skills may lead to an overemphasis on standardized testing, sidelining crucial educational aspects like emotional development and cultural competence (Zhang & West, 2020). This narrow emphasis risks undervaluing holistic education and broader educational goals, such as civic engagement (Preston, 2017). Additionally, implementing CBE presents challenges, including crafting valid competency frameworks and fair assessments, demanding substantial investments in time, resources, and educator development (Anderson-Levitt & Gardinier, 2021).

2.3. Eastern Perspectives of CBE

The Asian perspective on Competency-Based Education (CBE) exhibits diversity across various countries and educational systems in the region (Zhao & Tröhler, 2021), yet certain commonalities exist. It typically stresses academic excellence and stringent standards, often manifested through rigorous testing and performance-based assessments. In many Asian countries, competencies are defined by specific knowledge and skills within the curriculum, aligning with a traditional emphasis on academic prowess and excellence (Huang & Gove, 2015). The literature suggests that the Asian perspective of CBE often places a strong emphasis on memorization and mastery of foundational knowledge (Huang, & Gove, 2015). In fact, there is a belief that a solid understanding of core subjects, such as mathematics, science, and language, is essential for future success (Tan, 2018). Competency-based education in this context aims to ensure that students have a thorough grasp of fundamental concepts and can demonstrate their proficiency through examinations and standardized tests.

Another aspect of the Asian perspective of CBE is the importance of discipline and hard work (Kearns et al. (2017). Previous studies suggest that Asian cultures often emphasize the value of diligence, perseverance, and self-discipline in the pursuit of education (So & Kang, 2014). This mindset is reflected in the approach to competency-based education, where students are expected to put in extensive effort and practice to master the required skills and competencies. The Asian perspective of CBE highlights a focus on collective societal needs and contributions, aligning competencies with job market requirements and economic development (Mansilla & Wilson, 2020). This emphasis aims to prepare students for specific professions, stressing practical skills and employability. However, criticisms arise due to potential student stress from the strong focus on academic achievement and high-stakes testing, leading to burnout and mental health concerns (Panth & Caoli-Rodriguez, 2017). Moreover, the narrow focus on predetermined competencies and standardized assessments may limit creativity, critical thinking, and problem-solving skills, potentially stifling innovation, and independent thought (So & Kang, 2014). Neglecting individual interests, passions, and diverse learning styles is also noted within this perspective (Wu, 2015).

2.4. South African Perspective of CBE

Competency-Based Education (CBE) in South Africa has garnered attention to tackle educational challenges (Terblanche & De Clercq, 2020). While perspectives vary, the country's initiatives emphasize the alignment of education with workforce demands. CBE bridges the gap between traditional education and job market needs, prioritizing skill mastery to meet industry requirements (Keevy & Mare, 2018; Coetzee et al., 2021). This focus on practical competencies enhances employability, acknowledging that conventional education falls short in adequately preparing students for the job market, fostering economic growth (Likisa, 2018). Previous studies suggest that the South African perspective of CBE emphasizes the importance of inclusivity and addressing historical inequalities (Cleary et al., 2017). In fact, South Africa has a complex history marked by apartheid and the need for redress and transformation in education (Spreen, 2004). Within this context, CBE is perceived to provide equal opportunities for all learners, regardless of their background, by shifting the focus from time-based models to mastery of competencies. The overall intention is to ensure that all students have access to quality education and the ability to acquire the skills needed for their personal and professional development, irrespective of any historical, social, or economic categorisations.

Furthermore, the South African perspective on CBE recognises the diverse needs and aspirations of learners (Cleary et al., 2017). Previous studies suggest that South Africa is characterized by a multicultural and multilingual society, with a range of educational contexts and challenges (Likisa, 2018). Hence, CBE provides an opportunity to tailor learning experiences to individual learners' needs, allowing for flexibility and personalized pathways. More importantly, there is a shared understanding in the literature that the CBE approach can help address the diverse learning styles, abilities, and interests of students, fostering a more inclusive and engaging educational environment. The literature highlights challenges in implementing CBE in South Africa, emphasizing the need for adequate resources and infrastructure (Thompson et al., 2017). This includes educator training, robust competency frameworks, and suitable assessment methods, posing a challenge in resource-constrained settings (Kiguli-Malwadde et al., 2014). While practical skills are vital, nurturing critical thinking and emotional development is equally crucial. A holistic approach ensuring well-rounded individuals capable of multifaceted contributions should integrate into CBE implementation. Despite its innovative promise, critical evaluations expose limitations like narrow outcome focus, standardization concerns, testing overload, fragmented learning, and the need for extensive teacher training, raising doubts about CBE's long-term effectiveness (Dlamini et al., 2018). As education evolves, it's essential to consider new paradigms carefully, aiming for a balanced approach addressing diverse student needs.

2.5. Skills Demanded by 4IR within the Accounting Field

As students prepare to enter the workforce, it is essential for them to develop the necessary skills to meet the demands of the Fourth Industrial Revolution (4IR), as depicted by Landsberg and van den Berg (2023). Previous research has emphasized the need for flexible curricula and innovative teaching approaches that can equip students with the soft skills necessary to navigate technology-based work environments (González-Pérez & Ramírez-Montoya, 2022). Digital and soft skills have been found to be increasingly crucial for success in the 4IR (Mhlanga, 2022; Williams & Halawani, 2023), and as such, there is a need to assess and develop these skills in an effective manner. Research indicates that students can enhance their soft skills by utilizing accounting software (Jackson et al., 2023; Blount et al., 2016). In a study conducted by Blount et al. (2016), an enterprise resource software package was incorporated into the curriculum of an accounting information systems course. The study revealed that providing instructors with technical and pedagogical support resulted in achieving the desired learning outcomes. Scholars also suggest that accounting software can help students develop skills in areas such as digital acumen, decision-making acumen, and business acumen, which are all essential for success in the 4IR (Marr, 2022; Landsberg & Van den Berg, 2023). However, as Landsberg and Van den Berg's (2023) study highlights, current curricula may not be adequately addressing the needs of the 4IR workforce. Hence, it is important to understand the specific needs of 4IR that are not being addressed by the current curricula.

The literature suggests that introducing accounting software to students can be an effective way to develop their soft skills and prepare them for the changing workforce (Coffelt et al., 2019); Tsiligiris & Bowyer, 2021). In fact, by using accounting software, students can gain practical experience in financial record-keeping, data analysis, and decision-making (Mohamed & Ramli, 2022). More important for this study is the view that incorporating accounting software into the curriculum can help to bridge the gap between theoretical knowledge and practical application, which is essential for preparing students for the realities of the workforce (McIntyre, 2005; Rhodes, 2012). Accounting

software has become an indispensable tool for businesses and organizations of all sizes in managing their financial transactions (Raewf & Jasim, 2020; Stainbank et al., 2023). Scholars are of the view that one of the main advantages of accounting software is that it allows for greater accuracy and efficiency in financial record-keeping (Shehzad & Ali, 2022). This, in turn, can lead to improved decision-making and better financial management. In fact, accounting software can also provide real-time access to financial data, making it easier for businesses to monitor their financial performance and identify potential issues. In a similar vein, accounting software can automate many of the routine tasks involved in financial record-keeping (Kamau et al., 2023). Of interest to this study is the view that accounting software can save businesses a significant amount of time and resources, which can be redirected towards more value-added activities (Cai, 2021). Others suggest that accounting software can help reduce the risk of errors or fraud by providing better controls and audit trails (Schmitz & Leoni, 2019).

However, there are also some limitations to the world view of using accounting software. One of the main concerns is that accounting software can lead to a reliance on technology at the expense of human expertise (Munoko et al., 2020). While accounting software can automate many tasks, it cannot replace the judgment and experience of a skilled accountant (Hiromoto, 2019). Businesses need to ensure that they have the necessary human resources in place to interpret and analyze financial data. Studies also suggest that accounting software can be expensive and may not be accessible to all businesses (Cai, 2021). Of concern is that this could create a competitive disadvantage for smaller businesses that cannot afford to invest in advanced accounting software. Additionally, some businesses may not have the necessary IT infrastructure or expertise to effectively implement and maintain accounting software. There is consensus in the literature that the changing nature of the workforce requires students to develop the necessary competencies, and soft skills to succeed in the 4IR (Halili et al., 2022; Landsberg & van den Berg, 2023). Incorporating accounting software into the curriculum can be an effective way to develop these skills and prepare students for the demands of technology-based work environments (Stainbank et al., 2023). However, it is essential for educational institutions to ensure that their curricula are up-to-date and relevant to the changing demands of the workforce. While accounting software can improve accuracy and efficiency in financial record-keeping, it cannot replace the expertise of skilled accountants. Scholars, based on a CBE lens, share the view that businesses need to carefully consider the costs and benefits of implementing accounting software and ensure that they have the necessary resources in place to effectively utilize it (Clayton & Clopton, 2019).

From a South African perspective, the use of accounting software has been a topic of interest in recent years, with many proponents advocating for improved efficiency and accuracy in financial record-keeping (Stainbank et al., 2023). However, there are also concerns about the potential impact of accounting software on employment opportunities, particularly for individuals with limited technological skills (Adeniran, & Johnston, 2014). One of the benefits of using accounting software in South Africa is the potential to improve efficiency and accuracy in financial record-keeping (Stainbank et al., 2023). Additionally, businesses can save time and resources, which can be especially beneficial for small and medium-sized enterprises (SMEs), the cornerstone of the South African economy (Stainbank et al., 2023), that may not have the resources to invest in extensive accounting departments. Furthermore, the use of accounting software can help to reduce the risk of errors and fraud, which is an ongoing concern in South Africa (Raewf & Jasim, 2020). Additionally, there are also concerns about the potential impact of accounting software on employment opportunities (Stainbank et al., 2023). As more businesses adopt accounting software, there is a risk that traditional

accounting roles may become obsolete, particularly for individuals with limited technological skills. This could have significant implications for employment in South Africa, where the formal unemployment rates stand at 27% (Buthelezi, 2023). Additionally, there are concerns about the potential for accounting software to perpetuate existing inequalities, as individuals with limited access to technology or training may be at a disadvantage (Chauke et al., 2023). Another consideration is the potential cost of accounting software, particularly for South African SMEs (Mkansi & Nsakanda, 2023).

While accounting software can provide long-term benefits in terms of efficiency and accuracy, the initial investment may be prohibitive for some businesses, particularly those with limited financial resources, as is the case with many SMEs in South Africa. Therefore, it is essential for policymakers and businesses to carefully consider the potential implications of accounting software and align it with competencies needed for the world of work, as this might help to develop strategies to mitigate any negative impacts.

The South African Institute of Chartered Accountants (SAICA) is a professional body that plays a significant role in the regulation and development of the accounting profession in South Africa (Landsberg & van den Berg, 2023). SAICA has taken a position on the use of accounting software in South Africa, recognizing both the benefits and challenges of developing digital competencies for accounting professionals, which is associated with the CBE approach. In fact, SAICA's stance on developing competencies, such as the use of accounting software in South Africa aligns with CBE, as outlined in their 2025 competency framework (Stumke & Swart, 2020). The framework emphasizes the need for accounting professionals to develop work-related competencies, including the ability to effectively use software tools to perform accounting tasks (Lubbe, 2020), highlighting the need for professionals to continually update their skills to remain competitive. This aligns with the CBEs focus on lifelong learning and the acquisition of relevant skills for real-world application.

2.6. Accounting Software in the Curriculum

As discussed, professional bodies are emphasising the integration of IT in professional accountants' competencies, even before they enter the market. Various professional bodies (SAICA, 2021; AICPA, 2014; ICAI, 2013) include IT in their mandatory higher education programmes and/or accounting trainee programmes. Stainbank et al. (2023) documented that teaching accounting software in the curriculum has positive benefits for the students. Accordingly, Association of Chartered Certified Accountants (ACCA, 2016) states that the benefits associated with various forms of new accounting software are widely recognised as pivotal for an institution's success. However, Stainbank et al. (2023) cautioned that accounting software are not to be regarded as a passive addition to the curriculum, rather the accounting software should be positioned within a pedagogical framework. Supporting this notion, Neely et al. (2015) suggest that students should be taught what the accounting software can do rather than the software itself. To illustrate this conclusion, a study conducted by Bouliane (2014) investigated accounting students at the Canadian Business School and the use of software. The study compared students that completed the task manually and then later with the accounting software; and students who completed the tasks using only the accounting software. It was found that the highest knowledge acquisition was obtained when both methods are used and followed by students who utilised only the software. Similarly, in a South African context Papageorgiou (2014) investigated the perceptions of students whether the inclusion of accounting software in the

undergraduate programmes would assist them in improving their skills as well as provide them with relevant skill that are applied in real-life accounting practice, concluding that both are positively viewed by students.

On the negative side, Rackliffe and Ragland (2016) cautioned that an unclear direction of the implementation of the accounting software could have adverse effects on the accounting theory or profession, and institutions may face the risk of placing emphasis on the tools and techniques rather than key accounting concepts. Subsequently, incorporating accounting software in the curricula might lead to a reduction or removing of concepts of value from the curriculum. Daff (2021) discovered that majority of employers preferred graduates with knowledge of accounting software, yet, called on graduates to understand how information flows in accounting systems to get the desired output. Hence, it is more likely that the integration of accounting software in the accounting curricula may lead to well-rounded graduates that can contribute to the job market. In essence the integration should take up a balanced approach and may not take a sacrificial approach.

3. Problem Statement

The problem of the study is the failure by university study in the accounting department to fully utilise the services provided draftwork software for their benefits. Lecturers in the accounting department are having less knowledge to adopt and implement draftwork software for the benefits of the learners. The failure by both learners to harness the services of draftwork software is a major challenge for the future of the learners at their workplace. Also, the failure to harness the draftwork software by the students is a drawback to achieve the requirements of the competence based curriculum.

4. Key Terms

- Competency-Based Education refers to the teaching and learning that provide both academic and practical knowledge for the learners.
- Industrial Revolution refers to a complete change of conducting business activities by the industrialists.
- Financial Statements refers to a set of books of accounting that provide the annual financial performance of the business in each financial period.

5. Methodology

The study employed an interpretivist research paradigm, as it aimed to delve into the participants', namely the accounting students', innermost feelings, and thoughts. While a survey strategy was utilized, the study was fundamentally qualitative in nature and demanded that participants respond to unstructured questions (van den Bos et al., 2021). The questions were disseminated via email to all 129 students enrolled in the Advanced Diploma in Accountancy program at the Tshwane University of Technology, one of six university of technologies in South Africa. Participants were encouraged to voluntarily complete the survey within a period of two weeks. The email accounts used to send the questions were official university accounts of each student. Additionally, clear, detailed information about the purpose of the study, the questions being asked, and how the data would be used were

provided to participants. Despite the low response rate of 37.98%, which resulted in 49 usable responses, the research team prioritized upholding the ethical principles of voluntary participation and gathering qualitative insights from participants.

Thematic analysis was employed as the primary method of data analysis, which involved an iterative process that entailed moving between coding, meaning extraction, categorization, and the relevant literature, consistent with the principles of analysing qualitative data (Spiggle, 1994). The collected data was analyzed using Atlas.ti, whereby participants' responses were read and reread, notes were written, lists were made, and comments were highlighted. Different members of the research team conducted the same exercise, and the findings were compared. Additionally, the responses were coded, and themes were identified through an iterative process. Some data or codes fit into more than one theme or category. The identified themes were then considered in relation to each other and to those found in another relevant research. This approach allowed for a comprehensive analysis of the data collected.

6. Results and Analysis

The study's findings are presented according to the themes that were identified. Three prominent themes emerged from the data analysis, namely 1) the introduction and implementation of the accounting software; 2) the experiences of students with the accounting software; and 3) the benefits of using the accounting software.

6.1. Introduction and Implementation of the Software

There was a difference of opinion among participants on this theme. On the one hand, participants were of the view that accounting software is so important that it should be introduced earlier in their current study year, so that they would be able to benefit from the training presented later in the study year, as mentioned by a participant that: "It should be introduced earlier into the year so we can get a better understanding more in depth". Participants indicated a time frame of up to 12 months of training on the software, between 2 to 12 months. The participants were of the view that given the relative ease to understand and use the Draftworx software, within the given period they would have grasped how to use the software. The extract reflects a recognition of the benefits of early and in-depth exposure to a particular subject or topic within the CBE framework. It highlights the importance of timely and comprehensive learning experiences to foster a deeper understanding and mastery of the subject matter. The participants further pointed out that when being exposed to the software earlier it will enable them to have the skills required for them to compete in the job market after graduation. Hayes et al. (2011) found that by implementing the accounting software earlier, students also learn how accounting information flows and that improves their skills. Hence, the introduction of such software at the appropriate stage of the student learning process might prove to be more crucial in improving their skills.

A second point highlighted by participants on the timely introduction to the software, is that the programme should be introduced in the undergraduate level of studies as this will ensure that students have the necessary skills for entry level jobs after completion of their studies, as mentioned by a particular respondent: "The Draftworx software training should be introduced in the 1st year of study. This will enable students to get used to the software and acquire an in-depth knowledge about real

work environment practical preparation of financial statements and this will give them an advantage in the accounting industry when applying for entry level positions". This indicates a proactive approach to providing students with hands-on experience using the software relevant to their field, specifically in the context of financial statement preparation. By starting early, students could become familiar with the software and develop a deep understanding of its functionalities, supporting the principles of CBE by emphasizing the integration of practical training, real-world skills, and early exposure to industry-relevant software, thereby enhancing students' readiness for the job market. By incorporating the software training over multiple years, students can further refine their competence and reinforce their understanding of the software's application in their field of study.

A further aspect highlighted by 26 of the participants is that small class groups will be more effective, as they would get enough attention from the instructor, thus ensuring they understand the use of the accounting software. The participants were of the view that if the classes are small, they would be able to participate and interact with each other and the instructor to maximize their experience during the training process, as supported by a participant: "Smaller groups allows or afford mostly each candidate an opportunity to get as much knowledge as possible and are easier to manage for the facilitator, as well as ensuring everyone within the group(s) grasps the functions of the software properly". Smaller groups for training purposes are aligned with the principles of the CBE theory. When working in smaller groups, each candidate is provided with a greater opportunity to acquire knowledge and skills related to the software being taught. This is because smaller groups allow for more individual attention and engagement, facilitating a deeper understanding of the software's functions. Furthermore, smaller groups are easier for the facilitator to manage. With fewer participants, the facilitator can dedicate more time and attention to each candidate, ensuring that their specific learning needs are addressed effectively. This personalized approach contributes to the development of individual competencies. Hence, this also amplifies the importance of ensuring that everyone within the group grasps the functions of the software properly. In a smaller group setting, it is more feasible for the facilitator to closely monitor the progress of each participant and identify any areas where additional support or clarification may be required. This fosters a collaborative learning environment where participants can engage with one another, share insights, and collectively enhance their understanding of the software.

6.2. Students' Experience with the Accounting Software

Overall, the study revealed that participants frequently expressed that Draftworx software was helpful and user-friendly. This finding aligns with Utami and Yuliantos (2019), who also highlighted the ease of use associated with accounting software. Participants found that the software simplified the accounting process, enabling them to accurately and timely complete their work. In the CBE approach, these findings emphasize the practicality and effectiveness of using software to enhance accounting skills and facilitate efficient work completion. Examples include: "I find Draft-worx more effective when recording financial statements, it makes it easy, and it saves time" and "It is a beautiful program offering a wonderful and advantageous experience for students, which also prepares them to overcome the challenges....". CBE promotes a learner-centred approach where individuals actively engage in authentic tasks and develop practical competencies that are relevant to their chosen field. These extracts reflect the idea that competence is best demonstrated through practical application and the ability to achieve desired outcomes efficiently. The description of the program as "beautiful" and "wonderful" suggests that it is engaging, motivating, and potentially enjoyable for students. This is important in CBE, as students are more likely to be actively involved in their learning when they find

it meaningful and enjoyable. By explicitly mentioning the challenges that the program prepares students for, it indicates a practical and application-oriented approach.

6.3. The Benefits and Advantages of Accounting Software

All participants indicated that there are indeed benefits of using (Draftworx) accounting software for teaching and learning purposes. When asked what aspects of the training the students found to be the most beneficial, most of the participants stated that working with the software had been very helpful in understanding the practical side of accounting. Additionally, the participants highlighted the usefulness of the practical activities that provided them with a hands-on concrete example of recording transactions using accounting software, as stipulated: “Yes, it gives practical experience of accounting in general and allows accounting students to know if they are able to put into practice what they learned”. The extract highlights that the program or experience provides practical experience in accounting. This suggests that students are given opportunities to engage in hands-on activities, simulations, or real-world scenarios related to accounting. By doing so, students can directly apply their theoretical knowledge and understand how it translates into practical situations. Here, it also unveils the importance of allowing accounting students to determine if they can put into practice what they have learned. This reflects the central tenet of CBE, which focuses on assessing learners based on their ability to demonstrate specific competencies. The program acknowledges the need for students to evaluate their own performance and assess whether they can effectively apply their knowledge and skills in real-world accounting contexts.

Similar findings were observed by Stainbank, Jankeeparsad, and Algu (2023) who found that students presumably found the accounting software (Pastel) beneficial for them as it made them understand the principles of accounting. Similarly, most of the participants found the use of the Draftworx software program to be an advantageous tool they can incorporate into their set of skills and enhance their competitive edge in the job market. The use of software for learning purposes did not only provide students with knowledge and skills but also exposed them to the way things are done practically in the business world. Subsequently, the completion of the accounting software training will be an added advantage for students in their accounting careers as most of the participants believed that the Draftworx program could help them in the workplace to boost their careers, in line with the CBE theory (practical experiences and real-world application of knowledge and skills): “The program really worked out in my favour as it has given me a huge experience of what to expect in a work field, so that it doesn’t come as a surprise to me when I get there.”

The latter part of the statement highlights the goal of CBE focussing on students’ adequate preparation and being equipped with the necessary skills and knowledge to succeed in their chosen field. By gaining a comprehensive understanding of what to expect in the work field, the individual can avoid potential surprises and better adapt to the demands of the professional environment. Participants mentioned that: “It was very productive and has helped students gain knowledge of a software that we will potentially use in our workplaces or even in our own firms. This will make us more marketable and set us apart.” and “I was happy that I found this program and happy with the lecture for getting us to know trial balance and all about Draft-worx. The certificate will help me to achieve and have a better chance with the employers”. Students believed valuable skills and knowledge were obtained. This indicates that the program was designed to provide practical learning experiences, specifically focusing on software that is relevant to the students’ future workplaces or their own firms. CBE theory

emphasizes the importance of developing skills that are directly applicable to the professional field. By gaining knowledge of specific software that is commonly used in workplaces or businesses, the students are not only being prepared for real-world scenarios and increasing their competence in the relevant domain but also enhances students' employability and distinguish them in the job market - the key objective of CBE. In the latter quote, the participant's positive attitude towards the program, satisfaction with the lecture content, and recognition of the certificate's value all align with the principles of CBE. The participant also expresses gratitude towards the instructor, indicating the role of opinion leaders or change agents in CBE. In this vein, Utami and Yulianto (2019) found that the use of accounting software in higher education institutions will train prospective accountants to be more effective and efficient.

7. Conclusion

In the quest to revolutionize accounting education, this study embarked on a mission to delve into the minds of accounting students at a university of technology, being a higher education institution that has as main objective to prepare students for the workplace and unearth their perspectives on the utilization of the formidable accounting software, Draftworx. Conducted during the 2022 academic year, the study harnessed the insights of students enrolled in the Tshwane University of Technology's Advanced Diploma in Accountancy program. As we find ourselves amid the 4IR, where the demand for IT proficiency permeates every sphere of employment, accounting stands as no exception, leading to higher demand for entry accountants to be ready for this new domain. Findings suggested that the resounding advantages of introducing accounting software, as fervently reported by the students, resided unequivocally in its transformative potential. It became clear that this technological infusion would not only prepare them for the demanding workplace environment but also bestow them with invaluable practical experience in implementing their theoretical accounting knowledge, as supported by CBE. Respondents passionately expounded on how the software would facilitate their seamless integration of practical application and software proficiency, paving the way for a harmonious symbiosis. Moreover, the acquisition of an accounting software certificate emerged as a powerful asset, bolstering their employability prospects. Noteworthy benefits such as gaining insight into the working environment and elevating work accuracy also resonated deeply. The user-friendliness and time-saving nature of the software further solidified its appeal. This study conclusively affirmed that the introduction of accounting software to accounting students would indubitably enrich their expertise and endow them with an array of advantages. So overwhelmingly positive were the respondents that they ardently advocated for the integration of such software to commence as early as the first year of their academic journey.

The far-reaching implications of this study extend beyond the realms of tertiary accounting education, permeating diverse disciplinary fields. Future investigations, not bound by the confines of accounting, can be conducted at higher education institutions, illuminating the transformative potential of software integration. Other beneficiaries of this study include HEI curricula developers, professional bodies demanding IT in HE curricula, employees, as well as students working ready for relevant jobs. The study had certain limitations. It was conducted only in one qualification, one specific year of study and at a single tertiary institution. However, being a fact-finding research study, exploratory and inductive by nature, an in-depth qualitative approach was deemed efficient. Furthermore, the relatively low response rate could have been the result of a lack of resources. Not all students have access to private computers/laptops. Future studies should take these latter limitations into account.

8. Future Work

Future researchers are encouraged to research on the following topics:

- Impact of adopting accounting software in enhancing university learning in South Africa.
- Challenges faced for the effective adoption and implementation of accounting software in teaching and learning of accounting at university level.
- Impact of harnessing Artificial intelligence in the learning and teaching of accounting at university level.

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